# The Effect of Audit Quality, Firm Size, and Financial Expert CEO to Earnings Management in Indonesian Manufacturing Industry

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Abstract— This study aims to empirically examine the effect of audit quality, firm size, and financial expert CEO to earnings management in the Indonesian manufacturing industry. The sample is manufacturing firms listed on the Indonesia Stock Exchange with the study period 2012-2017. Data obtained from Data Stream and IDX website. The proxy used to calculate earnings management is discretionary accruals (DAC) by modified Jones model (1991), audit quality is categorized into audits by Big 4 auditor and Non Big 4 auditor, measurement of firm size by calculating natural logarithm (In) on total assets, and financial expert CEO which is differentiated into financial expert CEO and not financial expert CEO. Using fixed effect panel regression, this research finds that there is a significant negative effect of audit quality to earnings management, no significant positive but negative effect on firm size to earnings management, and no significant effect of financial expert CEO to earnings management.

Index Terms - Earnings management, manufacturing, audit quality, firm size, financial expert CEO

#### 1 INTRODUCTION

NE of important information in the financial statements that is considered by investors is information on earnings. Information on earnings is used as the basis of tax calculation, dividends and for decision making, including decision to invest. Change of earnings is regularly monitored by many parties including board members, financial analysts, executive, and so on (Charoenwong & Jiraporn, 2009). Management is considered as the party that is responsible for preparing financial reports and reporting business performance for shareholders. Therefore, if information on earnings has low quality and contains inaccurate data, investors can make wrong decisions (Piyawiboon, 2015).

Various actions taken by business agents are based on a theory that is called as agency theory. This theory basically explains about the relationship and interests of the shareholders as the principal and the management as the agent. Tan & Lee (2015) state that the principal is insensitive or does not give trust to the agent about how the agent regulates goals, risks, and information. An example of information asymmetry in agency theory is the actions taken by management for its own sake, one of which is by manipulating profits. Management's ability to manipulate profits can be referred as earnings management. Earnings management is done to influence stakeholders, especially investors by reducing or increasing reported income (Mostafa, 2017).

Earnings management is still an interesting issue to be discussed. This is because there are differences in perspectives regarding earnings management itself. According to Sulistyanto (2014), earnings management is still a matter that deserves to be explored for two reasons.

First, because earnings management is considered as a common culture that is attached to all types of companies. Second, earnings management behavior is proven to lead to managerial activities that can affect the economic, ethical, and moral order. The public seems to lose trusts in the credibility and integrity of accountants who is considered capable of detecting fraud, including earnings management, in order to achieve a healthy business life. For this reason, research on earnings management can be raised in order to create awareness for each user of financial statements that to make decisions can not only refer to the results listed in the financial statements.

Dichev et al. (2013) states that earnings management is based on several factors (that related to one another), which in general is the motivation of the company to dominate the capital market, followed by a contract debt, career paths, and compensation issues. Meanwhile, Daniel et al. (2012) state that earnings management is an opportunistic behavior by management in terms of regulating the level of profit divided into several literatures. The first literature detects earnings management when the company is in a certain phase, such as when companies make stock and acquisition offers. The second literature explores managerial incentives for earnings management, such as bonus and dividend payments. The third literature considers whether the management does earnings management to meet the standards they to achieve, such as to avoid reporting losses and decreasing profits. The last literature describes the relationship between the level of debt and management decisions to increase or decrease the rate of profit. From several views above, earnings management which is conducted by management is motivated by various conditions and factors, depending on the objectives to be achieved.

This study uses the manufacturing industry as research objects. Although so many research topics related to earnings management have been conducted, there are few studies that use manufacturing industry as the object of research, especially that focus on manufacturing industries in Indonesia. This is used by researchers as a research gap. One industry sector that has an impact on economic growth in Indonesia is the manufacturing industry. Through the Press Release of the Ministry of Industry of the Republic of Indonesia (2018), the Ministry of Industry guarantees will actively increase the value of investment and major exports in the manufacturing sector to spur national economic growth and create equitable development and public welfare. Quoting a statement from the Minister of Industry Airlangga Hartarto through the Press Release of the Ministry of Industry of the Republic of Indonesia (2018), the manufacturing industry has become a major driver in accelerating the growth of national economy. Based on that statement, it can be concluded that the manufacturing industry is the mainstay industry of the Indonesian government to advance the economy, both in terms of investment and economic growth. Based on data from Badan Koordinasi Penanaman Modal (BKPM) (2018) and Badan Pusat Statistik (BPS) (2018) Indonesia, the average investment contribution of the manufacturing industry over the past 6 years reached 45,80% of the total value of investment in Indonesia, according to Minister of Industry Airlangga Hartarto through the Press Release of the Ministry of Industry of the Republic of Indonesia (2018). That means, the interest of investors from both inside and outside the country is still very large towards the manufacturing industry in Indonesia. In addition, based on the source of GDP growth from each business sector, comparing to other sectors, manufacturing industry is the biggest contributor to GDP growth from Quarter II-2017 to Quarter II-2018, which make the manufacturing industry becomes the object of this research.

