THE IMPACT OF FIRM AND BOARD CHARACTERISTICS TOWARDS EARNINGS MANAGEMENT

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Abstract

This research aims to empirically prove the impact of firm and board characteristics, consisting of firm leverage, firm size, audit quality, independence of board of directors, CEO duality, board size, share ownership, board composition, and size of audit committee towards earnings management. The population in this study are manufacturing companies that have been listed on the Indonesia Stock Exchange in the period of 2013-2017. Sample used was a total of 100 manufacturing companies per year observed. Audit quality, independence of board of directors, CEO duality, board size, share ownership, board composition, and size of audit committee were taken from the annual reports of the companies. Data analysis method uses a multiple regression analysis. The results of the analysis found that firm leverage, audit quality, and board composition has a significant effect on earnings management. On the other hand, firm size, independence of board of directors, CEO duality, board size, share ownership, and size of audit committee did not have a significant effect towards earnings management.

Keywords: *firm characteristics, board characteristics, earnings management, leverage, firm size*

1. Background

Over time, the issue regarding the theory of earnings management has been raising concerns among financial market regulators, financial operators, investors and also academic researchers according to one of the former US Security Exchange Commission Chairman circa 2002 as quoted by Uwuigbe et al (2015). The concept of earnings management had been going on and has been receiving much attention due to corporate failures. The trend had enlarged the doubts of stakeholders regarding to the credibility and reliability of the financial report. The importance of a company's earnings is quite big such that it should not be over emphasized. To add, according to Uwuigbe et al (2015), the profession in accounting also has responsibility to protect the company, with keeping in mind that a company's final product of the accounting process is earnings.

Waweru and Riro (2013) elaborated that financial reports with high quality is more acknowledged by investors and other stakeholders that are final users of the said financial reports. By having high qualityfinancial reports, it gives users more reliable information that is finally

later used for decision making. Inaddition, high quality financial reporting increases the transparency level and helps in executing better contracts. In addition, the International Chamber of Commerce (ICC), which is a company that helps business around the globe to operate internationally and responsibly, states that the efficiency of the market and also investors’ confidence level increase in the situation where the financial report information is reliable and has high quality in the aspects of consistency, comparability and understandability. In a journal article by Nugroho and Eko (2011), they argued that the independence of the board of commissioners and the existence of an audit committee contribute to a firm’s corporate governance. They also added that those two factors are the main focus for the Indonesia’s SEC (Stock Exchange Committee) and regulator, BAPEPAM, (Indonesian Capital Market and Financial Institution Supervisory Agency). Nugroho and Eko (2011) also stated in their research that in addition to independence of board of commissioners and also the existence of audit committee, stock ownership, chief executive officer duality, board size, board composition, board tenure, and board interlock can have effect on a firm’s earnings management.

This topic of research is interesting to be researched on because of the fact that this concept of earning management up till now has been topic of debate and concern for regulators, financial operators, investors and researchers. Particularly, this topic of research has been discussed several times in journal articles from other countries outside of Indonesia. With this topic being discussed in many countries, it seemed to be a good opportunity to apply and further explore this research topic into Indonesia.

This research paper will explore deeper about the impact of a firm’s characteristics and board characteristics towards earnings management in Indonesia. This research is made based on companies in Indonesia that is listed on the Indonesia Stock Exchange, with observation years spanning from 2013 to 2017. Based from the facts above, writer wishes to further study and explore whether firm characteristics such as; firm size, leverage, and corporate strategy impacts the earning management of a company.

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2. Theoritical Framework And Hypothesis Development

2.1 Basic Concept Definitions

2.1.1 Earnings Management

To discuss the earnings management, it is important to know the role of the financial statements in a company’s operations. By the explanation by Sun and Rath (2008), the main role

of the financial statements of a company is to give a report regarding the financial situation and information of firms with faithful representation and timeliness for both internal and external users. These financial statements are the main method of how the end users are able to understand the financial performance of the firm. Earnings in a major part of the financial statements as it is used to create business decisions.

The definition of earnings as provided by Goel (2012) is that it represents the bottom line or net income. It is the most important element of the financial reports because it specifies a company's value added activities and also helps in the organization of resources in the capital market.

Mentioned in a study conducted by Uwuigbe et al (2015), earnings management is defined as the efforts of management to influence the financial reports, especially earnings, through the use of accounting techniques, or the changing of the use of accounting techniques that has been intended to have an effect on earnings.

2.1.2 Information Asymmetry

One of the reasons to explain earnings management in information asymmetry. Sun and Rath (2008) explained that the existence of asymmetry of information leads management to manage earnings and as a result, external users of the information are unable to attain the full information in a company environment which has information asymmetry.

In an argument by Jiraporn et al (2008), he states that a greater level of information asymmetry creates a more difficulty for the users of information to observe the behavior of management, and as a result, it gives management more luxury in mistreating their ways in the process of financial reporting.

