Audit committee characteristics and earnings management practices

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ABSTRACT
This study revisits the effectiveness of the audit committee independence and expertise in preventing earnings management practices. Studies in other studies with relatively stricter regulations showed the audit committee independence was effective to prevent earnings management. On the contrary, studies in Indonesia were arguably outdated and shorter in period. This study was conducted on Indonesian listed-manufacturing companies from 2009 to 2015. It used two earnings management model such as Modified Jones Model and Performance-Adjusted Modified Jones Model. The results showed that audit committee independence is effective to prevent earnings management practices. However, it was found that audit committee expertise did not affect earnings management practices. The results are consistent for both earnings management models. Although majority of the audit members in Indonesian listed manufacturing companies are experts in accounting and finance, the existence of those expert members did not affect the companies to engage or not engage in earnings management practices. However, the accounting and/or financial expertise does not determine the effectiveness of the audit committee’s monitoring role.

1. INTRODUCTION
In the early 2018, Faisal Basri, an Indonesian economist, allegedly stated that business performance of the manufacturing industry in Indonesia was declining, which as he stated, it has happened since 2011 (Kumparan, 2018). Besides it is caused by the reduction in purchasing power, imported products seemingly continue to overflow the domestic market, causing domestic products to be marginalized, which then reduced the production. This phenomenon has undesirably
affected Indonesia’s gross domestic product. Indeed, given the slowdown in production, firms’ profitability may also be reduced and instigate negative consequences on firms’ overall performance. To the extent that firms desire to meet certain targets and to be able to maintain their competitive advantage, they may engage in earnings management practices (Kapoor & Goel, 2017; Young, 2018).

In order to alleviate the negative consequences of earnings management practices, monitoring costs such as management audit should be commonly applied. The notion of GCG arguably creates the expectation for the company to provide more transparent corporate practices. The GCG code usually outlines several mechanisms that could improve stakeholders’ confidence towards publicly listed companies. One of those mechanisms is the presence of an audit committee in every listed company. This is because audit committee is considered as helping the board of commissioners in performing their monitoring roles, specifically in the area of corporate financial reporting. Indeed, the existence of audit committee as required in good corporate governance (GCG) is expected to provide unbiased monitoring device to the corporation, although the possibility to engage in earnings manipulation may still exists because managers could have the incentives to expropriate corporate resources due to many motives.

More transparent corporate financial practices may lead the company to provide more reliable financial information, especially to the shareholders. The shareholders are to be ensured that management is being accountable to them, and acting according to their best interest. Therefore, the presence of an audit committee is in line with the needs for the company to be accountable to its shareholders. This is because the committee might prevent the company to engage in unfavorable financial practices such as earnings management that can result in providing unreliable financial information to the shareholders.

The existing studies related to the relation between audit committee independence and earnings management in different countries show that the independence of the audit committee is essential to prevent earnings management practices (e.g., Alkdai & Hanefah, 2012; Bedard, Chtourou, & Courteau, 2004; Inaam & Khamoussi, 2016; Miko & Kamardin, 2015; Nik Salleh & Che Haat, 2014; Peasnell, Pope, & Young, 2005; Saleh, Iskandar, & Rahmat, 2007). However, it can be argued that the code of GCG in Indonesia regarding the audit committee is relatively more lenient because, unlike the regulation in other countries (e.g., Australian Stock Exchange, 2003), the regulations in Indonesia only specified that at least one member is an independent commissioner (National Committee on Governance, 2006; Otoritas Jasa Keuangan, 2015). Hence, the degree of the audit committee independence in Indonesia may affect the effectiveness of its monitoring role, specifically in preventing earnings management practices.

Another specification regarding an audit committee as required by Indonesia’s code of GCG and Otoritas Jasa Keuangan (OJK) is that the audit committee should at least has one member with accounting and finance background (National Committee on Governance, 2006; Otoritas Jasa Keuangan, 2015). This is due to the extensive knowledge possessed by the committee members regarding the accounting and finance area that enable them to scrutinize corporate financial reports and other related matters. Therefore, the audit committee’s expertise is also essential to prevent earnings management practices. However, studies have shown mixed results regarding whether the expertise of audit committee members is effective to reduce earnings management practices. Badolato, Donelson, and Ege (2014), for example, found that firms with audit committee expertise was able to reduce earnings management practices. In contrast, Alkdai and Hanefah (2012) found that audit committee expertise has no significant influence on earnings management.