## 2 THEORETICAL FRAMEWORK AND HYPOTHESES

Associated with economics, agency theory has been used as a theoretical foundation, both for practitioners and academics in several disipliner. These disciplines include organizational behavior, legal, marketing, accounting, family business, and other scientific disciplines (Bendickson et al., 2016). Problems related to agency theory usually happens between the principal and the agent or the governance mechanism. Tan & Lee (2015) mentioned that there are three types of asymmetry related to agency theory, there are: goal asymmetry, risk asymmetry, and information asymmetry. Information asymmetry is the type of asymmetry that is related to earnings management because the decision makers will evaluate every piece of information provided by information providers, then use that information as a basis for decision making. Associated with this research, if company management manipulates earnings in financial statements, then the earnings information will be invalid and can lead to wrong decisions making. That explains why the quality of earnings information must be maintained to avoid creating information asymmetry.

Earnings management is defined as the choices taken by management to obtain earnings as desired (Scott, 2015). Scott (2015) explains some types of earnings management, there are: taking a bath/big bath theory, income minimization, income maximization, and income smoothing. Taking a bath/big bath theory is done when the company is in a bad condition and is not profitable, or when the company is restructured. If the company is in a situation that is required to report a loss, management may choose to report a loss on a really big scale because the company is no more disadvantaged than the situation at that time. Second, management does income minimization when the company is in a high level of profitability. Income minimization is done to minimize the level of income to achieve certain purposes, one of them is to reduce the number of tax. Third, income maximization is done by management to maximize income in order to get a certain bonus. Not only that, management also chooses to do income maximization in order to save the company from the violation of the debt agreement. Lastly, income smoothing is done to avoid reporting volatile and unstable earnings levels.

Basically, management's decision to conduct earnings management is based on the desire to achieve a goal. In general, there are several motivations that encourage management to behave opportunistically, such as motivational bonuses, contracts, politics, tax imposition, CEO changes, etc. Those motivations are in line with three hypotheses in positive accounting theory, which is the basis for developing hypothesis to detect earnings management according to Watts & Zimmerman (1986), including: bonus plan hypotheses, debt (equity) hypotheses, and political cost hypotheses. Bonus plan hypotheses states that a business contract between management and other parties can influence the level of earnings management, in the form of bonus or managerial compensation. In the bonus agreement compensation, the owner of the company promises that management will receive a large amount of bonus if the company achieves certain performance. Second, debt (equity) hypotheses explains that earnings management is done to make the company seems to have the ability in completing debt obligations. Third, political cost hypothesis states that management manipulates earnings to avoid violations of government regulations. The government regulation is included in the form of tax laws, anti-trust and monopoly, and so on.

Hypothesis of the Effect of Audit Quality to Earnings Management

Several studies have been conducted to examine the effect of audit quality to earnings management behavior. Some research support the statement that public accountant firm that is classified as Big 4 auditors can reduce management decisions to do earnings management. This is because the Big 4 auditors have the tendency and ability to detect and identify fraud committed by management (Alzoubi, 2017). In addition, large auditors are also considered to have a

stronger desire to maintain reputation that has been created in the public (Krishnan, 2003), so that the auditor will avoid things that can damage their reputation, including helps management to do earnings management. Taken together, Big 4 auditors are considered more capable of detecting and reducing the tendency of management to conduct earnings management compared to Non Big 4 auditors. Thus, the first hypothesis is:

H1. Big 4 auditor has a negative significant effect on earnings management.