A solution to information asymmetry as proposed by Al-Fayoumi et al (2010) is to increase institutional investors as they are more sophisticated and well informed than normal individual investors. Al-Fayoumi et al (2010) also added that if there are more institutional investors, the information asymmetry in the company will decrease, thus in turn will make it more difficult for managers to influence earnings.

2.1.3 Agency Theory

One of the more earlier researches regarding the agency theory as written by Jensen and Meckling (1976), suggested that the agency theory problem is that when managers of the company (agents) acts according to their own will and advantage, and in an opportunistic way,

while inflicting damages to the owners or shareholders of the company.

An explanation provided by Bhundia (2012) reveals that agents are willing to give a good image and representation of the company's financial position for the shareholders so that they may be able to maximize their interests and keep their positions in the company. On the other hand, agency issues may appear if it so happens that the agent's wealth increase does not indicate that the shareholders wealth also increase. Basically meaning that opportunistic earnings management can have agency issues.

Teshima and Shuto (2008) discusses that an incentive alignment, meaning that management are also shareholders of the firm, will decrease the earnings management. This is due to the fact that the goals of management and the shareholders are the same.

2.1.4 Earnings Management Techniques

2.1.4.1 Accrual Based Earnings Management

In a paper published by the Congressional Research Service, written by Gnanarajah (2014), the accrual basis of earnings management is defined as an accounting method where revenue is recorded when it has been earned, expenses are recorded when they are incurred, even when the payment has not yet been done. According to Ewert and Wagenhofer (2011), accrual based earnings management begins with the transactions, with the goal of manipulating the recognirtion, measurement and disclosure of the said transactions and also other events that will be represented in the financial statements. The influencing of recognition and measurement choices will have an effect on the net assets and earnings of a certain period and will be reversed in the coming periods. On the other hand, the influencing of classification and presentation don't have any effect on the numbers, but will have effect on the subtotals of the numbers. Lastly, the influencing of disclosures will have effect on the amounts that have been reflected in the financial statements, yet they don't change the numbers in the balance sheets and income statement.

2.1.4.2 Real Earnings Management

In the definition provided by Ewert and Wagenhofer (2011), real earnings management is the form of management that includes arranging transactions that are reported in the financial statements so that they will influence the reported amounts. These influenced transactions generally influence negatively the total cash flows, thus the results cannot be reversed. Since

the results are unable to be reversed, the consequences are costly to the firm. Due to this fact, accounting standards and rules are unable to prevent management from conducting real earnings management as the accounting standards and rules is incapable of differentiating the real transactions and those transactions which has been designed for the purpose of earnings management.

Explained by Zang (2012), this type of earnings management is described to be an action with a goal which is done to change the reported financial information to go a certain way by changing the timing, or organizing financial transaction.

2.1.5 Firm Characteristics

2.1.5.1 Firm Size

In a research by Ali et al (2015), they mentioned that larger firms have a tendency to have a better internal control system. These internal controls in larger firms are more effective. Ali et al (2015) also mentioned that larger companies have better teams of internal auditors who are much more qualified and competent as compared to firms that are smaller. They further added that larger firms have better chance to hire the Big 4 accounting firms as their external auditors. Larger firms also have much more funds to have the best technology in the process of financial information preparation. Nugroho and Eko (2011) defines size of the firm to be measured by the natural logarithm of the total assets of the firm.

2.1.5.2 Firm Leverage

In the research by Prasavita et al (2014), a company's leverage ratio gives an idea to external parties about how much of the company is being funded by loans or debt. A company that has a high debt have a chance to conduct a debt violation, therefore sometimes company turn to earnings management to try and reduce the level of debt they have. Usually in this situation, managers would reduce the level of debt by increasing the earnings they record. By doing so, the managers help the company to maintain its reputation amongst the external parties, as companies that have higher debt level has a tendency to have a more difficult time getting more funds.

2.1.6 Audit Quality

In a research by Bassiouny et al (2016), it was mentioned that a high audit quality has a

better change of detecting and reporting any errors and any irregular things in the financial reports. The auditing process reduces the chance of managers to hide information from the shareholders by the process of the validation of the financial reports created by the company. Therefore, there is a need for good quality auditors to make good quality audit reports. Rusmin (2010) and Chung et al (2005) mentions that the big 4 companies have a much higher audit quality because they are more well-known and have better resources to train their auditors. Bassiouny et al (2016) audit quality is measured on whether or not the public accountant used is from the big four (Pricewaterhouse Coopers, Ernst and Young, Deloitte, KPMG).

2.1.7 Board Characteristics

2.1.7.1 Independence of Board of Directors

According to Nugroho and Eko (2011) board of directors is defined as the number of people, selected by the shareholders of a company, to take a very high position in the company along with its responsibilities, including forming policies for company operations. Defined by Daghsni et al (2016), board independence is the most important aspect in figuring out the effectiveness of the board's work in reducing opportunistic chances for managers to practice earnings management.

They suggested that the ratio of external directors on the board should outnumber the internal directors on the board. Dagshni et al (2016) also mentioned that an independent director is a person who is not affiliated with the company, and has no interest in it as well.