In Indonesia, several studies have been conducted to examine the effect of audit committee on earnings management practices. For instance, Pamudji and Trihartati (2010) found that independence of audit committee significantly influenced earnings management practices in 56 Indonesian manufacturing companies. Although it only utilized a small sample size, that particular study can be considered as one of the early studies on the relation of audit committee and earnings management conducted in Indonesia, specifically related to the enactment of audit committee regulation. This is because before its role is taken over by OJK which is the Indonesia Financial Services Authority, BAPEPAM-LK (i.e., the Capital Market Supervisory Agency
and Financial Institution) as the previous regulator of the capital market required every listed company to establish an audit committee. In fact, as stated on the Decree of the Chairman of BAPEPAM number KEP-41/PM/2003, every Indonesian public company is regulated to have an audit committee by December 31, 2004. However, the regulation may provide different implications to current practices. Another study by Restuningdiah (2011) conducted on 35 public companies in Indonesia in 2009 did not find any influence of audit committee on earnings management. This latter study, however, measured the effectiveness of audit committee using number of meetings, as well, it utilized income smoothing as the earnings management measurement.

This study revisited the relation of corporate governance mechanism to earnings quality. It extends the previous studies by investigating whether the characteristics of the audit committee as one of the corporate governance mechanisms is effective to prevent earnings management practices among manufacturing companies listed in Indonesia Stock Exchange (IDX). Incorporating more current and longer period of study, this study examined whether over time the compliance to the regulations ensures the effectiveness of the monitoring role of the audit committee. In addition, it analyzed the impact of the audit committee independence and expertise on corporate earnings management practices using two earnings management models, the Modified Jones Model and the Performance-Matched Modified Jones Model, to ensure the robustness of the results. In addition, this study contributes to the existing literature by providing new evidence on the effectiveness of audit committee which is one of the corporate governance mechanisms in alleviating earnings management practices.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS

Earnings Management

Earnings management is a prevalent corporate activity that has been studied across time. It refers to the action taken by the management to attain the targeted level of earnings which can be done through particular choices of accounting principles and/or implementation of particular operating decisions (McKee, 2005). Regarding the accounting choices by the management, the continuum of earnings management varies from conservative accounting to fraudulent accounting. At the end of this continuum, fraudulent accounting is a choice of accounting principles that violate the generally accepted accounting principles (GAAP) (Dechow & Skinner, 2000; McKee, 2005). Indeed, Healy and Wahlen (1999) regarded earnings management as a judgment by the management that is deliberately intended to manipulate financial reports. This manipulation will then mislead and influence the decision-makers in taking certain actions that can be harmful to them. Therefore, on the one hand, earnings management can be conducted legally whenever the accounting choices are in accordance with GAAP; on the other hand, earnings management may be illegal when conducted overly aggressive through the violations of GAAP.

There are some incentives why the management deliberately chooses to manage earnings. Besides to avoid reporting losses, Dechow and Skinner (2000) described, for example, an incentive for the management to manage earnings is because analyst and money managers may provide incentives to management whenever they can meet earnings forecasts. In this case, higher earnings may result in higher stock prices. Better earnings performance may increase the market value of a company, attract more investors, and boost the managers' reputation. Consequently, earnings management becomes an inseparable practice among corporations.

There are two parties within a company (i.e., management and shareholders) that can typically have different interests that need to be aligned through an effective mechanism. The contradicting interests can be caused by the information asymmetry between those two parties (Jensen & Meckling, 1976). To a larger extent, information asymmetry may drive the management to take maximum advantage on the expense of shareholders by practicing earnings management. Although to some extent it may be a good way of communicating the inside information from the management to investors, earnings management can be harmful particularly when the management opportunistically use earnings management to benefit themselves (Scott, 2015). To avoid the misbehavior, a controlling and monitoring mechanism is important to be employed inside a company. Therefore, studies have been conducted to examine whether particular mechanisms are effective to prevent earnings management practices (e.g., Davidson,
One mechanism to align management and shareholders’ interests is through a GCG practice. The fall of several big corporations around 2000 to 2002 (e.g., Enron, WorldCom) caused market confidence to diminish. The enactment of Sarbanes-Oxley Act of 2002 (SOA) by the U.S. Congress indicates that government and regulators were concerned about the loss of public confidence over corporation’s financial practices. SOA provides more rigorous requirements regarding corporate governance organs within public companies, mainly to increase corporate transparency and accountability and to promote a more truthful and fairness representation of financial reporting (Oxley & Sarbanes, 2002). Since then the practice of GCG was more prevailing, hence stricter corporate governance practices will be expected these days based on several reasons such as to comply with the regulation, to avoid unlawful acts that can destroy its reputation, and to be favorably valued by the market.