Hypothesis of the Effect of Firm Size to Earnings Management

Warfieid et al. (1991), Chung et al. (2002), Piot & Janin (2007) found that large companies tend to do earnings management, based on political costs. The bigger the company, the more sensitive the company in a political manner. Earnings management is done by management to reduce that political costs (Warfieid et al., 1991). Lobo & Zhou (2006) explained that earnings management tends to be done by large companies compared to small companies because large companies have a greater level of operational complexity than small companies. If the management of a large company conducts earnings management, it will be more difficult to detect because of the complexity of operations and the greater chance of information asymmetry in large companies.

H2. Firm size has a positive significant effect on earnings management.

Hypothesis of the Effect of Financial Expert CEO to Earnings Management

CEO's experience in finance and accounting will lead the CEO to make better decisions. The similar background of the company's CEO and CFO will improve the process and financial reporting results. The financial expert CEO is also encouraged to provide high-quality financial reporting to the market. Not only that, the desire to maintain a good reputation will also keep the financial expert CEO from reporting financial reporting errors, so the financial expert CEO will avoid decisions to do earnings management. These statements were stated by Gounopoulos & Pham (2018) through the results of his research. Thus, the third hypothesis is:

H3. Financial expert CEO has a negative significant effect on earnings management.

#### 3 RESEARCH APPROACH

This study examines Indonesian manufacturing industry for fiscal years 2012-2017. All financial data is gathered from Data Stream Thomson Reuter and Indonesia Stock Exchange database. Our initial population comprised the entire population of all 153 firms or 918 firm-year observations. Of the 153 firms, we found that not all companies have complete data since 2011, because there are several new companies that just make an Initial Public Offering (IPO) in the middle of the research period. Such companies were ultimately not included as research samples. Not only that, we also impose

several categories in filtering research samples through purposive sampling with several conditions including: companies that will be used as research samples are all manufacturing companies listed on the Indonesia Stock Exchange before 2011 to 2017, have complete financial report data for calculating each research variables during 2011 to 2017, published financial statements with the financial year ending December 31, and published financial statements in Rupiah. Thus, the final sample for the analysis is 74 firms or 444 firm-year observations ranging from 2012-2017.

We use discretionary accruals as a proxy for earnings management. Prior to estimating discretionary accruals, total accruals (TAC) are calculated as (1):

 $TAC_{jt} = (\Delta CA_{jt} - \Delta Cash_{jt}) - (\Delta CL_{jt} - \Delta LTD_{jt} - \Delta ITP_{jt}) - DPA_{jr}$ 

Where:	
$TAC_{jt}$	= total accruals for firm $j$ in time period $t$ .
$\Delta CA_{jt}$	= change current assets for firm <i>j</i> from time period <i>t</i> -1 to <i>t</i> .
$\Delta Cash_{jt}$	= change cash balance for firm <i>j</i> from time period <i>t</i> -1 to <i>t</i> .
$\Delta CL_{jt}$	= change current liabilities for firm <i>j</i> from time period <i>t</i> -1 to <i>t</i> .
$\Delta \mathrm{LTD}_{jt}$	= change long-term debt included in current liabilities for firm <i>j</i> from time
	period <i>t</i> -1 to <i>t</i>
$\Delta  ext{ITP}_{jt}$	= change income tax payable for firm <i>j</i> from time period <i>t</i> -1 to <i>t</i> .
$\mathrm{DPA}_{jt}$	= depreciation and amortization expense for firm <i>j</i> in time period <i>t</i> .

TAC is then decomposed into normal accruals (NAC) and discretionary accruals (DAC) using the cross-sectional modified Jones (1991) model defined formally as (2):

$$\begin{aligned} \text{TAC}_{jt}/\text{TA}_{jt\text{-}1} &= \alpha_{jt} \left[ 1/\text{TA}_{jt\text{-}1} \right] + \beta_{jt} \left[ (\Delta \text{REV}_{jt} - \Delta \text{REC}_{jt})/\text{TA}_{jt\text{-}1} \right] + \\ & \gamma_{jt} \left[ \text{PPE}_{jt}/\text{TA}_{jt\text{-}1} \right] + \varepsilon_{jt} \end{aligned}$$

Where:	
$TAC_{jt}$	= total accruals for firm $j$ in time period $t$ .
$TA_{jt-1}$	= total assets for firm <i>j</i> at the end of year <i>t</i> -1.
$\Delta \text{REV}_{jt}$	= change net sales for firm <i>j</i> between years <i>t</i> -1 and <i>t</i> .
$\Delta \text{REC}_{jt}$	= change net receivables for firm <i>j</i> between years <i>t</i> -1 and <i>t</i> .
$PPE_{jt}$	= gross property, plant, and equipment for firm $j$ in the year $t$ .
$\alpha_{jt} \beta_{jt} \gamma_{jt}$	= estimated coefficients.
Eit	= error term.