2.1.7.2 CEO Duality

As defined by Nugroho and Eko (2011) chief executive officer duality means that the chief executive officer has another role in the company, usually as the owner of the company, apart from he or she being the chief executive officer of the company. In a definition by Obigbemi et al (2016), they mentioned that by the Code of Corporate Governance, the positions of CEO and owner should not be mixed together as the combined role of both CEO and owner could lead to a large power owned by an individual. If a single individual has too much power, this individual could turn into a situation where there is a power concentration, which could lead to the CEO or owner to cause harm to stakeholders of the company.

2.1.7.3 Board Size

Nugroho and Eko (2011) gave a definition that board size is described as the number of members in the board. It consists of the members on the board of directors and the board of commissioners. Mentioned in a research by Daghsni et al (2016), a larger sized board improves the ability to have control over the company. They further explained that the size of the board should not be too big or not too small. They suggested the optimal size for a board is between 5 to 9 members. This is because a board too big will lose its effectiveness in the controlling of the company.

2.1.7.4 Board Ownership

Nugroho and Eko (2011) defines board ownership as the number or percentage of shares that is owned by the members of the board. Aygun et al (2014) explains that according to the agency theory, managers at times do not wish to act in the company on behalf of the stakeholders. This is because the managers do not have the same interest in the company as the stakeholders do. Aygun et al (2014) further discusses that if managers have a higher level of shares of the company, they have a tendency to work on behalf of the stakeholders as they have also become stakeholders, when they own the company shares.

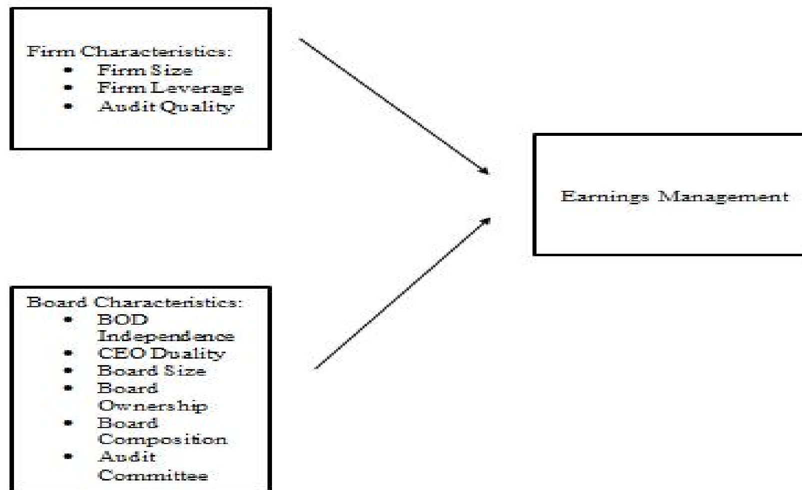
2.1.7.5 Board Compositon

Defined by Nugroho and Eko (2011), board composition refers to the ratio of independent commissioners to the total number of members on the board. Board composition should be effective, accurate, and be fast in making decisions. The role of independent commissioners in the board is as a neutral and have a balanced decision making environment, so to satisfy the interest of all stakeholders of the company.

2.1.7.6 Audit Committee

Nugroho and Eko (2011) defines audit committee or independent auditors as the ones who are responsible for supervision of the company from a third party point of view. They are tasked with the review of financial information that will be publicized for the company's shareholders, and they will give an assessment of those reports. They are required to discover any issues in the financial statements and should there be any issues found, they are to report them to the board.

2.2 Conceptual Framework



Picture 1. Conceptual Framework

Source : data processed by researchers

2.3 Hypothesis Development

The theory of financial distress studies the incentives of earnings management by managers in companies facing financial distress. As discussed by Fung and Goodwin (2013), they argue that in the situation where managers influence the earnings of a company, the reason to that action is because the worthiness of the firm’s credit is in doubt.

In another aspect, through the information asymmetry theory as discussed by Jones et al (2005), the presence of information asymmetry is less for companies with larger loans and this is due to the fact that the costs of obtaining information regarding a borrower is lower and access is more easily granted to those with large loans. Oppositely, companies with smaller loans are more likely to face larger information asymmetry.

With these prior research, writer expects that as a company has a larger loan, the practice of earnings management is increased as management would like for the users of the financial information to have the image that the company is doing financially well. Therefore, writer comes up with the following hypothesis:

H1: There is a positive significant relationship between Firm Financial Leverage and EarningsManagement

In a previous research conducted by Meek et al (2007), he discussed that through the

information asymmetry theory, larger firms have a lower tendency of information asymmetry. The reason to this fact is that as a company is larger, the governance and controls of the company is greater, thus leading to a lower practice of earnings management.

Another reason as to why there is a possibility of a negative relationship between firm size and earnings management is explained in by Kim et al (2003). The study claims that as larger firm has a stronger internal control, there would be more knowledgeable auditors that help in making the financial statements published become more reliable, and therefore lessening the practice of earnings management. In addition to the internal controls of a company decreasing earnings management, it was also discussed that large companies have a reputation to upkeep and that their reputation cost is high as they have more knowledge and understanding about their line of business, consequently this may prevent larger firms to reduce their practice of earnings management.