Although there are various ways to investigate earnings management, studies related to it are usually conducted by assessing accruals. There are two types of accruals which are discretionary and nondiscretionary. Discretionary accruals are accruals that are managed through accounting choices by management and usually used by the managers for income smoothing (Spohr, 2005). In contrast, nondiscretionary accruals are considered as accruals that are mandatory and might not depend on the management discretion to be incurred. Given that discretionary accruals are those that can vary according to the accounting choices and treatments by the management and might be easily manipulated, this type of accruals is usually used as a proxy for earnings management.

**Audit Committee Independence**

Independence of the members is essential for the audit committee to be impartially exercise its judgment regarding the financial reporting of a company. It could also be an attribute to mitigate contracting costs (Deli & Gillan, 2000). Bedard et al. (2004) concluded that aggressive propensity of earnings manipulation is able to be reduced in companies whose audit committee members are completely independent. In fact, it is asserted that when the board of directors is less independent and there is no audit committee, companies have a tendency to engage in financial reporting fraud (Beasley, 1996). Therefore, a more independent audit committee is expected to prevent earnings manipulations.

According to the Decree of the Chairman of BAPEPAM number KEP-29/PM/2004 which was later amended by the OJK Regulation No. 55/PJOK.04/2015, the minimum number of audit committee members is three and one of them should be the independent commissioner of the company who also serves as the chairman of the committee. Several criteria related to an independent member are such as he or she; (1) should not have a family relation with directors, commissioners and the major shareholders of the company, (2) should not possess a direct and indirect business relation with the company, (3) should not possess a direct or indirect shareholder of the company or other public companies, and (4) should not be a person who is in charge to direct and control the activities of the company at least six months before the appointment. These criteria are considerably essential to isolate the member from being controlled by certain parties.

A study by Bedard et al. (2004) examined the possibility to engage in earnings manipulation among the companies whose audit committee members were 100 percent independent compared to those whose audit committee members were majority independent. They found that companies which have 100 percent independent audit committee members were less probable to conduct aggressive earnings manipulation. Peasnell et al. (2005), in their study, found that the upward management of earnings occurred less in companies that had larger numbers of independent directors. Moreover, a study conducted in Malaysia by Saleh et al. (2007) found that a company would have fewer tendencies for earnings manipulation if all of its audit committee members were independent.
Although Alkdai and Hanefah (2012) in another Malaysian study showed that audit committee members in the sample observations were not fully independent (i.e., only around 82 percent), it is found that the independence of audit committee is effective to reduce earnings management. Sharma and Kuang (2014) examined the relationship between audit committee voluntary characteristics and earnings management. Using New Zealand listed firms in 2004 to 2005 they found that audit committee that has majority independent directors is able to reduce aggressive earnings management. Nevertheless, they did not found any impact of 100 percent independent audit committee on earnings management, thus suggesting that 100 percent audit committee independence may not necessary to be imposed. Those studies provide insight that the more independent the audit committee, the more effective its monitoring role would be performed. On the other hand, Garcia, Barbadillo, and Pérez (2012) in the study of 108 Spanish publicly traded companies found no significant relation between audit committee independence and earnings management. However, their study only utilized a dummy variable to proxy for audit committee independence which arguably might not fully capture the relative independence capacity of the audit committee. Accordingly, the argument that the independence of audit committee members could reflect the effectiveness of their monitoring role leads to the hypothesis below:

\[ H_1: \text{Audit committee independence affects earnings management practices in Indonesian listed manufacturing companies.} \]