NAC is defined as the fitted values from equation (2) whilst DAC is the residual (TAC minus NAC). After getting the DAC, we made an absolute value for the DAC because we only focused on the number without seeing the positive or negative of the DAC.

To control compounding influences of cross-sectional factors, we incorporate control variables in the regression analysis. This study includes absolute value of total accruals (ABSTACC) to control firm's "accrual-generating potential" (Becker et al., 1998). Firms with higher absolute value of total accruals are likely to have greater discretionary accruals (Khrisnan, 2003). Thus, we expect a significant positive coefficient on the ABSTACC variable for the regression result. Second, we add leverage (LEV) as the next control variable. Debt to equity ratio (DER) is used as proxy for leverage. This ratio is a part of the solvency ratio that is used to measure the company's ability to pay off its obligations. If DER gets lower, the company's debt position will be better. DER is used as one of the control variables in research because companies will choose to do earnings management to reduce barriers to making loans (Damak, 2018). In addition, associated with one of the company's motivations to do earnings management, DER supports the debt (equity) hypotheses where management will do earnings management to delay the obligation to pay debt. Thus, we predict a significant positive relationship between leverage and earnings management.

Return on assets (ROA) is the third control variable we use in this research. ROA is one of the ratios included in the profitability ratios. ROA is used to assess how effective the utilization of every asset owned by the company to generate profits (Skousen & Walther, 2009). ROA is calculated by focusing on income in relation to assets. ROA shows how well the performance produced by the company through a comparison of profits generated by capital investment in the form of assets. If ROA is high, it shows that the company is both productive and efficient in utilizing the resources they have. Associated with earnings management, Dechow et al. (1995) and Kothari et al. (2005) state that the level of DAC depends on the company's financial performance because the company's financial performance is one of the considerations to conduct earnings management. If the company's financial performance in one period is bad or low, then earnings management is one of some ways to cover that. For this reason, we estimate a significant negative relationship between ROA and earnings management.

Furthermore, we also include a variable of investment (INVEST) measured by the level of investment in tangible fixed assets in current year scaled by total assets of previous year. The reason why investment is included as one of the control variables of this study is because investment has one element that is directly related to DAC as a proxy for calculating earnings management, the depreciation expense (Rusmin et al., 2012). Investment predicted to have a significant positive effect on earnings management because the more investment will lead to more depreciation expense so that the opportunity for management to make earnings management is even greater. Lastly, we include cash flow from operations (CFO) as the fifth control variable. The cash flow of each company is reported in one report, which is referred as a statement of cash flow. The reason why we use CFO as one of the control variables because we want to find out more, whether a company that produces a strong CFO performance will still consider managing earnings to increase its earnings or not (Alzoubi, 2016). In addition, only CFO that is directly related to the company's net income.

Reynolds & Francis (2001) found a significant negative relationship between CFO and earnings management. Thus, we predict that CFO negatively significantly affects earnings management. Table 1 shows each variables' definition and description of this research.

TABLE 1 VARIABLES' DEFINITION AND DESCRIPTION

	Variable	Definition	
Dependent Variable	DAC	Discretionary accruals of firm <i>i</i> for year <i>t</i> measured by modified Jones (1991) model	
	Audit Quality	First independent variable for firm <i>i</i> in fiscal year <i>t</i> that equals one (1) if a company is audited by Big 4 auditor and zero (0) otherwise.	
Independent Variables	Firm Size	Second independent variable for firm <i>i</i> in fiscal year <i>t</i> that measures size of firm as natural logarithm of total assets.	
	Financial Expert CEO	Third independent variable for firm <i>i</i> in fiscal year <i>t</i> that equals one (1) if a CEO has financial work experience and zero (0) otherwise.	
	Absolute Value of Total Accruals	Absolute value of total accruals for firm <i>i</i> divided by total assets for firm <i>i</i> for year <i>t</i> -1.	
Control Variables	Leverage	Debt to equity ratio that divides total debt of firm i for year t to total equities of firm i for year t-1.	
	ROA	Return on assets ratio that divides net income of firm <i>i</i> for year <i>t</i> to total assets of firm <i>i</i> for year <i>t</i> -1.	
	Investment	The amount of the increase or decrease in tangible fixed assets for firm i from year t 1 to year t, scaled by last year's total assets.	
	CFO	Cash flow from operations for firm <i>i</i> during the year <i>t</i> deflated by total assets as at end of year <i>t</i> -1.	