With the basis of these prior research, writer expects that as a firm grows larger, it would have a reduction in the practice of earnings management. As a result, writer comes up with the hypothesis as follows:

H2: There is a negative significant relationship between Firm Size and Earnings Management

In a research previously conducted by Alzoubi (2015), their results show that companies that have been audit ed by the big four audit firms have lower earnings management, and companies that are audited by audit firm other than the big four show larger instances of earnings management. With this results, writer assumes that as a company is audited by the big four auditing firms, the level of earnings management tend to decrease. This results in the writer formulating the following hypothesis:

H3: There is negative significant relationship between audit quality and earnings management.

Cornett et al (2008) also adds that independent members of the board of directors are in a better role in terms of the monitoring and controlling of the company's managers. The study by Cornett et al (2008) further elaborated that as the monitoring of managers increase, there would be a lower practice of earnings management. With the facts stated above gathered from previous research, writer expects that as the number of members on the board of directors increase, the chances of performing earnings management will decrease. Consequently, writer comes up with the following hypothesis:

H4: There is negative significant relationship between independence of board of directors and earnings management.

Chief Executive Officer Duality is defined as a manager's dual role in the company by

Nugroho and Eko (2011). This basically means that the CEO of the company has more than one position in the structure of the company. This is mentioned by Gul and Leung (2004), and quoted by Nugroho and Eko (2011) as the situation in which the CEO also takes the position of the chairman of the board. This duality of CEO is also mentioned to end up in a power concentration, which can lead to management preference.

Cornett et al (2008) argues that the separation of the duties of CEO and chairman to two people will create a more efficient and effective supervision of the company. With this, writer expects that CEO duality will create earnings management to take place. As mentioned above, with the CEO having two positions to fill inthe company, the supervision will not be more efficient and effective if there are two people doing the job, thus writer comes up with the following hypothesis:

H5: There is positive significant relationship between chief executive officer duality and earnings management.

Based on previous research conducted by Syahirah (2017), it is mentioned that by having more members in the board, the board will then consist of people from different professional backgrounds and this may include financial experts or funders. Saleh et al (2005) adds that due to the increased variety of background of the members on the board, the company may have better performance and can help better their supervision on the company's operations. These two researches basically explain that with a larger board size, the jobs are then distributed more equally and will result in better performance and supervision. To counter the previous research, Gulzar and Zongjun (2011) explained that with a smaller board size, the members are able to focus more on decision making. With these researches in mind, writer takes assumption that as the number of board members increase, the manipulation of financial reporting will lessen, thus resulting in the following hypothesis:

H6: There is a negative significant relationship between board size and earnings management.

As previously mentioned above in the basic concept definition section of this paper, Teshima and Shuto (2008) reveals that with incentive alignment, the level of earnings management will decrease. The reason is that management will have the same goals as the shareholders of the company. In addition, Nugroho and Eko (2011) mentioned in their research that as managers own corporate shares, they will eventually have the same objectives as the company's shareholders. This will in turn control management's behavior in the process of preparing the financial statements of the company.

From the results of the previous research conducted, writer takes into consideration and assumption that as the percentage of share ownership by management increases, the company will

then reduce the level of earnings management as their goals are in line with those of other shareholders. With this, writer suggests the following hypothesis:

H7: There is negative significant relationship between board ownership and earnings management.

In addition, Nugroho and Eko (2011) also stated in their research that the independent commissioners present in the board should create balanced decision making, so that they are able to protect the minority shareholders and other parties. Writer assumes that as independent commissioners are present in the board,

there should be information fairness and equality as above it has been mentioned that the independent commissioners in the board are working to represent and protect the smaller shareholder. Therefore, writer suggests the following hypothesis:

H8: There is negative significant relationship between board composition and earnings management.

The audit committee's task is to monitor the process of financial reporting, monitor the company's internal control effectiveness, monitor the statutory audit of the financial statements, and lastly review and monitor the audit firm's independence. Basically, the audit committee is to oversee the company's audit process and also take part in the communication with external auditors directly, not through management. A research by Mishra and Malhotra (2016), shows result that as companies have a larger audit committee size, earnings management decrease.

With these theories in mind, writer takes assumption that since the audit committee are paying much attention to the process of the company's financial reporting, and more people to monitor, there should be lesser chances for management to try and influence the earnings amount, thus reducing the possibility of earnings management. Due to this, writer proposes the following hypothesis:

H9: There is a negative significant relationship between the size of an audit committee and earnings management

3. Research Methodology

The population for the data collection is manufacturing companies that has been listed on the Indonesia Stock Exchange for the period of 2013-2017. The sample is selected by using purposive sampling method with criteria as follow:

1. The company are manufacturing companies listed in Indonesia Stock Exchange in the period of observation 2013 - 2017.

2. The company publishes its financial statements and audited annual report each year, especially in the observation period beginning with the fiscal year ended at December 31, 2013 through fiscal year ended at December 31, 2017.
3. Published financial statements and annual reports of companies observed use Indonesian Rupiah as its currency.
4. The financial statements and annual report published by the company contain information necessary for the research.