**Audit Committee Expertise**

Studies show that, particularly, an audit committee which has members with accounting and/or finance knowledge is more effective in performing its monitoring role (e.g., McDaniel, Martin, & Maines, 2002). Other than Indonesia, the expertise characteristic is also required by regulations in other countries which suggest that at least one audit committee member should be a financial expert (American Bar Association, 1999; Australian Stock Exchange, 2003; National Committee on Governance, 2006; Oxley & Sarbanes, 2002). In addition, McMullen and Raghunandan (1996) stated that it would be more preferable if the financial expert member is affiliated with accounting professional body, an experienced public accountant, an auditor, or a financial officer. On the contrary, the regulation in Indonesia does not permit an audit committee member to be affiliated with professional bodies (e.g., public accountant, auditor, etc.) that provided services to the company within six months before his/her admission to the committee. Nevertheless, the knowledge and expertise can supposedly enhance the effectiveness of the audit committee members to oversee and protect the integrity of companies’ financial reporting.

McDaniel et al. (2002) stated that the expertise of the members of an audit committee enables them to assure the quality of the companies’ financial reporting. A survey was conducted by McMullen and Raghunandan (1996) to several corporations with a different financial condition. They found that among the 51 companies that were in financial problems only six percent of them have audit committee members that were certified public accountant (CPA). On the other hand, 25 percent of 77 companies that were not in financial problems had audit committee members who were CPAs. Indeed, accounting or financial experts among the audit committee members may help to improve the quality of financial statement reporting.

An audit committee that has financial or accounting experts is considered more qualified in executing its monitoring role, which to some extent might increase the company’s value. A study by Davidson, Xie, and Xu (2004) found that the information regarding the existence of financial expertise within an audit committee caused the market to react positively as reflected in the stock price. Their result showed that capital market tended to favor a company whose directors were considered competent in ensuring the good conduct of financial reporting activities. Thus, possessing relevant knowledge will cause audit committee members to competently examine and oversee the financial reporting activities and this, in turn, might increase investors’ confidence in the company.

Employing audit committee members with financial expertise provides evidence that financial statement manipulations can be prevented. To some extent, combined with regular meetings, an audit committee that is more knowledgeable about accounting and finance is more likely to minimize the occurrence of earnings manipulation within a company (Saleh et al., 2007). Additionally,
a study by Badolato et al. (2014) which was conducted on US firms in the period of 2001 to 2008 found that audit committee financial experts who hold higher status in the company is also effective to reduce earnings management practices. Alkdai and Hanefah (2012) examined the relation of audit committee characteristics and earnings management of 270 Malaysian companies that complied with the Shariah laws in the period of 2007 to 2009. They found no significant relationship between audit committee financial experts measured by the proportions of professional accountants and earnings management measured by discretionary accruals. In contrast, a company with fewer financial expert members in the audit committee tends to encounter financial problems (Rahmat, Iskandar, & Salleh, 2009). Having more experts in the area of accounting and finance within an audit committee should promote effectiveness in controlling the financial reporting process and hinder the managers’ propensity to manipulate earnings. Thus, this study conjectured that the accounting and/or financial expertise is effective to prevent earnings management practices in Indonesia. Hence, the hypothesis would be:

\[ H_2: \text{Audit committee expertise affects earnings management practices in Indonesian listed manufacturing companies.} \]

3. RESEARCH METHOD

Data and Sample

The population of this study consists of 135 listed manufacturing companies. Based on the initial purposive sampling criteria this study found 133 manufacturing companies that are consistently listed on the IDX which formed 931 firm-year observations. After removing companies that reported their financial statement not in Indonesian Rupiah, the fiscal year ended other than on December 31, and the financial and governance data are not available, the remaining samples are 648 firm-year observations. Further data analysis showed there were three observations that are considered as influential outliers, thus excluded from the sample. The final sample size consists of 645 firm-year observations (i.e., 105 unique firms). Table 1 presents the sample selection.

The financial data of this study are taken from corporate financial reports published in IDX website and/or company websites. Additionally, the corporate annual reports were used in obtaining data regarding audit committee independence and expertise, following by a content analysis.