To test our hypotheses on audit quality, firm size, and financial expert CEO, we develop the following multivariate model:

DAC<sub>i</sub> = α<sub>i</sub> + α<sub>i</sub>:AuditQuality<sub>i</sub> + α<sub>i</sub>:FirmSize<sub>i</sub> + α<sub>i</sub>:FinancialExpertCEO<sub>i</sub> + α<sub>i</sub>:ABSTACC<sub>i</sub> + α<sub>i</sub>:Leverage<sub>i</sub> + α<sub>i</sub>:ROA<sub>i</sub> + α<sub>i</sub>:Investment<sub>i</sub> + α<sub>i</sub>:CFO<sub>i</sub> + ε<sub>i</sub>

### 4 EMPIRICAL RESULTS

Table 2 shows the descriptive statistics for each variables, meanwhile Table 3 shows the frequency and percentage of audit quality and financial expert CEO.

TABLE 2
DESCRIPTIVE STATISTICS

Variable	N	Min.	Max.	Mean	SD
DAC	444	0,0004	1,2401	0,1244	0,1891
AUD QUAL	444	0	1	0,4144	0,4932
FIRM SIZE	444	25,0546	33,3202	28,3427	1,6080
FINEXP CEO	444	0	1	0,2297	0,4211
ABST ACC	444	0,0002	0,5908	0,0705	0,0829
LEV	444	0,0000	5,3753	0,7620	0,8340
ROA	444	-0,2057	1,0370	0,0822	0,1177
INVEST	444	-0,3567	0,6253	0,0328	0,0901
CFO	444	-0,3751	1,0457	0,0896	0,1354

Notes: See Table 1 for full definitions and descriptions for the dependent, independent and control variables.

TABLE 3
FREQUENCY AND PERCENTAGE OF AUDIT QUALITY
AND FINANCIAL EXPERT CEO

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AUDQUAL				
	Dummy	Frequency	Percentage	
Big 4 Auditor	1	184	41,40	
Non Big 4 Auditor	0	260	58,60	
Total		444	100,00	
FINEXPCEO				
	Dummy	Frequency	Percentage	
Financial Expert CEO	1	102	23,00	
Not Financial Expert CEO	0	342	77,00	
Total		444	100,00	

Based on Table 2, the DAC has a minimum and maximum value of 0,0004 and 1,2401, respectively. Both figures show that manufacturing companies really do earnings management, because the value of DAC is more than 0. The mean value for the DAC is 0,1244 and the standard deviation for the DAC variable is 0,2264. Table 3 shows the frequency and percentage for each independent variables that use dummy.

Do audit quality, firm size, and financial expert CEO affect earnings management?

TABLE 4
RESULTS OF MULTIVARIATE REGRESSION ANALYSIS

Variabel	Hypotheses	Coeff.	Sig.
C		9,2293	0,0000
AUDQUAL	1	-0,1567	0,0194*
FIRMSIZE	+	-0,3208	0,0000**
FINEXPCEO	ı	-0,0249	0,2738
ABSTACC	+	0,6744	0,0000**
LEV	+	-0,0333	0,0615×
ROA	-	0,6793	0,0000**
INVEST	+	-0,0800	0,2315
CFO	-	-0,2028	0,0234*
Prob. F		0,0000	•
Adjusted R <sup>2</sup>		0,2685	

Notes: See Table 1 for full definitions and descriptions for the dependent, independent and control variables.

\*p < .10

\*p < .05

\*\*p < .01

Total Observation = 444

Based on the results of Table 4, it can be seen that the audit quality is proven to have a significant effect to earnings management, with a significance of 0,0194. The audit quality coefficient is equal to -0,1567, which means that the audit quality has a significantly negative effect on earnings management. If the audit quality increases by 1 unit, then the DAC will decrease by 0,1567 units. The second independent variable tested in the study is the firm size. The regression test results show the significance level for variable size the company is 0,0000 with a coefficient of -0,3208. These results indicate that firm size has a significantly negative effect to earnings management. If the size of the firm increases by 1 unit, then the DAC will decrease by 0,3208 units. The third independent variable tested in the study is the financial expert CEO. Based on the test results above, it shows that the financial expert CEO has a significance level of 0,2738 with a coefficient of -0,0249. These results indicate that the financial expert CEO is not proven to have a significant effect to earnings management.

