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## The effect of audit committee characteristics on earnings management: the case of Indonesia

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**Abstract:** We investigate the effectiveness of audit committee in mitigating earnings management in the context of Indonesia. Audit committee is expected to reduce earnings management. This study examines the effect of several audit committee characteristics: independence of audit committee members, number of audit committee members, number of meetings, expertise in finance and gender on earnings management. We study 393 Indonesian listed firms during the 2006–2010 period. Results show that female member(s) of audit committee mitigate earnings management. However, financial expertise and number of meetings have positive effect on earnings management. This result shows that both variables might not be effective to constraint earnings management. On the other hand, number of audit committee members and independence of audit committee member do not have any significant influence on earnings management. Further, this study shows that audit firms and leverage have negative effect on earnings management. However, institutional investors tend to push earnings management higher and growth has no significant effect on earnings management.

**Keywords:** audit committee; earnings management; financial expertise; gender; number of meetings; Indonesia.

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## 1 Introduction

In 2001, the Indonesian Stock Exchange issued a circular which requires that audit committee must be chaired by an independent commissioner and other members must come from external parties. In 2004, BAPEPAM-LK<sup>1</sup>, as the supervisory agency for the Indonesian capital market, requires Indonesian listed companies to establish an audit committee. It is expected that audit committee will help the board of commissioners (BOC) to analyse financial information, risk and internal audit. Thus, the audit committee helps companies to achieve better corporate governance practices and to present better quality information. Nurhaida, the former chairperson of BAPEPAM-LK, stressed the importance of the audit committee in minimising manipulation by listed firms (Hasniawati, 2011). It is expected that audit committee is able to constraint earnings management by companies. However, she commented that internal governance structure, such as audit committee, underperforms and this situation provides opportunities for managers to manipulate investors, such as in the case of PT Elnusa Tbk and Bank Mega.

She suggested that Indonesian listed firms should improve their internal monitoring structure. The audit committee is expected to help the BOC in monitoring management and provide better quality information. However, there were complaints that the audit committee underperforms according to the BAPEPAM-LK Chairperson. Therefore, this study investigates the effectiveness of the audit committee to curb earnings management.

One of the important characteristics of earnings management concerns the independence of the audit committee members. Previous studies show that the independence of the audit committee member has a negative effect on earnings management (Bronson et al., 2009; Inaam and Khamoussi, 2016; Klein, 2002). There is evidence on the importance of all members of audit committee to be independent because the monitoring activity is not optimal if there is a non-independent member (Bradbury et al., 2006; Bronson et al., 2009). On the contrary, there is also evidence that the independence of the audit committee member is not effective in curbing earnings management (Ghosh et al., 2010; Lin et al., 2006; Sun et al., 2014).

Another characteristic of audit committee is that it requires that at least one of the members needs to have financial/accounting background. This is important so that the audit committee member can analyse financial information of the companies. Carcello et al. (2006) find that audit committees which have members with financial background effectively mitigate earnings management. Another characteristic of audit committee concerns the number of audit committee meetings. The more audit committee meetings, the less earnings management occurs. Ghosh et al. (2010) and Inaam and Khamoussi (2016) confirm this expectation. BAPEPAM-LK requires that audit committee members consist of at least three persons. One member is the independent commissioner and she/he is to become the Chairperson. Lin et al. (2006) find that the number of audit committee members has a negative effect on earnings management. Another characteristic of audit committee is gender diversity. There is evidence that female member(s) of the audit committee have a negative effect on earnings management (Thiruvadi and Huang, 2011).

Research on the effectiveness of audit committee in curbing earnings management in Indonesia is rare, except for Siagian and Tresnaningsih (2011) and Siregar and Utama (2008). Siagian and Tresnaningsih (2011) compared earnings management before and after Indonesian firms comply with the regulation on audit committee in 2001. They find that earnings management is significantly smaller after complying with the regulations compared with before the adoption. This results show that audit committee is effective in reducing earnings management. On the other hand, Siregar and Utama (2008) do not find any significant effect of audit committee on earnings management. Previous studies on audit committee and earnings management in Indonesia are limited and focus only on the audit committee as a unit. They do not analyse the characteristics of the audit committee, such as: the independence of audit committee members, number of audit committee meetings, number of audit committee members and gender diversity. Indonesia as an emerging market has a different institutional context when compared with developed markets such as the USA. Indonesian companies are mostly controlled by the family (Carney and Child, 2013; Carney and Hamilton-Hart, 2015; Setiawan et al., 2016). As a majority shareholder, the family usually appoints their members to the board of directors (BOD) and the BOC to get more control on their companies.

The regulation on audit committee members strictly requires the independence of the audit committee. However, the family as the majority shareholder has the opportunity to

put their family members on the audit committee composition. Therefore, it is interesting to analyse the independence of the audit committee member in the Indonesian context. In this present paper, we investigate the effects of audit committee characteristics such as: the independence of audit committee members, financial expertise, number of meetings, number of audit committee member, and gender diversity on earnings management.