Research Model

Several earnings management models are widely used in extant studies. Two of the models are the Modified Jones Model and the Performance-Adjusted Modified Jones Model. Dechow, Sloan, and Sweeney (1995) described the first model in their study that compares several earnings management models. Dechow et al. (1995) stated that the original Jones Model was modified “to eliminate the conjecture tendency of the Jones Model to measure discretionary accruals with an error when discretion is exercised over revenues” (p. 199). The modification was done by adjusting the changes in revenues by the changes in receivables during the period of observation. Kothari, Leone, and Wasley (2005) proposed a model that is called the Performance-Adjusted Modified Jones Model. Their model considers offering further control on firms’ performance,

<table>
<thead>
<tr>
<th>Criteria:</th>
<th>Firm-year Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistently listed between 2009 to 2015</td>
<td>931</td>
</tr>
<tr>
<td>Less:</td>
<td></td>
</tr>
<tr>
<td>Financial Statements are not reported in IDR</td>
<td>77</td>
</tr>
<tr>
<td>Annual Reports ended on other than Dec 31</td>
<td>28</td>
</tr>
<tr>
<td>Incomplete Data</td>
<td>178</td>
</tr>
<tr>
<td>Sample</td>
<td>648</td>
</tr>
<tr>
<td>Less: Influential outliers</td>
<td>3</td>
</tr>
<tr>
<td>Final Sample</td>
<td>645</td>
</tr>
</tbody>
</table>

Source: Data Processed
because they argued that “firms classified as having abnormally high or low levels of earnings management are those that manage more than would be expected given their level of performance” (p. 165). Hence, those two models were used in this study to provide comparison and ensure the robustness of the results.

The first model used to obtain the earnings management for cross-sectional analysis in this paper is stated below:

\[ \frac{TACC_{it}}{TA_{it-1}} = \gamma \frac{1}{TA_{it-1}} + \gamma_1 \Delta \text{REV}_{it} - \Delta \text{REC}_{it}/TA_{it-1} + \gamma \frac{PPE_{it}}{TA_{it-1}} + \epsilon_{it} \]  

\[ \Delta \text{TACC}_{it} = \gamma \frac{1}{TA_{it-1}} + \gamma_1 (\Delta \text{REV}_{it} - \Delta \text{REC}_{it}/TA_{it-1} + \gamma \frac{PPE_{it}}{TA_{it-1}}) + \epsilon_{it} \]  

TACC is the total accruals which obtained from the differences between operating profit after taxes and cash flows from operating activities. The \(1/TA_{it-1}\) is replaced the constant in the original Jones Model (Jones, 1991). \(\Delta \text{REV}\) are the changes in revenues, \(\Delta \text{REC}\) are the changes in accounts receivables and PPE is the gross amount of Property, Plant and Equipment, while the \(\epsilon_{it}\) is the error term which is basically the estimated discretionary accruals that proxies for earnings management. The \(\Delta \text{REV}, \Delta \text{REC}, \text{PPE}\) are scaled by lagged total assets, which like Kothari et al. (2005) state is intended to alleviate the heteroscedasticity which is the non-constant variance of the residuals that would possibly violate the OLS assumption.

The second earnings management model used in this study was developed by Kothari et al. (2005):

\[ \frac{TACC_{it}}{TA_{it-1}} = \gamma \frac{1}{TA_{it-1}} + \gamma_1 (\Delta \text{REV}_{it} - \Delta \text{REC}_{it}/TA_{it-1} + \gamma \frac{PPE_{it}}{TA_{it-1}}) + \epsilon_{it} \]  

\[ \Delta \text{TACC}_{it} = \gamma \frac{1}{TA_{it-1}} + \gamma_1 (\Delta \text{REV}_{it} - \Delta \text{REC}_{it}/TA_{it-1} + \gamma \frac{PPE_{it}}{TA_{it-1}}) + \epsilon_{it} \]  

The difference with the previous model is on the addition of return on assets (ROA) as part of the regression model. ROA is the ratio of earnings to total assets. By adjusting with ROA, they called this model Performance-Adjusted Model. The reason for them to adjust the traditional discretionary accruals model is to tackle the issue that accruals are related to the contemporaneous and past performance of the firms. Following Chen, Elder, & Hsieh (2007), this study includes lagged ROA to the model.

