CHAPTER II
THEORETICAL FRAMEWORK AND HYPOTHESIS

2.1 Earning Management

Earning fundamentally is an alternative way to sound the profit of the company. As communal information, most existing or potential investors are theoretical to detect earning as one of the furthermost actual accounting data on the income statement to redirect the monetary strength of the company so that they are capable to make moderately basic assessments on its upcoming prospects. (Nguyen. 2016)

Earning management is a plan and the administration of a company intentionally manipulates or modifies it with the idea of raising and lowering the company's earning so that it fits the company's target (Iraya, Mwangi & Muchoki, 2015). Earning management as an action used to gain profit and this action tends to be part of the management's personal interests. This definition shows the existence of earning management, financial reports do not describe the actual condition of the company. This causes the management to strive to make earning management for the company's performance is considered good by external parties.

Earning management is an option that managers can make by utilizing accounting policies to achieve specific report of earning (Scott, 2006). Earning management is done by managers or financial reporters because it expects a benefit from it. Earning management turn out to be fascinating to investigate since it can give a description of the manager performance in reportage its corporate

activity at certain historical that is the possible emergence of certain motivations that encourage managers to manage financial data that have been reported.

The emergence of earning management can be explained by agency theory. As a representative, chiefs are in control for elevating the leading light of earning and in return for compensation affording to the agreement. Therefore, there are two different safeties surrounded by the innovativeness, in which every party pursues to achieve or conserve the preferred level of opulence. Information known to managers may be communicated to owners via financial statements. However, in order to achieve its own interests, managers make changes to the profit presented in the financial statements, so that the financial statements presented can or do not reflect the actual company conditions (Scott, 2006).

Wahlen and Healy in 1999 describe that earning management happens when managers use considerations in monetary reporting and the preparation of dealings that can modify financial reports as to alter the views of the parties concerned to the company. Cheng dan Warfield (2010), contends that there are two aspects of understanding of earning management. First, managers see it as an opportunistic behavior to maximize utility in dealing with contracts of compensation, debt contracts and political costs (resourceful earning management). Second, earning management is seen as a well-organized contract perspective (effectual earning management), managers flexibly protect them and companies to anticipate unexpected events to get parties involved in the contract.

As a significant research subject, earning management has classically been examined in the variability of fiscal contexts accordingly, earning

management is distinct in a large number of alternative ways. Schipper (1989) predominantly suggests a description of earning management as a determined interference in the external financial reporting procedure, with the resolved of procurement some individual improvement. (Nguyen, 2016)

Some company that applies to earn management have spawned several widely known accounting scandal cases, including World Com, Merck and Enron the majority of other companies in the United States (Marcuss, Cornett, Tehranian and Saunders, 2006). By looking at some of the examples above, it is very relevant for us to ask about corporate governance effectiveness application. Corporate governance is an important factor in improving corporate effectiveness, which contains a variety of relations among management of the corporation such as the board of commissioners and directors, stakeholders and other shareholders. (OECD, 2004). Corporate governance should deliver the exact inducements for the board of management and directors so as to complete the ideas and should be able to facilitate effective oversight and encourage effective use of the resources. Managerial manipulation behavior which is originated from the agency conflict can be lessened through a monitoring mechanism aimed at aligning these interests (Jensen & Meckling, 1976).

Earning management involves management intervention in the company's internal financial reporting process for the purpose of self-benefit (Schipper, 1989). If earning are modified in accordance with accounting principles in general, such as changing procedures for inventory estimates and depreciation, then this does not include financial reporting fraud.

According to Watts and Zimmerman (1986), there are three factors that motivate the occurrence of earning management:

1. Bonus Plan Hypothesis

   The bonus plan hypothesis dictates that managers will use accounting policies that are likely to shift reported earning from future periods to the current period. This is to maximize their personal compensation as by reportage a high net income, the utility will be maximized over incentives and bonuses.