## **2 Indonesian institutional context**

Indonesia adopts the two-tier board system in which there is the BOD and the BOC. The BOD manages the operations of the company while the BOC is responsible for monitoring and giving advice to the BOD. Both the BOD and BOC are appointed and dismissed at the Annual General Meeting of Shareholders (AGMs). The audit committee is one of the internal governance structures to help the BOC to monitor the BOD. The audit committee consists of at least three persons in which one of them is the independent commissioner and she/he acts as chairperson of the audit committee.

During the Asian financial crisis in 1997–1998, Indonesia was one of the countries that were badly affected. One of the causes was weak corporate governance practices (Claessens et al., 2000). Subsequently, the Indonesian Government introduced initiatives to increase the quality of corporate governance practices. In 2000, one of initiatives by BAPEPAM-LK was to recommend that Indonesian listed firms establish an audit committee. The audit committee is not obligatory for Indonesian listed companies but voluntary. Later in 2001, the Indonesian Stock Exchange issued another circular to provide more information regarding the independence of audit committee members and the role of the independent commissioner as chairperson of the committee. In addition, in 2002, the Indonesian National Committee for Good Corporate Governance also issued a guideline on how to form an effective audit committee.

Later, in 2004, BAPEPAM-LK issued new regulations pertaining to audit committee which require Indonesian listed companies to establish audit committees. Hence, audit committee became mandatory for listed firms. Further, it is stated that the audit committee should have at least three persons and one of them should be an independent commissioner. The independent commissioner holds the position of chairperson. Other audit committee members should not have any relationship with the companies and must come from outside the firm. This regulation regarding audit committee members state that all members must be independent. This rule also requires that at least one of the members must have an accounting/finance background.

In 2000, BAPEPAM-LK states that audit committee will help the BOC in monitoring the BOD. This argument is supported by Siagian and Tresnaningsih (2011) and Ika and Ghazali (2012). Siagian and Tresnaningsih (2011) investigate the effect of audit committee on earnings management after the BAPEPAM recommendation in 2000, to form the audit committee. They find that earnings management is reduced after the formation of the audit committee. Therefore, they argue that audit committee is effective. On the other hand, Siregar and Utama (2008) find that the existence of audit committee does not have any significant effect on earnings management. Ika and Ghazali (2012) investigate the effectiveness of audit committee on the timelines of financial statement reporting. The results of their research show that audit committee increases the timeliness of financial statement reporting. The results of these researches revealed inconsistent results.

### **3 Literature review and hypotheses development**

Agency theory argues that the firm is a nexus of contract between principal and agents (Jensen and Meckling, 1976). The owner (principal) hires the manager (agent) to run the companies. However, the interests of manager will not always be congruent with the owner. Both parties have their own agenda to maximise their wealth. There is the agency conflict between principal and agent. Managers have more information on the companies and he can use his discretion to achieve his interest. Agency theory can be traced back to the work of Berle and Means (1932), Fama and Jensen (1983), Jensen and Meckling (1976), and Ross (1973). An important characteristic of agency theory is the separation between owners and managers. The owner delegates the right to manage the companies to the managers. As the rewards for the responsibility to manage the company, managers earn salaries and bonuses. Meanwhile, owners expected a return from their investment (Shleifer and Vishny, 1997). This is the agency relationship between owners, as a principal, and managers, as an agent. As both parties want to maximise their interests, thus conflict of interests happen between them. Conflicting goals between the two parties, give rise to agency cost. Agency problems happen due to divergence of interests between principal and agent (Chrisman et al., 2004; Eisenhardt, 1989; Jensen and Meckling, 1976; Ross, 1973). Managers have opportunity to use his discretion to achieve his interest in the expense of ownership interest. Managers can use earnings management to achieve earnings benchmark (Caylor, 2010) or to exceed earnings threshold (Charoenwong and Jiraporn, 2009; Degeorge et al., 1999).

Shleifer and Vishny (1997, (p.737)) argue that “corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment.” Corporate governance has to protect investors’ interest. It has to monitor on how managers manage the resources, to make sure the managers’ work is not divergent with shareholders’ interests. It is expected that corporate governance mechanism minimise earnings management. One of elements of corporate governance is audit committee. Audit committee function is to oversee financial statement process (Klein, 2002). Therefore, it is expected that audit committee minimise earnings management. Previous studies shows that audit committee has a negative effect on earnings management (Klein, 2002; Lin et al., 2015; Siagian and Tresnaningsih, 2011). Audit committee is able to lower accrual earnings management.