Using both discretionary accruals (DACC) based on the Modified Jones Model and the Performance-Adjusted Modified Jones Model, the regression model is as follows:

\[ \text{DACC}_{it} = \delta_0 + \delta_1 \text{AC_IND}_{it} + \delta_2 \text{AC_EXP}_{it} + \delta_3 \text{SIZE}_{it} + \delta_4 \text{LEV}_{it} + \delta_5 \text{ROA}_{it} + \epsilon_{it} \]  

Where, DACC is the the residuals in Modified-Jones Model and Performance-Adjusted Modified Jones Model which represents the earnings management. \(\text{AC_IND}\) represents the audit committee independence, measured by the ratio of independent members to total audit committee members. \(\text{AC_EXP}\) is the audit committee expertise, measured by the ratio of members whose background is accounting and/or finance to total audit committee members. \(\text{SIZE}\) is the firm size measured by the natural logarithm of total assets. \(\text{LEV}\) is the leverage, measured by the ratio of total liabilities to total assets. \(\text{ROA}\) represents firm performance, measured by the ratio of earnings to total assets. Firm size (\(\text{SIZE}\)), leverage (\(\text{LEV}\)) and firm’s performance (\(\text{ROA}\)) are several control variables that are generally used in earnings management studies (e.g., Saleh et al., 2007). Therefore, following previous research, we included those control variables in the regression model.

4. RESULTS AND DISCUSSION

Descriptive Statistics

The descriptive statistics of 648 observations are presented in Table 2. On average, the total accruals of all firms are around 43 billion rupiahs. The total assets are around 6.4 trillion rupiahs which on average the firms could be categorized as relatively large. Approximately, revenues are 6.8 trillion rupiahs, receivables are 652 billion rupiahs, and gross property, plant, and equipment are 3.6 trillion rupiahs. ROA has a mean of approximately nine percent which shows that approximately the return is nine times the invested assets. Leverage is around 61 percent, meaning that on average total liabilities are 61 percent more than total assets. On average, 58 percent of audit committee members are classified independent, and 67 percent of the members have accounting and/or financial background. This shows that generally firms comply with the regulations of audit committee independence and expertise as posed by BAPEPAM-LK and OJK.
The descriptive statistics of discretionary accruals showed the unstandardized residuals of the two earnings management models which are the discretionary accruals of the Modified Jones Model (DACC_MJ) and the discretionary accruals of the Performance-Adjusted Modified Jones Model (DACC_PAMJ). According to Lindelauf (2011), the unstandardized residuals are usually used to detect whether there are more negative or positive accruals and whether firms manage their earnings upwardly or downwardly. On average, the unstandardized residuals from both models are positive, implies there are more upward-managed earnings.

Table 2

Descriptive Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Min</th>
<th>Max</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>TACC</td>
<td>42,947</td>
<td>1,332,477</td>
<td>-11,400,000</td>
<td>14,300,000</td>
<td>648</td>
</tr>
<tr>
<td>TA</td>
<td>6,379,640</td>
<td>21,200,000</td>
<td>901</td>
<td>245,000,000</td>
<td>648</td>
</tr>
<tr>
<td>REV</td>
<td>6,779,268</td>
<td>20,300,000</td>
<td>0.000</td>
<td>202,000,000</td>
<td>648</td>
</tr>
<tr>
<td>REC</td>
<td>652,424</td>
<td>2,424,385</td>
<td>0.000</td>
<td>46,300,000</td>
<td>648</td>
</tr>
<tr>
<td>GROSS PPE</td>
<td>3,619,360</td>
<td>9,459,194</td>
<td>654</td>
<td>103,000,000</td>
<td>648</td>
</tr>
<tr>
<td>ROA</td>
<td>0.092</td>
<td>0.633</td>
<td>-0.870</td>
<td>15.478</td>
<td>648</td>
</tr>
<tr>
<td>LEV</td>
<td>0.607</td>
<td>0.780</td>
<td>0.037</td>
<td>10.711</td>
<td>648</td>
</tr>
<tr>
<td>INDEP_AC</td>
<td>0.580</td>
<td>0.320</td>
<td>0.000</td>
<td>1.000</td>
<td>648</td>
</tr>
<tr>
<td>EXPERT_AC</td>
<td>0.667</td>
<td>0.259</td>
<td>0.250</td>
<td>1.000</td>
<td>648</td>
</tr>
<tr>
<td>DACC_MJ</td>
<td>0.049</td>
<td>0.932</td>
<td>-0.545</td>
<td>21.675</td>
<td>648</td>
</tr>
<tr>
<td>DACC_PAMJ</td>
<td>0.046</td>
<td>0.955</td>
<td>-0.308</td>
<td>21.594</td>
<td>648</td>
</tr>
</tbody>
</table>