2. Debt Covenant Hypothesis

   The debt covenant hypothesis statuses that the nearer a company is to bargaining their debt contracts, the more likely management is to use accounting rules that change stated earning from upcoming periods to the present period. This is for the reason that higher net earning will reduce the probability of practical default on the obligations.

3. Political Cost Hypothesis

   The political cost hypothesis statuses that the grander the political costs to the company the more probable management is to use accounting rules to submit stated earning from present periods to upcoming periods. This theory takes politics into the choice of accounting rules. Vastly cost-effective company appeal to mass media and customer courtesy. This courtesy can make an upsurge in taxes and other principles.

2.2 Corporate Governance

Corporate governance is an important aspect that cannot be ignored. Investors pay more attention to corporate governance practices before making an investment decision. Corporate governance is a system where corporations are controlled and harassed. The Board of Directors is in charge of corporate governance. The auditor is in charge of improving the recital of the firm, particularly from the control feature. Shareholders play a part in the firm to keep on the activities of the firm, appoint directors and auditors so that the company structure can be organized in accordance with the wishes of shareholders (Nguyen, 2016).

Corporate governance was first introduced by the Cadburry Committee (1992) which at that time focused on the low level of confidence in the financial reports and the auditor's ability to provide correct, accurate and secure assessments for users of financial information. With the formation of the Cadbury Committee which produces a system where the company can be arranged and supervised by involving Shareholders, managers, creditors, government, employees and internal and external parties.

Warfield, Wild, dan Kenneth (1995) mentioned that the most significant issues that could decrease earning management and increase the quality of financial statements is corporate governance. Corporate governance in a broad sense is defined as a structure and procedure used by the firm (shareholders, auditors, commissioners or supervisory boards and directors) to increase the accomplishment of the accountability and the of the business company in

command to realize shareholder assessment by taking into interpretation the benefits of shareholders, based on ethics and laws.

Corporate governance has key principles when companies apply corporate governance practices (Law No. 40 of 2007 on Good Corporate Governance Principles), there are:

1. Transparency, the disclosure required by law, timely, clear and comparable information, information relating to financial circumstances, company management, and possession of the firm.
2. Accountability, elucidate responsibilities and support and roles efforts to certify complementary the welfares of shareholders and management supervised by the board of commissioners.
3. Responsibility, certifying compliance with regulations and instructions that apply to reflect and adherence to social standards.
4. Fairness, confirming the defense of the privileges of shareholders, and ensuring the application of pledges with investors. In simple terms, reasonableness can be defined as fair and equitable treatment in fulfilling the stakeholder rights under applicable regulations, laws, and agreements.

Several studies that inspect the part of corporate governance in earning management, found that good corporate governance can effectively limit managers from engaging in earning manipulation activities. A good corporate governance structure assistances guarantee that organization uses the company's

resources well and reports the operating performance and the company's financial correctly (Lin & Huang, 2010). The function of corporate governance to ensure compliance of financial report with usually recognized accounting philosophies and to preserve the trustworthiness of corporate governance apparatuses that are predictable to decrease earning management, as they efficiently oversee management in the financial reporting process (Patrick, Paulinus, & Nympha, 2015).

2.3 Earning Management Detection Model

2.3.1 Modified Jones Model

The accrual basis is the basis chosen for the preparation of financial accounting reports where the accrual basis is seen as more rational than the cash basis. Besides that, the accrual basis is also better able to show and describe the actual state of the company where the rights and obligations of the company can be known through the financial statements. However, the accrual basis also gives concessions to management in terms of selecting accounting methods that can affect the accounting numbers concerned. This opportunity is often used by managers when they want certain incentives for themselves.

Earning management is proxies through discretionary revenue (Stubben, 2010) and discretionary accruals (Dechow, 1995). The accrual model is the most commonly used model for discovering earning management and there have been many examine on earning management peroxided by discretionary accruals. The accrual model of Dechow (1995) or better recognized as the Modified Jones

Model, conditions for changes in cash income rather than total income (Stubben, 2010). This Modified Jones Model was chosen because many studies on earning management in Indonesia use this model such as Siregar and Shiddarta (2005), Halim, (2005) and Fanani (2006).