#### *3.1 Independence and earnings management*

One of functions of the audit committee is to monitor the management. Audit committee members should be independent from the companies in order to get the full benefit from the formation of the audit committee. The independence of audit committee member is effective to reduce the level of information asymmetry (García-Sánchez et al., 2012). Thus, the information provided by the companies becomes more transparent and better quality (Pucheta-Martínez and De Fuentes, 2007). It is also expected that the independence of the audit committee member is able to reduce earnings management behaviour of the companies. Klein (2002) argues that independent audit committee member is an important characteristic to monitor the financial process and that an independent audit committee has a negative relationship with earnings management.

Thus, independent audit committee members are able to reduce the level of earnings management.

Carcello et al. (2006) investigate the effect of the characteristics of audit committee on earnings management in the USA. They reveal that audit committee independence mitigates earnings management. It is important to have an audit committee that consisted of independent members. Further, research by Bronson et al. (2009) also find that fully independent audit committee is important to monitor management. They get consistent results in the presence of an effective audit committee if all members are independent. Bradbury et al. (2006) investigate the effectiveness of independence to mitigate earnings management in Malaysia and Singapore. Their results show that audit committee independence has a negative effect on income, increasing abnormal accrual only. Inaam and Khamoussi (2016) also find the negative impact of independence directors on earnings management using meta-analytics study.

On the other hand, there are some studies that do not find any relationship between audit committee independence and earnings management (Baxter and Cotter, 2009; Osma and Noguer, 2007; Rahman and Ali, 2006). Baxter and Cotter (2009) test the effect of audit committee characteristics on earnings management in Australia. However, they do not find any significant impact of audit committee independence on earnings management. This result is also confirmed by Osma and Noguer (2007) using Spanish data. Rahman and Ali (2006) investigate the effect of audit committee characteristics on earnings management in Malaysia and they find no significant relationship between audit committee independence and earnings management.

Independence is an important characteristic of the audit committee because it gives greater assurance that audit committee perform better and mitigate earnings management (Ghafran and O'Sullivan, 2013). Studies on audit committee independence reduce earnings management conducted by the management (Bronson et al., 2009; Carcello et al., 2006; Inaam and Khamoussi, 2016; Klein, 2002). Therefore, it is expected that the independence of the audit committee mitigate earnings management. Thus, the first hypothesis is:

H1 There is a negative relationship between the independence of the audit committee and earnings management.

### *3.2 Financial expertise and earnings management*

It is expected that audit committee review the financial statement process. BAPEPAM also require that at least one audit committee member has accounting/financial background to ensure that the audit committee is able to give an opinion and advice regarding firm financial statement process to the BOCs. Carcello et al. (2006) find evidence that financial expertise has a negative influence on earnings management. Financial expertise is effective to mitigate earnings management. This result was confirmed by Baxter and Cotter (2009) using Australian evidence. Financial expertise has significant influence on the abnormal accrual in Australia. Xie et al. (2003) investigate the effect of financial expertise on the earnings management using data from the USA. They find that financial expertise reduce the level of earnings management. Inaam and Khamoussi (2016) confirm the result of Xie et al. (2003) in that the financial expertise has a negative influence on earnings management. This result supports the regulation that requires at least one of the audit committee member has financial/accounting background.

On the other hand, there is evidence that financial expertise does not have any significant influence on earnings management (Rahman and Ali, 2006). Rahman and Ali (2006) find that in an emerging market such as Malaysia, financial expertise does not reduce earnings management.

Previous studies reveal that financial expertise has a negative influence on earnings management (Carcello et al., 2006; Inaam and Khamoussi, 2016; Xie et al., 2003). Financial expertise is an important characteristic for the audit committee to mitigate earnings management. Therefore, the second hypothesis is:

H2 There is a negative relationship between financial expertise and earnings management.

### *3.3 Number of audit committee members and earnings management*

There are two arguments on the influence on the number of audit committee members and earnings management: smaller size audit committee is better or larger size audit committee is better? Smaller size audit committee is better because the board can make quick decisions, has fewer communication problems and fewer free-rider problems (Bliss, 2011). On the other hand, larger audit committee size may be better because it has more expertise than smaller audit committee size (Bliss, 2011). In the regulation on the number of audit committee members, an audit committee must consist of at least three persons. The result of the previous research on the effect of number of audit committee members shows that smaller size audit committee is better because it able to reduce the earnings management (Carcello et al., 2006). However, Baxter and Cotter (2009) did not find any significant relationship between the number of audit committee members and earnings management in the Australian context. This result shows that the number of audit committee members do not have any significant influence on earnings management. On the other hand, Sun et al. (2014) find that larger audit committee size has no effect on earnings management.

Smaller size audit committee is better because it will be able to respond more quickly and better compared to larger size audit committee (Jensen, 2010a, 2010b). Therefore, it is expected that smaller size audit committee is better in curbing earnings management. The third hypothesis is:

H3 There is a positive relationship between number of audit committee members and earnings management.