Source: Data Processed

Statistical Assumption Tests

Several regression assumption tests—heteroscedasticity, autocorrelation, and multicollinearity—were conducted before performing the regression analysis. Conducted by using Breusch-Pagan/Cook-Weisberg test in STATA the results show that the variances were not constant, hence concluding there is heteroscedasticity problem. Nevertheless, the problem of heteroscedasticity was controlled by using robust standard error. Conducted by using Breusch-Godfrey that there is autocorrelation problem in the regressions, which was able to be controlled by adjusting the standard error using cluster. The collinearity problem was observed using VIFs or tolerances and the results show that, for each of the independent variable, the VIF value is less than 10 and the 1/VIF value is higher than 0.1. Therefore, there is no multicollinearity problem appears among the explanatory variables.

Regression Results

To test the hypotheses the first regression analysis was conducted using the discretionary accruals obtained by the Modified Jones Model (i.e., MJ). Table 3 summarizes the comparison of results before and after including the control variables. It shows that the adjusted R² for this model is increased from only one percent to approximately 66 percent which means that the inclusion of the control variables is able to increase the explanatory power of the model. Overall, the models are significant (p-value of the F-test is < 0.001). Moreover, it is shown that the independence of audit committee is negative and significant (p-value = 0.007). Therefore, H₁ is supported, which means that audit committee independence affects the earnings management practices of a company.

Therefore, it is evident that the independence characteristic determines the effectiveness of audit committee monitoring role in Indonesia. To maintain their reputation and to avoid losing their credibility, the independent members of the audit committee might exert their role in effectively monitor firms’ financial reporting process. Moreover, being more independent enables the audit committee to carry out their tasks and duties respectably, especially in ensuring the effectiveness of the internal control over the financial reporting process (García et al., 2012).
The coefficient of audit committee expertise is not significant at any confidence level ($p$-value = 0.552). Thus, $H_2$ is rejected, which indicates that audit committee expertise does not affect earnings management. The results for control variables are consistent with previous tests. This shows that although on average the majority of audit committee members have accounting and financial background this expertise may not be effective in preventing earnings management. It can be argued that it is more important for audit committee members to be independent that to have particular expertise. This is because the expertise may not guarantee the members to conduct true and fair control over the company’s financial reporting process. Consequently, the discretion to manipulate financial information should also be controlled through other monitoring mechanism within the firms. According to Badolato et al. (2014) financial expertise solely might not be an effective mechanism in preventing earnings management practices. In fact, their study found that it is the joint effect of both expertise and higher status of the audit committee members that makes their monitoring role more effective in lowering earnings management practices.

Another study by Sharma and Kuang (2014) also found that when the financial experts were also independent directors, they were able to lower earnings management propensity. Rationally, knowledge and expertise may not be enough to prevent irregularities in financial reporting if it does not accompany by authority to exert certain decisive actions.

Among the control variables, only LEV that is not significant ($p$-value = 0.108). The result also shows that firm size (i.e., SIZE) has a negative and significant impact on discretionary accruals ($p$-value < 0.001). The results support the findings of previous studies (e.g., García, Barbadillo, & Pérez, 2012) This indicates that the larger the company, the lower the propensity to engage in earnings management practices. The reason might be because larger firms are more likely to have better reputation and receive more scrutiny from the stakeholders, thus they tend to avoid damaging their reputation. ROA is positive and significant ($p$-value < 0.001) however the sign is not consistent with previous studies that predicted that company whose financial performance is better will be less likely to manage its earnings (e.g., Kapoor & Goel, 2017).