There are two accrual concepts, namely: non-discretionary accruals and discretionary accruals. Non-discretionary accruals are accruals determined by economic conditions, which are recognition of reasonable profits, which are subject to a generally accepted accounting standard or principle. Non-discretionary accruals are reasonable accruals and if violated will affect the quality of financial statements (unnatural), therefore the accruals analyzed in this study are discretionary accruals which are abnormal accruals and are a management policy choice in choosing accounting methods.

Discretionary accruals are accruals determined by management because the organization can choose policies in terms of accounting methods and estimates. This is where the weakness of the basic accruals creates opportunities for managers to implement earning management strategies. Discretionary accruals are strategies that are more difficult to detect so that their detection requires more detailed data investigation and analysis (Achmad, *et al*., 2007).

Jones (1991) model is the initial model in discovering earning management. Then Dechow, (1995) try to correct the weaknesses of the Jones model that is unable to imprisonment the effects of income-based manipulation because variations in income are expected to result in non-discretionary accruals (Young and Peasnell, 1999). The Modified Jones Model adds the receivable

change variable to the earning management detection model. Changes in income deducted by changes in receivables indicate the assumption of changes in credit sales which are chances for earning management (Achmad, 2007). From the consequences of the comparison of the strengths between the Jones (1991) and Modified Jones Models, there is an indication that the Modified Jones Model is knowingly better at spotting income-based earning management (Peasnell and Young, 1999). The formula used in the Modified Jones Model is as follows:

$$\mathbf{TACC} = \mathbf{NI_{it} - OCF_{it}}$$

$$\mathbf{DACC} = \mathbf{TACC / A_{it-1} - [\alpha_t (1 / A_{it-1})] + \alpha_{1i} [(\Delta REV_{it} - \Delta REC_{it}) / A_{it-1}] + \alpha_{2i} [PPE_{1t} / A_{it-1}] + \varepsilon_{it}}$$

Where :

TACC = Total company accruals in one period

Nu_{it} = Net profit

OCF_{it} = Operating cash flow

DACC = Discretionary accrual company in one period

A_{it-1} = Total assets at the beginning of the year

ΔREV_{it} = Operating revenues of the company in one-period changes

ΔREC_{it} = Accounts receivable of the company in one-period changes

PPE_{1t} = Net worth of fixed assets in a period

ε_{it} = Error model company in one period

2.3.2 Conditional Revenue Model

Conditional Revenue Model introduced by Stubben in 2010 on the basis of dissatisfaction with the accrual model commonly used today. First, the restraint of the accrual model is that cross-sectional approximation indirectly undertakes that companies in a similar business produce the same accrual procedure. Second, the accrual model also does not provide information for components managing corporate profits where the accrual model does not differentiate discretionary rises in earning over income or component costs (Stubben, 2010).

Conditional revenue is this model, focusing on income that has a direct relationship with accounts receivable. Dechow and Schrand (2004) in Stubben (2010), found that more than 70% of SEC Accounting and Auditing Application Release cases involved income misstatement. The Conditional Revenue Model of Stubben (2010) uses accrual receivables slightly than collective accruals as an occupation of income changes. The main accrual component, receivables have a strong empirical relationship and a direct conceptual relationship to income. In his previous research, Stubben (2006) found evidence that the relationship between changes in receivables and changes in income was greater than the relationship between current accruals and changes in receivables.

This also relates to management policies that can determine or make decisions in granting credit. When income increases, it can be accompanied by an increase in accounts receivable. The Conditional Revenue Model build upon discretionary revenue which is modification between the real changes in receivables and changes in forecasts in accounts receivable based on the model.

Receivables that are abnormal, high or low indicate income management (Stubben, 2010).