### *3.4 Number of audit committee meetings and earnings management*

The number of audit committee meetings describes the activity of the audit committee. It is expected that large number of meetings of audit committee is able to curb earnings management. Xie et al. (2003) confirms this expectation and find that higher number of meetings has a negative relationship with earnings management. Saleh et al. (2007) using Malaysian find a negative relationship between the frequency of audit committee meetings and earnings management. Baxter and Cotter (2009) also find that frequency of audit committee meetings mitigate accrual abnormal earnings, using the Jones (1991) model in Australia. However, this result is not robust on the other measurement of earnings quality, such as: Dechow and Dichev (2002) methods. However, Rahman and

Ali (2006) find no evidence that large number of audit committee meetings mitigates earnings management in Malaysia. The results of their research show that the number of audit committee meetings does not have any significant influence on earnings management.

It is expected that high frequency of audit committee meetings will result in better performance and monitoring (Ghafran and O'Sullivan, 2013). Therefore, it is predicted that the frequency of audit committee meetings has a negative relationship with earnings management. The fourth hypothesis is:

H4 There is a negative relationship between the number of audit committee meetings and earnings management.

### 3.5 *Gender and earnings management*

There are some differences between gender (female and male) in the context of decision making and monitoring within a firm, such as: female directors have higher moral consideration and more risk aversion attitude than male directors (Gavious et al., 2012). In addition, female directors are more careful compared to male directors. In the context of monitoring activities, female directors are more conservative and rigid with the rules. Thus, it is expected that female directors are more effective in mitigating earnings management compared with male directors. Gavious et al. (2012) investigate the effect of female directors on the audit committee and BOD to monitor the companies in Israel. The results of their research show that female directors have a negative effect on earnings management. This result confirms this expectation. Other studies also find a negative relationship between female directors and earnings management (Thiruvadi and Huang, 2011). However, there is also evidence that female directors have no effect on the firm's earning management (Sun et al., 2011). Sun et al. (2011) investigate the role of female directors on the audit committee group. They find that female directors do not have any significant influence on earnings management.

Female directors have more ethical consideration in decision making (Gavious et al., 2012). If earnings management is unethical because managers try to provide bias information for their best interest, female directors will react. Female directors try to mitigate earnings management (Sun et al., 2011). Therefore, the next hypothesis expects that female directors on the audit committee composition have a negative influence on earnings management.

H5 There is a negative relationship between female committee member and earnings management.

## 4 **Research methodology**

### 4.1 *Sample*

Our sample consists of all manufacturing firms listed in the Indonesian Stock Exchange (IDX) during the 2006–2010 periods. Companies are included in the sample if there is complete information available regarding audit committee members background, such as: member's name, financial background and gender, audit committee activities, for example, the number of audit committee meetings. We collected data on audit committee



characteristics: number of audit committee members, number of audit committee meetings, and the independence of the audit committee from the firms' financial statements from 2006–2010. To get more information on the audit committee members' background for independence and financial expertise, we rely on the firm disclosure and information accessed from the internet. The final sample consists of 393 firm-year observations over the 2006–2010 periods. We provide the definition of the variables in Table 1.

**Table 1** Variable definition

<i>Variable</i>	<i>Definition</i>
Dependence variable	
Earnings management	Abnormal accrual using modified Jones model (Dechow et al., 1995)
Independent variables	
Number of audit committee meetings	Frequency of audit committee meeting within one year (Baxter and Cotter, 2009)
Size of audit committee	Number of firms' audit committee members (Sun et al., 2014)
Independence	Percentage of independent directors in audit committee (Baxter and Cotter, 2009; Carcello et al., 2006; Osmá and Noguera, 2007). Directors are considered independent if he/she has no relationship with the firm (Bronson et al., 2009; Carcello et al., 2006) including affiliated companies.
Financial expertise	Percentage of member of audit committee with accounting/finance background (Bronson et al., 2009; Carcello et al., 2006; Xie et al., 2003)
Gender	Percentage of female directors in audit committee (Sun et al., 2011; Thiruvadi and Huang, 2011)
Control variables	
Auditor size	Dummy variable, 1 if the auditor is Big-4 and 0 otherwise (Siagian and Tresnaningsih, 2011; Siregar and Utama, 2008)
Leverage	Debt to assets ratio (Siagian and Tresnaningsih, 2011)
Growth	Market-to-book ratio of equity (Sun et al., 2014)
Institutional ownership	Institutional investor is percentage of shares owned by institutional investors (Siregar and Utama, 2008)

#### 4.2 Research method

This research investigates the effect of audit committee characteristics on earnings management. Thus, the research model for this study is provided below:

$$EM = \alpha + \beta_1 Meet + \beta_2 Size + \beta_3 FinExp + \beta_5 Gender + \beta_6 Au + \beta_7 IO + \beta_8 Gr + \beta_9 Lev + \varepsilon$$

where

- EM = earnings management, this study using cross-sectional modified Jones model (Dechow et al., 1995).
- Meet = number of audit committee meetings.