Table 3
Regression Results using DACC from the Modified Jones Model

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>MJ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
</tr>
<tr>
<td>INDEP_AC</td>
<td>-0.100***</td>
</tr>
<tr>
<td></td>
<td>(0.028)</td>
</tr>
<tr>
<td>EXPERT_AC</td>
<td>-0.049</td>
</tr>
<tr>
<td></td>
<td>(0.050)</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.029***</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
</tr>
<tr>
<td>LEV</td>
<td>0.022</td>
</tr>
<tr>
<td></td>
<td>(0.014)</td>
</tr>
<tr>
<td>ROA</td>
<td>0.396***</td>
</tr>
<tr>
<td></td>
<td>(0.057)</td>
</tr>
</tbody>
</table>

Firm-year Obs. 645
R² 0.016 0.660
Adjusted R² 0.013 0.658
F-test 11.490 51.180
$p$-value 0.000 0.000

Notes: Robust standard errors in parentheses, *** $p<0.001$, ** $p<0.01$, * $p<0.05$

Source: Data Processed
Robustness Test
To ensure the robustness of the results, another regression analysis was conducted using discretionary accruals obtained by the Performance-Adjusted Modified Jones Model (i.e., PAMJ). Table 4 summarizes the results. Similar to the previous tests, the inclusion of control variables increased the adjusted R² from one percent to around 78 percent showing that the inclusion of control variables improves the explanatory power of this model. In addition, comparing the adjusted R² of the Modified Jones Model and that of the Performance-Adjusted Modified Jones Model showed that the latter model improves the explanatory power the earnings management model (i.e., from 66 percent to 78 percent). The results also showed that audit committee independence has a negative and significant influence on earnings management practices (p-value < 0.001). However, audit committee expertise does not seem to affect earnings management practices (p-value = 0.307). Although a positive and significant results is found for ROA, there is no impact of firm size and leverage on earnings management.

Given that including ROA in the regression may be problematic since ROA has been included to measure the discretionary accruals, hence another regression analysis was performed without ROA in the control variables. The result is consistent for the impact of audit committee independence on earnings management practices. Nevertheless, the explanatory power of the last regression is substantially reduced (Adjusted R² = 1.5 percent), although it is still higher than without the inclusion of all control variables.

5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS
The demand for more transparent and accountable financial reporting is of particular interest of extant corporate governance and earnings management studies. As one of the corporate governance mechanisms, the existence of an audit committee is deemed beneficial to improve awareness to report true and fair performance of the companies. An audit committee is expected to assist in aligning management interests to that of the shareholders, especially to prevent firms engaging in earnings management practices.
It is found in this study that audit committee independence negatively and significantly affects earnings management practices. The results implied that as an audit committee become more independent, it would be more likely to prevent a company from practicing earnings management. Thus, it indicates that the regulation regarding audit committee independence is relatively effective to ensure the effectiveness of the audit committee monitoring role. However, this study did not find a significant effect of the expertise of the audit committee on preventing earnings management. Arguably, the accounting or financial knowledge of audit committee members could not determine the effectiveness of the audit committee monitoring role in preventing a company to engage in earnings management.

This study implies that compliance with the regulation may not be a determinant in the effectiveness of audit committee role. Companies that are only motivated by regulation compliance will be less concerned whether the existence of an audit committee within a firm is beneficial or not. They would only comply in a minimum level with the incentive of not being persecuted by the regulator or influential stakeholders. On the contrary, companies that are concerned with whether the firm is well governed may take further steps to ensure they surpass the requirements of the regulation. This would relatively assure that these companies will perform better in their financial reporting and be less engaged in manipulating earnings. To some extent, the effectiveness of corporate governance mechanism within a firm may improve the transparency and accountability of a company which is then expected to contribute on the increasing investors’ confidence in the company and capital market as a whole.

There are some limitations to this study. First, the external validity of this study might be considered low given that this study is confined only on manufacturing industry. Second, this study might be less comprehensive in depicting the effectiveness of the audit committee characteristics because it only considers the two characteristics of audit committee: independence and expertise, although since 2012 there are other characteristics that were specified by the regulations concerning audit committee. Lastly, this study unable to show the effectiveness of audit committee characteristics in preventing other earnings management practices, since it is only confined in analyzing earnings management through discretionary accruals.

Given the limitations, there are several recommendations that can be made for further research related to this topic. First, to increase the external validity, a similar study could be conducted across industries to examine whether audit committee characteristics provide different effects on different industries. Second, further study could also employ other characteristics of an audit committee besides independence and expertise, as specified by the regulations (e.g., activity). Third, another study could be conducted to compare the relation between audit committee characteristics and earnings management using other earnings management models or through considering the motivations behind earnings management practices. Additionally, future research should also employ more control variables on the study.

REFERENCES