Discretionary revenue takes the number of forms. Some include an operation of actual activities such as channel stuffing, loosening credit supplies, garage sale discounts, and bill and hold sales and others not, for example, revenue recognition using aggressive or wrong applications of GAAP, fictitious income, and deferred income (Stubben, 2010). Channel stuffing is a management way to avoid reporting losses by making concessions to the company's credit policy (Tung. Et. Al., 2008). This action has many risks such as the return of merchandise by distributors or consumers because the goods do not sell. Whereas bill and hold sales occur when ownership rights have moved and payments have been received but the seller still has the product or product still in the hands of the seller.

According to Stubben (2010), premature revenue recognition is the most common form of income management. With the recognition of premature income carried out by the company will have an impact on the income itself and accounts receivable. By recognizing and recording future or unrealized income, the current period income is greater than the actual income. As a result, as if the company's performance is better than the actual performance (Sulistyanto, 2008).

As found by Feroz, 1991 in Stubben (2010) more than half of SEC legal cases among 1982 and 1989 complicated excessive debt results from earlier income recognition. Dopuch et.al., (2005) in Stubben (2010), shows that the relationship between accrual changes and income be subject to company precise

issues such as companies and credit policies. Therefore Stubben (2010) makes an estimate that provides income coefficients for the company's credit policy.

Following is the Conditional Revenue Model formula:

$$\Delta AR_{it} = \alpha + \beta_1 \Delta R_{it} + \beta_2 \Delta R_{it} \times SIZE_{it} + \beta_3 \Delta R_{it} \times AGE_{it} + \beta_4 \times AGE\_SQ_{it} + \beta_5 \Delta R_{it} \times GRR\_P_i + \beta_6 \Delta R_{it} \times GRR\_N_{it} + \beta_7 \Delta R_{it} \times GRM_{it} + \beta_8 \Delta R_{it} \times GRM\_SQ_{it} + \varepsilon_{it}$$

Description:

AR = Accrual receivable

R = Annual revenue

SIZE = Total asset at the end of the year natural log

AGE = Company age natural log

GRR_P = Industry median adjusted revenue growth (= 0 if negative)

GRR_N = Industry median adjusted revenue growth (= 0 if positive)

GRM = Industry median adjusted gross margin at end of the fiscal year

_SQ = Square of variable

Δ = Annual change

Representation of fiscal strength is Firm size. Age and size of the firm is a proxy for the company's phase in the commercial sequence. As a proxy of the operative recital from the assessment of companies with competitor companies, industry median adjusted development rates in revenue and industry median adjusted gross margins were used (Stubben, 2010).

2.4 Previous Research

Research on earning management has often been done both in Indonesia and abroad. The researchers tried to find the right formulation to measure earning management by adding or reducing proxies that could directly and strongly influence earning management.

Rihab Grassa and Mohamed Chakib Kolsi in 2017 observe the effect of corporate governance on earning management application for a sample of Islamic banks (IBs) Gulf Cooperation Council (GCC) using a new model of earning management. The independent variables are the Board of director characteristic, ownership structure, and audit committee.

Ridhima Saggar, Balwinder Singh, (2017) quantify the range of intended threat revelation and inspect the connection among corporate governance company equal eminence in the procedure of ownership concentration's and board characteristics influence on threat revelation in the yearly financial statements of Indian listed companies. This method trusted on a set of 39 risk keywords for computing the range of threat revelation. Additional, it uses a sample of 100 companies to observe the consequence of on threat revelation at one point in time.

Pascale Valéry, Hyacinthe Y. Somé and Jean-Claude Cosset (2016) examine the country characteristics on the rivalry-governance relations. Data gathering starts with firms comprised of the S&P Transparency and Disclosure evaluations. They accumulate company-level data after Worldscope. Industry attentiveness dealings come after Bureau van Dijk Orbis, and country variable comes after the World Development Indicators database.

Huy Tuan Nguyen in 2016 observes the company for among corporate governance and earning management mechanism. Based on 570 samples of nonfinancial firms from 2010 to 2014.