This research paper uses the following regression model to examine and test for the impact of multiple independent variables which are the firm characteristics on the dependent variable which is the earnings management practice in firms listed in the Indonesia Stock Exchange.

$$DAC=\beta 0+\beta 1FLEV+\beta 2FSIZE+\beta 3FAQ+\beta 4BODIND+\beta 5CEODUAL+\beta 6+SIZE+\beta 7OWN+\beta 8BCOMP+\beta 9AC+\varepsilon$$

Where:

DAC	: is the dependent variable earnings management measured by the discretionary accrual,
FSIZE	: is the firm's size,
FLEV	: is the firm's financial leverage,
AQ	: audit quality, dummy variable, given score 1 if audit firm is Big 4.
BODIND	: is the independence of BOD
CEODUAL	: is the duality of company CEO, dummy variable, given score 1 if CEO has dual role.
BSIZE	: number of members on the board
OWN	: share ownership of managers on the board
BCOMP	: ratio of independent managers to total number of managers on the board
AC	: Audit committee size, measured by number of members on the audit committee

And the is the error term

Model for Total Accruals

$$TACCt=NIt-CFOt$$

Where:

$TACC_t$: total accruals in year t,
NI_t: net income in year t,
CFO_t: cash flows from operating activities in year t.

According to Bassiouny et al (2016), earnings management is part of accruals that managers are able to control and manipulate. Total accruals are divided into two parts which are discretionary accruals and non-discretionary accruals. To calculate discretionary accruals, non-discretionary accruals are deducted from total accruals (Shah et al 2009)

$$TA=DA+NDA$$

Where:

TA: total accruals,
DA: discretionary accruals,
NDA: non-discretionary accruals

on the modified Jones model 1995, which the study by Bassiouny et al (2016) uses, the equation to be used in calculating the NDA is as follows: (Shah et al 2009).

$$NDA_t = \beta_1 \left[\frac{1}{A_{t-1}}\right] + \beta_2 \left[\frac{\Delta REV_t - \Delta AR_t}{A_{t-1}}\right] + \beta_3 \left[\frac{PPE_t}{A_{t-1}}\right]$$

Where:

NDA*t*: Non-discretionary accruals for firm in year t,
A*t-1*: Total assets for firm in year t-1,
REV*t*: Change in the revenues (sales) for firm in year t less revenue in year t-1

AR*t*: Change in accounts receivables for firm in year t less receivable in year t-1

PPE*t*: Gross properties, plants and equipment for the firm in year t

The calculation for total accruals for the Jones Model is then calculated using the following formula:

$$\frac{TACC_t}{A_{t-1}} = \beta_1 \left[\frac{1}{A_{t-1}}\right] + \beta_2 \left[\frac{\Delta REV_t - \Delta AR_t}{A_{t-1}}\right] + \beta_3 \left[\frac{PPE_t}{A_{t-1}}\right] + \varepsilon_t$$

Following the calculation of the total accruals and the non-discretionary accruals through the equation of the modified Jones Model 1995, the discretionary accruals is then to be calculated using the following equation: (Bassiouny 2016)

$$DAt=TACtAt-1-NDAt$$

4. Results And Discussion

Descriptive Statistic

Table 1. Descriptive Statistics

```
. summarize dac lev size aq indbod ceo bsize own comp audcom
```

Variable	Obs	Mean	Std. Dev.	Min	Max
dac	500	.0660591	.0914543	.0000912	.9927159
lev	500	.5158625	.3711994	.0691752	3.029099
size	500	14.38664	1.596668	10.6001	19.50467
aq	500	.346	.4761696	0	1
indbod	500	.634	.6267612	0	7
ceo	500	.824	.3812016	0	1
bsize	500	9.048	3.815076	4	23
own	500	.0552517	.138995	0	.9503
comp	500	.3881528	.1405293	0	1
audcom	500	2.984	.4518322	1	5

Source: Output Result from Stata 12

The data provided in table above shows the results of the data's descriptive statistics. The data's characteristics are shown in the descriptive statistics test, such as the number of observations, the mean, standard deviations, minimum, and maximum value of the data.

Test of Classical Assumption

For the purpose of this research, the measurement for the dependent variable uses the absolute values. This is to gain better results as compared to when using the data that includes both positive and negative signs. Based on the test done, the data for this research has been passed test of classical assumption for normality test, autocorrelation test, heteroskedasticity test, and multicolonierity test.