- Size = size of audit committee (number of audit committee members).
- Ind = percentage of independent member in audit committee.
- FinExp = percentage of audit committee member with financial/accounting background.
- Gender = percentage of female member in audit committee.
- Au = auditor size, dummy variable is 1 if Big-4 and 0 otherwise.
- IO = institutional ownership, percentage of institutional shares in the firm.
- Gr = growth, market value to book value of firm shares.
- Lev = leverage or debt to assets ratio.

## 5 Results

### 5.1 Descriptive statistics

**Table 2** Descriptive statistics

<i>Panel A: continuous variable</i>									
	<i>Mod Jones (Dechow)</i>	<i>Meet</i>	<i>Size</i>	<i>Ind</i>	<i>FinExp</i>	<i>Gender</i>	<i>IO</i>	<i>Gr</i>	<i>Lev</i>
Mean	0.072	5.852	3.062	94.387	66.918	14.542	10.038	1.957	0.534
Median	0.087	4	3	100	66.670	0	0	0.954	0.505
Max	1.822	18	5	100	100	100	81.980	22.770	2.099
Min	-1.750	2	2	33.330	0	0	0	0.054	0.041
Std. dev.	0.392	3.522	0.348	15.045	26.761	21.979	18.377	2.911	0.312
<i>Panel B: Dichotomous variable</i>									
	<i>Frequency of 1</i>				<i>Frequency of 0</i>				
AU	49.37				50.63				

Notes: EM = earnings management, Meet = number of audit committee meetings, Size = number of audit committee members, Ind = percentage of independence members of audit committee, Gender = percentage of female members of audit committee, FinExp = percentage of audit committee members with financial/accounting background, IO = percentage of institutional ownership shares, Gr = growth, and Lev = leverage; AU = auditor size, 1 if Big-4 and 0 otherwise.

From Table 2, the mean of earnings management (using modified Jones model) is positive. Most of Indonesian manufacturing companies during 2006–2010 periods have positive earnings management. Indonesian firms try to increase accounting earnings. Further information from descriptive statistics shows there is great variations on the audit committee data. The frequency of meetings variations are from two meetings during the year up to 18 meetings a year. The Indonesian regulator's rules on frequency of audit committee meeting are at least the same number of meetings with board meetings. Most of the audit committee meetings frequency is four times a year. The regulation on the

number of audit committee members is at least three persons. However, from Table 2 there are some companies that only have two persons as audit committee members. The maximum number of audit committee members is five persons. Most of the Indonesian audit committees have three persons as members.

Regarding independence of the audit committee, the Indonesian regulator requires that all audit committee members are independent. However, Indonesian ownership structure shows that most of Indonesian firms are family firms (Carney and Child, 2013; Carney and Hamilton-Hart, 2015; Setiawan et al., 2016) and belong to business groups. Therefore, it is possible to have cross-holding positions between companies in the same business group (conglomerates). In this case, the audit committee members came from the same business group members and are not considered as independent. Other situations from the independence of audit committee members show that there are some members who have a relationship with the companies, for example, she/he is an employee of the companies.

From Table 2, most of the audit committee members are males. The descriptive statistics show that female members of the audit committee are only 14.52%. The other noteworthy information is that most of the audit committee members have financial/accounting background. The mean of the audit committee members with financial/accounting background is 61%. Table 2 also provides information regarding the control variables. Auditor size for this sample shows almost the same proportion between firms audited by the Big-4 firms (49.6%) and non-Big-4 firms (50.4%). The mean leverage level of this sample is 53.6%. The mean of growth shows a positive mean of 1.944 and institutional shareholders hold 10.441% of the shares.

## *5.2 Correlation*

Table 3 provides the result of the correlation between variables. As shows in Table 3, earnings management has no significant correlation with the independent variables: the frequency of audit committee meeting, audit committee size, gender, financial expertise and independence of audit committee members. Further, earnings management has no significant correlation with control variables: auditor size, institutional ownership, growth and leverage. Table 3 also provides evidence significant correlation between frequency of meetings and financial expertise, frequency of meetings and gender. Gender in audit committee also has significant correlation with independence and financial expertise.

## *5.3 Regression results*

Table 4 provides the regression results to test the hypotheses.

From Table 4, Meet (frequency of audit committee meeting) has a positive influence on the earnings management. This results shows that frequency of audit committee meeting might not mitigate earnings management practice by the managers. This result does not confirm the hypothesis that expects a negative relationship between the number of audit committee meetings and earnings management. This result does not confirm previous studies, such as Baxter and Cotter (2009) and Saleh et al. (2007). Therefore, audit committee activity on meetings does not mitigate earnings management.