Abdulsamad Alazzani, Rashidah Abdul Rahman, and Yaseen Al-Janadi (2016) observe the diminishing influence of government ownership on the relationship among corporate governance and voluntary disclosure. The outline of this observation is sheltered numerous independent variables of internal and external corporate governance mechanisms such as audit quality, audit committee, family board member, and board size). Furthermore, it refuges the dependent variable, which is the voluntary disclosures, and the moderating variable, which is government ownership.

Ayemere dan Elijah (2015), conduct research on the influence of the audit committee on profit management. With audit committee size, and audit committee independence are used as independent variables in this observation. The research conducted by Al-Rassas and Kamardin (2015) aims to examine the influence among the independence of the audit committee, the investment in internal function board independent of directors, and the ownership concentration independent variables, and the influence of control variables like ROA, leverage, big 4, company loss, and sales growth on earning management. The sample that was taken in the period 2009-2012 of 508 companies in Bursa Malaysia Main Market.

Hsu and Wen (2015) observe the influence of board size, managerial ownership, independent directors, institutional ownership, and CEO duality on

earning management. The research object used is in the period 2002-2012 of 11,604 companies on the Shanghai Stock Exchange and Shenzhen.

Iraya, Mwangi, and Muchoki (2015) examined the effect of ownership concentration, firm size, board independent, board activity, and CEO duality as independent variables to earning management. The research sample used is 49 companies registered in Nairobi Security Exchange in 2010-2012 periods.

The Latif and Abdullah studies (2015) used in the period 2003-2012 of 120 non-financial companies listed on Karachi Stock Exchange, Pakistan. This observation establishes earning management as the dependent variable. Independent variables used are CEO duality, board size, board independent, board meeting, audit committee size, audit committee independence, institutional ownership, insider ownership, and leverage, as well as CEO compensation, and firm size as control variables.

Nurdiniah and Herlina (2015), Limanto and Fanani (2014) conducted research on factor analysis affecting earning management at companies listed in Indonesia Stock Exchange. Leverage and firm size are used as independent variables. Nurdiniah and Herlina (2015) examined data on 12 automotive manufacturing companies, with annual financial reports for the 2011-2013 period, while Limanto and Fanani (2014) surveyed 102 manufacturing companies for the 2010 period.

Patrick, Ezelibe Paulinus, and Nympha (2015) conducted research on the consequence of corporate governance on earnings management. The audit committee, board independent, board size and firm size, are used as independent

variables. The research sample used is 23 companies in the Nigerian Stock Exchange in period 2011-2014.

Ramadan (2015) conducts research on the consequence of proprietorship structure on earning management. Independent variables used are equity concentration, managerial ownership, institutional ownership, and control variables used are profitability, financial leverage, and firm size. The study used a model in the period 2000-2014 of 77 Jordan industrial companies listed on the Amman Stock Exchange.

Uwuigbe, Ranti, and Bernard (2015) used 20 corporations listed on the Nigerian Stock Exchange with financial statements for 2006-2010 as research objects. The goal is to know the influence of company characteristics on earning management. Independent variables used are firm size, leverage, corporate strategy, and cash holding.

Aygun, Ic, and Sayim (2014) analyzed the influence of board size, institutional ownership, and managerial ownership. This research uses 3 control variables, called firm size, ROA, and leverage. The research sample used in the period 2009-2012 of 230 Turkish companies listed on the Istanbul Stock Exchange.

Ayadi and Boujelbene (2014) observe the influence of ownership concentration, institutional ownership, ownership structures, and managerial ownership. The researchers added International Financial Reporting Standards (IFRS), firm size, leverage, and growth as control variables. The sample used in the period 2003-2011 of 117 French companies.

Shah and Kamran (2014) conducted a study by taking 372 companies of Karachi Stock Exchange, Pakistan in 2003-2010. The independent variables in this research are CEO duality, board size, institutional ownership, a concentration of ownership, managerial ownership and audit quality.

Research on corporate governance on earning management is done by Kurawa and Saheed (2014). This observe uses CEO duality, ownership concentration, ownership management, board size and board composition as independent variables, as well as firm size and leverage as control variables. The research samples used are 9 petroleum distributor companies registered in Nigeria Stock Exchange in the period 2003-2012.