Test of Hypothesis

Table 2. Results of Regression

```
. regress bcdac lev size aq indbod ceo bsize own comp audcom, robust

Linear regression                                      Number of obs =     500
                                                       F(  9,   490) =    3.36
                                                       Prob > F      =  0.0005
                                                       R-squared     =  0.0589
                                                       Root MSE      =  .65912
```

bcdac	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
lev	.2319429	.1080489	2.15	0.032	.0196466	.4442393
size	-.0179913	.0256943	-0.70	0.484	-.0684759	.0324932
aq	.2067874	.0835337	2.48	0.014	.3709159	.0426589
indbod	.0460349	.0425015	1.08	0.279	-.0374727	.1295426
ceo	-.1040661	.0939338	-1.11	0.268	-.2886288	.0804967
bsize	-.0031978	.0106289	-0.30	0.764	-.0240817	.0176861
own	-.3572073	.2338817	-1.53	0.127	-.8167421	.1023276
comp	-.4885283	.2133883	-2.29	0.022	-.9077973	-.0692593
audcom	.0225591	.0591986	0.38	0.703	-.0937554	.1388736
cons	2.025415	.3382342	5.99	0.000	2.689983	1.360847

Source: Output Result from Stata 12

4.1.1 Coefficient of Determination (R^2)

The coefficient of determination R^2 basically estimates how much the ability of the research model to explain the dependent variable is. The coefficient of determination value is between 0 and 1. A small R^2 value means that the ability of the research model to explain the dependent variable is limited. On the other as the R^2 value gets closer to 1, it means that the independent variables give almost all the information needed to predict the dependent variable. In this research, the R^2 value is 0.0589 which means that only 5.89% of the research model can explain the dependent variable. This is due to the fact that there are still many other factors or other variables outside the research model that explains the dependent variable, which is earnings management.

4.1.2 T-Statistics

The T-statistics test is done to see the significance of the independent variables individually in explaining the dependent variable. In this research, the dependent variable is earnings management, with the discretionary accruals as its proxy. The test is done at a significance level of 5% (=5%). If the significance value of the independent variable is less than 0.05, then the

independent variable has a significant effect on the dependent. Based on the results of the regression, leverage, audit quality, and board composition have come to have significant effect on the dependent variable.

Leverage stands with a value of 0.032 and the coefficient is positive. This means that leverage has a significant positive relationship to earnings management. Next, the audit quality results in a value of 0.014, which means that it has a significant relationship with the dependent, yet it has a negative association as the coefficient is a negative. This means that a company's audit quality has a significant negative relationship to earnings management. Lastly, board composition resulted in a value of 0.022, which means there is a significant relationship. Since the coefficient is a negative, this means that there is a significant negative relationship between board composition and earnings management. The rest of the independent variables; firm size, board independence, CEO duality, board size, ownership, and number of audit committee members, do not support the hypothesis developed earlier in the research.

4.1.3 F-Statistics

F-test is conducted to see whether the independent variables in the data regression model as the whole has a significant effect on the dependent variable. F- statistics is also used to see the appropriateness of the regression model used. This research uses a significance level of 5% (=5%). If the probability value of F is smaller than 0.05, it can be deduced that the independent variables have an influence on the dependent variable. Based on the results above, the probability value is 0.0005 which shows that simultaneously, the independent variables have a significant impact on the dependent variable.

4.5 Analysis of Regression

4.5.1 Firm Leverage

In table 2, the coefficient for firm leverage (lev) is shown to be 0.2319429 with a probability of 0.032 (<0.05). From the results of the regression, the study shows that firm leverage has a significant effect on the dependent variable, earnings management. The positive sign on the coefficient suggests that there is a positive relationship between leverage and earnings management.

Excluding the signs of discretionary accruals, as this study has used the absolute value for the measurement of earnings management, with discretionary accruals as a proxy, the study cannot

specify whether leverage increases or decreases earnings management. However, by the results from this study, there is a positive correlation between leverage and earnings management.

The result of this study is not in consistence with the study done by Uwuigbe et al (2015) in which they stated that there is an insignificant relationship between leverage and earnings management. On the other hand, the research done by Moghaddam and Abbaspour (2017) found that leverage has a positive significant relationship with earnings management. Relating this explanation back into the results of the study, the study sums up that the greater the degree the leverage, the greater the degree of earnings management.

A reason to explain the significant relationship between leverage and earnings management is may be trying to lower their leverage so that the investors would get to see that the company they are going to invest in is actually doing well financially, and not in too much debt. Simply put, as leverage increases, managers would try to find a way in their accounting practice to bring down the level of leverage so that investors can see that the company does not have too much loan on their hands.

4.5.2 Firm Size

From table 2, it can be seen that the coefficient of firm size (size) is 0.0179913 with a probability of 0.484 (>0.05). From this result of the regression, it can be seen that firm size, measured as the natural logarithm of the firm's total assets, has no significant relationship towards earnings management.

This result is inconsistent with the research conducted by Uwuigbe et al. (2015) and Ali et al (2015) in which in their research shows that there is a positive significant relationship between the firm's size and the practice of earnings management. The result from this study shows that the size of a firm does not have any effect to whether or not the company practices earnings management. A reason to explain this result is probably due to earnings management not being a practice that is exclusive for a certain firm size. A company of any size is able to perform earnings management, therefore it may explain the reason why the size of the firm does not have any significant effect on earnings management.