Table 3 Correlation matrix

	Mod_Jones	Meet	Size	Ind	FinExp	Gender	AU	IO	Gr	Lev
Mod_Jones	1.0000									
Meet	0.0578 (0.3635)	1.0000								
Size	-0.0216 (0.7336)	-0.0374 (0.5567)	1.0000							
Ind	-0.0224 (0.7244)	0.0078 (0.9018)	0.0266 (0.6760)	1.0000						
FinExp	0.0410 (0.5186)	0.3348 <sup>a</sup> (0.0000)	0.1179 (0.0632)	0.1343 <sup>b</sup> (0.0341)	1.000					
Gender	-0.0954 (0.1331)	-0.1874 <sup>a</sup> (0.0030)	-0.0205 (0.7464)	-0.2759 <sup>a</sup> (0.0000)	-0.2129 <sup>a</sup> (0.0007)	1.0000				
AU	-0.0225 (0.7237)	0.2722 <sup>a</sup> (0.0000)	0.1003 (0.1142)	0.1674 <sup>a</sup> (0.0081)	0.2656 <sup>a</sup> (0.0000)	-0.1879 <sup>a</sup> (0.0029)	1.0000			
IO	-0.0053 (0.9327)	-0.2055 <sup>a</sup> (0.0011)	0.0033 (0.9578)	-0.3941 <sup>a</sup> (0.0000)	-0.1788 <sup>a</sup> (0.0046)	0.0955 (0.1325)	-0.0563 (0.3763)	1.0000		
Gr	0.0180 (0.7769)	-0.0334 (0.5992)	0.17049 <sup>a</sup> (0.0070)	0.0544 (0.3924)	0.0378 (0.5520)	-0.0133 (0.8343)	0.0431 (0.4982)	-0.1572 <sup>b</sup> (0.0130)	1.0000	
Lev	0.1043 (0.1004)	0.2254 <sup>a</sup> (0.0003)	-0.0731 (0.2502)	-0.1924 <sup>a</sup> (0.0023)	-0.0531 (0.4041)	-0.2123 <sup>a</sup> (0.0007)	0.1079 <sup>c</sup> (0.0892)	0.0451 (0.4786)	0.0692 (0.2761)	1.0000

Notes: <sup>a</sup>, <sup>b</sup>, and <sup>c</sup> significant at 1%, 5%, and 10%; EM = earnings management, Meet = number of audit committee meetings, Size = number of audit committee members, Ind = percentage of independence members of the audit committee, Gender = percentage of female members of the audit committee, Finexp = percentage of audit committee members with financial/accounting background, IO = percentage of institutional shareholdings, Gr = growth, Lev = leverage, and Au = auditor size, 1 if Big-4 and 0 otherwise.

This study also finds that the size of the audit committee does not influence earnings management. Thus, the number of audit committee members has no impact to mitigate earnings management. This result does not confirm the findings of previous studies, such as: Carcello et al. (2006) and Sun et al. (2014) who find that audit committee size has significant influence on earnings management. However, this research confirms Baxter and Cotter (2009) results who find an insignificant effect of the audit committee size on earnings management in Australia. Therefore, this result does not support the hypothesis.

**Table 4** Regression results

	1	2	3	4	5	6
a	-0.0126 (0.9574)	0.2630 (0.2127)	0.06377 (0.6810)	0.1442 (0.3372)	0.2760** (0.0270)	-0.3705 (0.3821)
Meet	0.0520** (0.0499)					0.0488* (0.0586)
Size		-0.0021 (0.4802)				0.0077 (0.4168)
Ind			0.0018** (0.0170)			0.0022 (0.1285)
FinExp				0.0014* (0.0619)		0.0023*** (0.0008)
Gender					-0.0034** (0.1379)	-0.0052* (0.0616)
Au	-0.2373*** (0.0001)	-0.2295*** (0.0000)	-0.1905*** (0.0025)	-0.1932*** (0.0036)	-0.1880*** (0.0001)	-0.1732*** (0.0000)
IO	0.0039*** (0.0004)	0.0031*** (0.0084)	0.0034*** (0.0047)	0.0035** (0.0202)	0.0033** (0.0318)	0.0039*** (0.0016)
Gr	0.0029 (0.3956)	0.0052 (0.3253)	0.0044 (0.3585)	0.0052 (0.3434)	0.0064 (0.3128)	0.0055 (0.3340)
Lev	-0.2709** (0.0302)	-0.2098 (0.1193)	-0.2173* (0.0907)	-0.2102 (0.1080)	-0.2043 (0.1087)	-0.2459* (0.0555)
F-value	1.9744***	1.8296***	1.8356***	1.8494***	1.8697***	1.9774***
F-prob	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Adj R2	0.2035	0.1802	0.1783	0.1817	0.1842	0.2120

Notes: \*\*\*, \*\*, and \* significant at 1%, 5%, and 10%; EM = earnings management, Meet = number of audit committee meetings, Size = number of audit committee members, Ind = percentage of independence members of the audit committee, Gender = percentage of female members of the audit committee, Finexp = percentage of audit committee members with financial/accounting background, IO = percentage of institutional shareholdings, Gr = growth, Lev = leverage, and Au = auditor size, 1 if Big-4 and 0 otherwise.