Uwuigbe, Peter, and Oyeniyi (2014) conducted a study using annual data of 40 companies on the Nigerian Stock Exchange in the 2007-2011 period, while Bala and Kumai (2015) collected data on 8 food and beverage companies registered in Nigeria during the period 2009-2014 as the object of research. Both conducted research to observe the influence of board meetings, board independence and board size as independent variables, as well as firm size as control variables to earning management.

Ujah and Brusa (2014), Matinfard and Ojaghi (2013) examined the effect of leverage on earning management. Ujah and Brusa (2014) used a sample of 489 companies based on market capitalization in the period 1990-2009, Matinfard and Ojaghi (2013) used the 2006-2011 period of all the companies on Tehran Stock Exchange as research samples.

Ajina, Bouchareb, and Souid (2013) examine the influence of corporate governance on earnings management. Audit quality, managerial ownership, institutional ownership, board size, board independence, CEO duality, audit committee, ownership concentration and family ownership used as independent variables and control variables consisting of firm size, level of debt, and foreign market. This study used a model of 145 companies registered in France in 2003-2006.

Bagheri, Emamgholipour, Bagheri, and Rekabdarkolaei (2013) studied the effects of accounting conservatism, leverage, return on equity, and control variables, ie firm size and firm size of KAP against earning management. 140 companies registered in Tehran Stock Exchange in the period 2006-2010 served as the object of research.

Arabi, Mansourinia, Emamgholipour, and Bagheri (2013), and Rezaei (2012) observe the influence of institutional ownership and board independent, as well as control variables, i.e firm size, and leverage to earning management. Emamgholipour in 2013 used 700 companies that listed on the Tehran Stock Exchange in 2006-2010 period as an object of study, while Rezaei (2012) retrieved sample data in 2004-2009 from 167 companies that listed on the Tehran Stock exchange.

Swastika (2013) studied the relationship between company size, audit quality, board independent, and board of directors. The data studied are 57 food and beverage on the Indonesia Stock Exchange in the period 2005-2007.

Abed, Al-Attar, and Suwaidan (2012), and Soliman and Ragab (2013) examined the influence of CEO duality, board size, board independence, insider ownership, and control variables that are firm size, and financial leverage to earning management. Abe *et al*. (2012) took samples from 329 listed companies in Amman Stock Exchange in the period 2006-2009, while Soliman and Ragab (2013) sampled in 2007-2010 from 50 most active-traded companies listed on the Egyptian Stock Exchange.

Alves (2012) examines the effect of managerial ownership, ownership concentration, and institutional ownership, as well as control variables consisting of board size, leverage firm performance, firm size and operating cash flow to earning management. The samples of this study were 34 non-financial companies in Portuguese companies in 2002-2007.

Hassan and Ahmed (2012) took data on 8 food and beverage corporations on the Nigerian Stock Exchange in 2006-2010 as research objects. The objective is to observe the influence of ownership structure on earning management. Independent variables used are family ownership, institutional shareholding, ownership concentration, managerial ownership and firm size as the control variables.

Rauf, Johari, Buniamin, and Rahman (2012) examine the effect of firm size, cash flow from operating activities, and board size to earning management. This study uses 214 sample companies listed in Bursa Malaysia in the period 2007-2008.

By taking samples of 20 private and public companies in Tunisian period 2000-2009, Chekili in 2012 led an observation on the effect of corporate governance mechanisms to reveal earning management. The independent variables in this observation are board size, CEO duality, ownership concentration, manager ownership, institutional investors, the presence of external directors, and presence of CEO.

Yero and Usman (2012) observe the influence of ownership concentration on earning management, using ROA, firm size and leverage as control variables. The sample used in the period 2004-2010 0f 6 conglomerate companies listed on the Nigerian Stock Exchange.

Ishak, Haron, Rashid and Salleh (2011) used a sample of non-financial annual report data from 236 companies on the Main Market of Bursa Malaysia in 2009. The purpose is to examine the influence of family board members, board size, audit committee meetings, audit committee size, firm size, audit committee financial expertise, auditor type, board independent and leverage to earning management.