The first control variable is ABSTACC, where ABSTACC shows a significance level of 0,0000 with a coefficient of 0,6744. These results show that the ABSTACC is proved to have a significantly positive effect to earnings management. If ABSTACC increases by 1 unit, then the DAC will also increase by 0,6744 units. The regression test results show that the leverage is proved to have a significantly negative effect to earnings management. The conclusion was taken based on the significance level of the leverage variable of 0,0615 with a coefficient of -0,0333. If the leverage rises by 1 unit, then the DAC will decrease by 0,0333 units.

Furthermore, ROA which is the third control variable in the study shows a significance level of 0,0000 with a coefficient of 0,6793. These results indicate that the ROA has a significantly positive effect to earnings management. If ROA increases by 1 unit, then the DAC will increase by 0,6793. The fourth control variable is investment, where investment has a significance level of 0,2315 and a coefficient of -0,0800. With this level of significance, it is concluded that there is no significant influence between investment and earnings management. The last control variable is CFO. The CFO has a significance level of 0,0234 with a coefficient of -0,2028. These results indicate that the CFO proved to have a significantly negative effect to earnings management. In other words, if the CFO rises by 1 unit, it will decrease the DAC by 0,2028 units.

Table 4 also shows the probability value (Prob. F) for the sample is 0,0000. When compared with alpha 0,05, we can conclude that all independent and control variables in the study, namely audit quality, firm size, financial expert CEO, ABSTACC, leverage, ROA, investment, and CFO have simultaneous effect to earnings management. The explanatory power for the sample is of 0,2685 or 26.85%. This percentage shows that variations of DAC (earnings management) can only be explained by audit quality variables, firm size, financial expert CEO, ABSTACC, leverage, ROA, investment, and CFO of 26.85%, while the remain 73,15% is explained by other variables that are not tested in the study.

The regression results on the research model shown in Table 4 shows that the audit quality is proved to have a significant negative effect on earnings management. These results are in accordance with the initial hypotheses of the study, where audit quality is expected to have a significant negative effect on earnings management. Thus, hypothesis 1 is not rejected. Significant negative effect means that high audit quality (Big 4 auditors) from external auditor will reduce the tendency of company management to do earnings management. The results of this study are in line with the results found by Becker et al. (1998), Francis et al. (1999), Khrisnan (2003), and Lin & Hwang (2010). Becker et al. (1998) and Francis et al. (1999) argue that Big 6 (Big 4) auditors are considered to have greater capability in detecting earnings management because the big auditor has superior knowledge and tends to act cautiously as an effort to maintain reputation, including to prevent earnings management. Khrisnan (2003) also added that big auditors have better resources and capabilities than non big auditors in detecting manipulations by management, including earnings management. In addition, big auditors are also considered to make more efforts to maintain their reputation because they are afraid or worried about losing the trust of a number of larger clients compared to non big auditors. Tendeloo & Vanstraelen (2011) in their research found that Big 4 auditors could detect and reduce earnings management because Big 4 auditors are considered more able to provide higher audit quality than Non Big 4 auditors.

The regression test results on the research model show that there is a significant negative effect on firm size to earnings management. This result proves that there is no significant positive relationship between firm size and earnings management, so hypothesis 2 is rejected. The results of the study is found to be in line with research from Rahman & Ali (2006), Wang (2006), Wang & Yung (2011),

Capalbo et al. (2014), and Muttakin et al. (2017). Lobo & Zhou (2006) concluded that large companies negatively affect earnings management because large companies are under the more stringent supervision by investors, which reduces the tendency of management to manipulate the level of earnings. Makarem et al. (2018) also argue that large companies are not expected to do earnings management compared to small companies based on the fact that large companies tend to have a stronger corporate governance system, such as internal control and the use of Big 4 Auditor services, compared to small companies that making earnings management more costly for large companies.