From Table 4, the audit committee independence has no significant influence on earnings management. Audit committee members that do not have any relationship with the companies might not able to constraint earnings management by the management. This result is in line with Prabowo and Simpson (2011) who find no significant relationship of

independent commissioners on firm performance. Prabowo and Simpson (2011) argue that independent commissioners do not have any effect on firm performance due to the lack of institutional reforms when companies choose independent commissioners. Even when companies choose directors/audit committee members who have no relationship with the firms; however he/she may a close relationship with the ultimate owners. Therefore, independent directors are not necessarily independent when in fact they are independent in appearance only. This situation leads to poor corporate governance adoption in Indonesia (Tabalujan, 2001).

The result also shows that gender has a significance influence on earnings management. The effect of the female members of audit committee is negative and significant on earnings management. Female directors have higher ethical standards compared to the male directors and she perceives earnings management to be unethical (Gavious et al., 2012). Thus, female directors have more motivation to monitor earnings management and to mitigate management in earnings management. This result confirm this theory, female members of audit committee curb constraint earnings management. Audit committee with higher proportion or female members has higher probability to prevent managers from conducting earnings management. This result in line with the previous research (Gavious et al., 2012; Thiruvadi and Huang, 2011) who find a negative effect of female directors on earnings management. Thus, female directors reduce earnings management in companies.

From Table 4, financial/accounting expert (FinExp) has a positive influence on earnings management. This results show that financial/accounting background is important for the audit committee. One of the main task of the audit committee is to oversee the financial statement process, thus, it is expected that audit committee have member(s) with financial/accounting qualification to carry out this duty. However, audit committee which has financial/accounting background might not able to provide better advice to the BOC regarding financial statements. This results do not confirm previous studies such as Bronson et al. (2009), Beasley et al. (2009) and Carcello et al. (2006). Therefore, this result does not confirm the hypothesis that expects a negative relationship between financial/accounting background and earnings management.

The result on the effect of control variables shows that auditor and leverage has a negative impact on earnings management. Thus, Big-4 audit firms mitigate earnings management. Further, firms with higher level of leverage have less earnings management. The negative effect of leverage on earnings management is in line with previous studies (Chen et al., 2007; Garven, 2009). Institutional ownership has positive effect on earnings management. Thus, institutional ownership exacerbates management in earnings management. This study also finds that growth does not have any effect on earnings management.

## **6 Conclusions**

Our results document that gender has a negative influence on earnings management in which female member(s) of audit committee might be able to mitigate earnings management and provide a positive effect on reducing the level of earnings management. However, this study shows that meetings and financial background have positive effect on earnings management. The higher frequency of audit committee meetings increases the level of earnings management. Thus, the higher frequency of audit committee

meetings might not constrain earnings management. We also find that financial background might not effectively reduce earnings management. However, this research does not find evidence of the impact of audit committee size and independence on earnings management.

We document that female members in the audit committee have negative effect on the earnings management. This result implies that the existence of female directors in the audit committee members is important. It is expected that female directors will closely monitor the firms, therefore the level of earnings management decreases.

Managers have two options to manage earnings: accrual earnings management and real earnings management. After the introduction of Sarbanes-Oxley Act in the United States, managers prefer to manage earnings through real activities rather than accrual accounting (Bartov and Cohen, 2009; Cohen et al., 2008). This research focuses on how audit committee characteristics mitigate earnings management. Thus, future research may investigate how audit committee characteristics constraint real earnings management in Indonesia.

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## Notes

- 1 At December 2012, the function of Indonesia Capital Market and Financial Institution Supervisory (BAPEPAM-LK) transfer to Indonesia Financial Service Authority (OJK).