4.5.3 Firm Audit Quality

Table 2 gives the value of the coefficient of audit quality (aq) to be - 0.2067874 and a probability of 0.014 (<0.05). This value means that there is a significant relationship between a firm's audit quality, measured as a dummy variable, and earnings management. The negative sign

on the coefficient suggests that there is a negative correlation between audit quality and earnings management. This result is in accordance with the research done by Lopes (2018) in which it stated that there is a negative significant relationship between audit quality and earnings management. The result of this study is also consistent with the results from the study by Alzoubi (2015) in which the results were that there is a negative significant relationship between audit quality and earnings management

Since the measurement for earnings management uses the absolute value of the discretionary accruals, the study cannot explicitly specify whether the dependent variable increases or decreases as the independent increase or decrease, but can summarize that since there is a negative relationship between audit quality and earnings management, as shown by the sign of the coefficient, earnings management is lesser when the big four companies are employed by the company. The reasoning to the results come from the fact as stated by Rusmin (2010) and Chung et al (2005) that the big four companies have great awareness of high quality of audit. Since these big four companies are internationally known, they would not risk to tarnish their reputation as to let large levels of earnings management be present in their clients.

4.5.4 Independence of Board of Directors

As seen in table 2, the coefficient of independence of board of directors (indbod) is 0.0460349 with a probability of 0.279 (>0.05). From this result, the study suggests that the independence of the board of directors, as measured by the number of independent directors on the board, do not have any significant relationship with earnings management.

The result is inconsistent with the study conducted by Busirin et al (2015) in which their results show a negative significant relationship between independence of directors and earnings management. An explanation to why the results come up as insignificant could be that independent directors are incapable of having a significant level of supervision on the management of the company. As suggested in the study by Nugroho and Eko (2011), they stated that it is possible that independent directors are hired due to the interest of the company to put up a face of professionalism and to be seen by the shareholders to have a sense of external supervision over the management of the company.

4.5.5 CEO Duality

Table 2 shows the coefficient of CEO duality (ceo) to be -0.1040661 with the probability of 0.268 (>0.05). From this result, it explains that the duality of the chief executive officer,

measured as a dummy variable, has no significant relationship to earnings management.

The results from the regression is inconsistent with the results produced in the research conducted by Daghsni et al (2016) and Salihi and Kamardin (2015) in which their results is a positive significant relationship between the CEO duality and earnings management. Here in this study it can be seen from table 4.1 that the mean for CEO duality is 0.824, meaning that the CEOs in 82.4% of the data in the sample has two positions in the company. Yet with that many data, it was shown that there is an insignificant relationship between CEO duality and earnings management. This comes to explanation that even though in theory CEO duality could create more opportunity to practice earnings management, it does not mean that the CEO will take that option, as shown in the results of this study.

4.5.6 Board Size

The coefficient of board size (bsize) as provided in table 2 gives the value of -0.0031978 and the probability of it being 0.764 (>0.05). This result means that the relationship between the size of the board, measured by the number of members on the board of directors and the board of commissioners, is not significant The result of the study's regression is inconsistent with the findings of Daghsni et al (2016) and Obigbemi et al (2016) in which they found that there is a negative significant relationship between the size of the board and earnings management. The results of this study shows that the number of members on the board, may it be many or little, does not have any effect to whether or not the company practices earnings management. To explain the reason behind the results, it is possible that indifferent to the number of members on the board, all management people want the financials of the company to show good numbers so that shareholders would have more interest in the company, and shareholders are satisfied with the company's financial situations. So no matter how many people there are on the board, all managers have the same goal which is to make the company seem to be in a good financial condition at all times so to also satisfy their shareholders.

4.5.7 Share Ownership

The result for share ownership as shown in table 2, gives a coefficient value of -0.3572073 with a probability of 0.127 (>0.05). This result has meaning that the relationship between share ownership, measured by the percentage of shares owned by member of the board of directors and commissioners, and earnings management is insignificant.

The result of the regression is inconsistent with the results from the research conducted by Aygun et al (2014) which gives a positive significant relationship between share ownership and

earnings management. This study's results give meaning that regardless of the amount of shares owned by the directors and commissioners of the company, there is no effect towards earnings management. An explanation to why the result of the study is insignificant is possibly because on average, the percentage of ownership from the data is only 5.52517%. Therefore, from this piece of information, it can be said that this percentage of shares in too small in comparison to the total number of shares that are distributed by the companies in the data, therefore it may have resulted in an insignificant result.

4.5.8 Board Composition

As shown in table 2, board composition (comp) is shown to have a coefficient of -0.4885283 and a probability of 0.022 (<0.05). These numbers mean that there is a significant relationship between board composition, measured by the ratio independent commissioners against the total number of commissioners on the board, and earnings management. The negative sign on the coefficient suggests that there is a negative correlation between board composition and earnings management.

The results of this study is in accordance to the research of Obigbemi et al (2016) in which it says that there is a negative significant relationship between board composition and earnings management. Since the measurement for earnings management, with discretionary accruals as a proxy, uses the absolute value, the study cannot specify whether the dependent variable increases or decreases as the independent increase or decrease. This study suggests that the greater the board composition, the lesser the earnings management.