Based on the regression result, financial expert CEO does not significantly affect earnings management. This finding is in line with the findings of Jiang et al. (2013) and Hu et al. (2017). The argument that can be used for the results found is that there is a possibility that the CEO does not pay too much attention in more detail to the presence or absence of earnings management in the company. In addition, it can also be interpreted that the CEO looks further and broader about the sustainability of the company for the long term state, compared to how the decision to conduct earnings management is used by management to improve the condition of the company in the short term. The CEO is also considered to be more focused on how to run the company's management functions optimally. It can also be said the party that is directly involve with earnings management within the company is not the CEO, but the CFO, so there is no significant influence between the CEO and earnings management. Thus, the conclusion that can be drawn is that there is no significant influence between the financial expert CEO and earnings management, so that hypothesis 3 is rejected.

Based on the regression results, ABSTACC is proved to have a significantly positive effect on earnings management. This result is in line with initial expectations, where companies with a large TAC level will also have a large DAC level (Khrisnan, 2003). The second control variable is leverage where the regression results indicate that leverage has a significantly negative effect on earnings management. This result is contrary to initial expectations. These findings are in line with those results found by Chung et al. (2002), Jelinek (2007), Benkraiem (2012), and Zamri et al. (2013). Park & Shin (2004) in their study stated that companies with high levels of leverage will reduce earnings management because the lender will monitor and pay more attention to each activity and transaction carried out by the company with a high level of debt. Furthermore, lenders will increase the intensity of their supervision to the borrowing companies that are deemed incapable of achieving earnings targets. If control by the lender is successful, then clearly the efforts of management with high debt levels to manage earnings will also decline.

The regression test results on ROA indicate a significant positive effect of ROA to earnings management. This result is not in line with the initial expectation. The results are in line with research from Koh (2007), Wang & Yung (2011) and Capalbo et al. (2014), and Hessayri & Saihi (2015). Companies with a high level of ROA actually shows that

when the company's performance is quite good, then the company is considered to have effectively utilized the assets it has for operating activities in generating a certain level of profit. However, based on the results of this study, it was stated that ROA is significantly positively related to earnings management which means management still does not feel enough just by looking at the level of ROA, but there are still other things to be achieved. If associated with one of the motivations for earnings management, the decision to make earnings management arises when the management has capital market motivations. Capital market motivations are motivations that arise when company management is aware that financial information (which is not only limited to certain ratios) can affect prices, performance, and other matters related to the stock market Habbash & Alghamdi (2015). The motivation theory is also in line with what was found by Skinner (2003), where company performance is related to earnings management, especially in terms of investment opportunities.

The regression results indicate that investment is proven to have no significant effect to earnings management. The results obtained did not successfully prove the expected initial expectation. This can happen because management feels confident in the investment they have, so that earnings management is not an option to do. It can also be interpreted that the management of the company does not see the significant risks of the investment they made, so that the management is not motivated to do earnings management. The last control variable, CFO, proved to have a significant negative effect to earnings management. This result is in line with initial expectation. Lobo & Zhou (2006) state that companies with a large CFO level will reduce the tendency to do earnings management because a company with a high CFO is considered to have performed well based on its cash flow, so that the management is not motivated to do earnings management. The same results were also found by Gul, Fung, & Jaggi (2009), Kiattikulwattana (2014), and Alzoubi (2016).

#### 5 CONCLUSIONS

The results showed that there was a significant negative effect of the effect of audit quality on earnings management because Big 4 auditors are considered to be more capable and have a higher ability to detect manipulations by management, including earnings management. Therefore, management that want to do earnings management will avoid auditing financial reports by Big 4 auditors. Furthermore, the author failed to prove that there is a significant positive but negative effect of firm size to earnings management. This result is concluded because large companies of large companies have limited space to move under the more stringent supervision carried out by investors, which reduces the tendency of management to manipulate the level of earnings. Finally, there is no proven significant influence of financial expert CEO to earnings management because the CEO is considered to be more focused on how to run the company's management functions optimally, rather than do earnings management.

Like any other empirical studies, the authors suggest several things that can be used for parties, such as: (1) for management to be able to avoid decisions to make earnings management. Although doing earnings management will provide benefits for management, it would be better to maintain the trust of each stakeholder, (2) for investors to pay attention to factors that are empirically proved to affect earnings management, such as audit quality and firm size, (3) for further researchers to use the latest model to detect earnings management, such as Kothari model.

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