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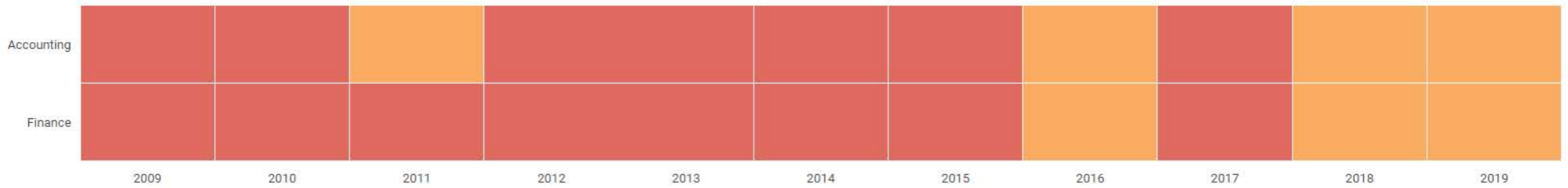
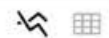
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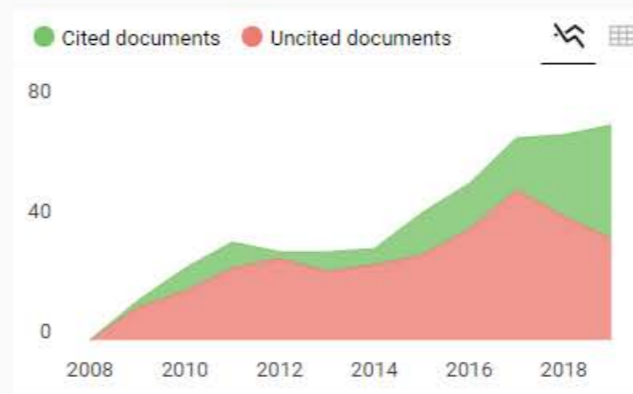
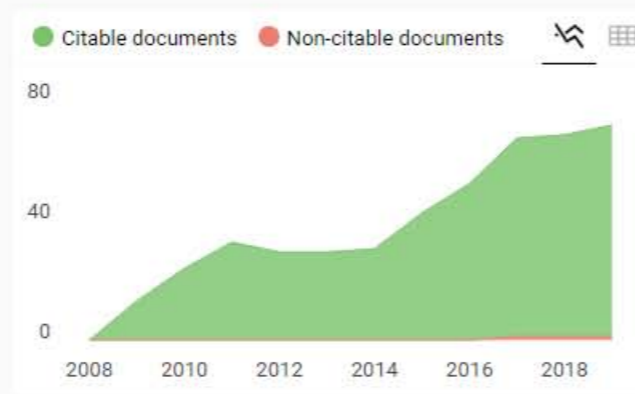
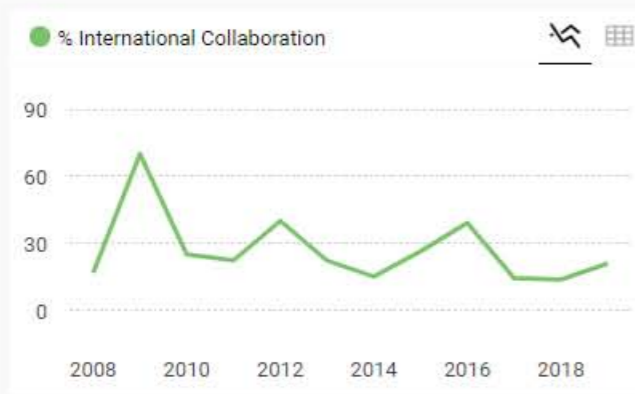
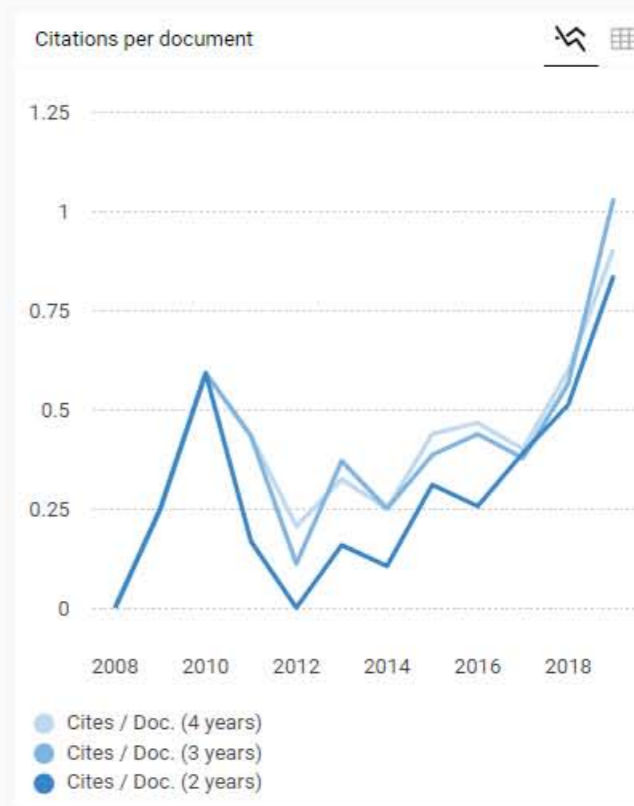
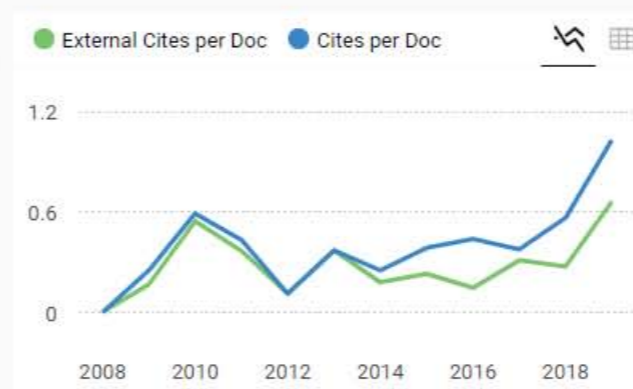
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