An explanation to this relationship is that the role of independent commissioners is to create balanced decisions as an external party to represent the minority shareholders and other external parties. The fact that they are independent means that they are making decisions for the good of external parties rather than for the internals of the company. Therefore these independent commissioners are acting supposedly working on behalf of the shareholders, and the interest of shareholders are usually wanting for the company to be truthful and transparent in their financial reporting.

4.5.9 Audit Committee

From table 2, the coefficient for audit committee (audcom) is given to be 0.225591 with a probability of 0.703 (>0.05). This results show that audit committee, measured by the number of members on the audit committee, have an insignificant relationship with earnings management.

The results of this study is inconsistent with the research conducted by Mishra and Malhotra (2016) in which their study gives result that there is a negative significant relationship between the size of the audit committee and earnings management. To explain why the result of this study turned up to be insignificant, it is much likely to be because of the variety of data for this particular variable. Seen in table 4.1, the mean of the size of audit committee is 2.984. During the data collection process, researcher has observed that most of the companies used for the sample has the audit committee size to be of 3 people. From the 500 observations used in the research, 428 observations give the value of 3 people as the size of the audit committee. This somehow makes the result redundant as there are too little variations to the data to produce a more fair result.

5.1 Conclusion

1. Leverage has a significant relationship to earnings management. It is consistent to the research done by Moghaddam and Abbaspour (2017) which the results show that leverage has a positive significant relationship with earnings management. This is due to managers wanting to reduce the level of leverage so that future investors can have more certainty regarding the financial well-being of the company.
2. Firm size does not have any significant relationship to earnings management. This is not consistent to the research done by Uwuigbe et al (2015) and Ali et al (2015) which indicated that there is a positive relationship between firm size and earnings management. This insignificance could be due to earnings management not being specifically used for only big firms or small firms, but can be used by firms of all sizes.
3. Audit Quality has a significant relationship with earnings management. This is in accordance with the research done by Lopes (2018) in which it stated that there is a negative significant relationship between audit quality and earnings management. Results from this study is also consistent with the results from the study by Alzoubi (2015), where results show that there was a negative significant relationship. This is due to the big four companies having great awareness of high quality of audit and having responsibility to keep their reputation as independent auditors.
4. Independence of board of directors does not have a significant relationship with earnings management. The result is inconsistent with the study conducted by Busirin et al (2015) in which the results have shown a negative significant relationship between independence of directors and earnings management. As mentioned in the study by Nugroho and Eko (2011), there is a possibility that independent directors are hired into the company to put a face of

external supervision for the shareholders.

5. CEO duality is shown to have no significant relationship to earnings management. The results is inconsistent with the results produced in the research conducted by Daghsni et al (2016) and Salihi and Kamardin (2015) in which their results is a positive significant relationship between the CEO duality and earnings management. Even though in theory CEO duality could create more opportunity to practice earnings management, it does not mean that management will take the choice to practice earnings management due to CEO duality.
6. Board size results have shown that there is no significant relationship to earnings management. The result of the study's regression is inconsistent with the findings of Daghsni et al (2016) and Obigbemi et al (2016) in which they found that there is a negative significant relationship between the size of the board and earnings management. Regardless to the number of people on the board, most managers would achieve for the goal of keeping the company to be in a good financial situation, thus also satisfying the shareholders of the company.
7. Share ownership does not have any significant relationship to earnings management. The result of the regression is inconsistent with the results from the research conducted by Aygun et al (2014) which gives a positive significant relationship between share ownership and earnings management. On average, the ownership of shares is only 5.52517%, thus it is a very small number when compared to the total number of shares that the companies have distributed, and thus it may lead the result to be insignificant.
8. Board Composition has a significant relationship with earnings management. The results produced in this study is in accordance to the research of Obigbemi et al (2016) in which it says that there is a negative significant relationship between board composition and earnings management. The role of an independent commissioner is to work on the behalf of the shareholders, and to make fair and balanced decisions for the interest of the shareholders. Therefore, these commissioners are to work truthfully and transparently as with the wishes of the shareholders.
9. Audit committee size does not have any significant relationship to earnings management. The results of this study is inconsistent with the research conducted by Mishra and Malhotra (2016) in which their study gives result that there is a negative significant relationship between the size of the audit committee and earnings management. From the 500 observations used in the research, 428 observations give the value of 3 people as the size of the audit committee, therefore it could have led to an unfair result.

5.2 Implications

The implications of the results from this study as applied in real life could be that as other people read from the results of this study, they would become moreknowledgeable regarding the topic of earnings management practice in companies. Future researchers could get an idea to how they can improve on this research as they can include more factors that may affect earnings management in their own research. For the companies who may happen to read this study, it could help them to realize just what factors happen to be able to affect their decisions regarding earnings management practice. As shown from the results of this study, the leverage, audit quality and board composition has proven to be able to affect a firm's earnings management practice. By knowing this result, firms can analyze further on how to decrease
the practice of earnings management.

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