Roodposhti and Chashmi (2011) conducted a study on 196 companies registered in Tehran Stock Exchange in 2004-2008. This observation was conducted to define the influence of ownership concentration, board independent, CEO dominance, and institutional ownership as independent variables, as well as firm size and leverage as control variables to earning management.

Mitani (2010) conducted research on 799 manufacturing companies in Japan in the period 1999-2004. This observation purposes to observe the influence

of institutional ownership, financial institution, managerial ownership, ownership concentration, stock option, domestic holding, and foreign another holding to Earning management, and profitability, growth, firm size and leverage as control variables.

Rahman, Danbatta, and Chaharsoughi (2010) examine the effect of board size, managerial ownership, board independent, as independent variables, and firm size as controls to earning management. A model of 114 companies on the Tehran Stock Exchange with the 2008-2010 annual report is used in this study.

Shah, Zafar, and Durrani (2009) conducted an observation to analyze the influence of board composition on earning management. Independent variables used are board independent and institutional ownership. ROE and firm size are added as control variables. Samples studied were 654 companies registered in Karachi Stock Exchange in the period 2003-2007.

Yang, Chun, and Ramadili (2009) conducted research by taking samples from 613 companies based on 3 main sectors: consumer products, industrial products, and construction on the Malaysia Stock Exchange. Independent variables used are independent commissioners and institutional ownership, and control variables used are a board meeting, leverage, firm size, board size, and cash flow to reveal earning management.

With a trial of non-financial companies that listed on the Tokyo Stock Exchange (TSE), Gomez (2000) observed the detection to reveal earning management by trying to create a basic model of discretionary accruals in the accounting process and the relationship between cash flow and the presentation of

accruals from Dechow, Kothari, and Watts (1998). So as to produce an accounting procedures model or AP model. By comparing Dechow (1995), Jones model (1991) and AP model (2000), the results of research seen through standard errors indicate that the AP model is more sensitive and stronger in detecting earning management.

Thomas and Zhang (2000), who conducted a comparative study of accrual models such as random walk models from Dechow and Sloan (1991), Dechow (1995), Kang- Sivaramakrishnan (1995), De Angelo in 1986, and Jones models in 1991. This study shows that the Kang-Sivaramakrishman (1995) model is the best model to reveal earning management by ranking the determinant coefficient value.

Islam *et al*. (2011), examined the efficiency of the Modified Jones Model to reveal earning management in companies that held IPOs on the Dhaka Stock Exchange (DSE) in the period of 1985-2005. The results show the Modified Jones Model is not really effective to detect earning management in the context of Bangladesh. Then Islam *et al*. (2011) include several factors such as income, depreciation costs, pension costs, asset disposal gain/loss with a modified model that is very effective to detect earning management in the perspective of Bangladesh.

According to Peasnell *et al*. (2000) examined the accuracy of the model to detect earning management using cross-sectional method data comparing 3 models which are namely the model margin formulated by Peasnell in 2000, Modified Jones Model (1995), Jones model (1990). Model margins from Peasnell

et al., (2000) emphasize the measurement of current accruals, namely accruals derived from accounts receivable, operating expenses, and bad debt. The result is that the Modified Jones Model and the Jones model is better at detecting bad debt and income manipulation, while the model margin is recovering at detecting load manipulation.

Stubben (2010) conducted research on the ability of accrual models and income models in detecting replicated earning management and real earning management. Stubben took samples of earning manipulation management data from all companies (except the financial and insurance sectors). Then the manipulation of income and expenses are carried out. Accrual models and revenue models were tested in detecting these manipulations. The results show that the revenue model is stronger in detecting the manipulation of income and expenses. As for actual earning management, Stubben takes a sample of companies involved in legal cases with the SEC then conducts detection using the accrual model and revenue model. The results also show that the Conditional Revenue Model is more neutral in reveal earning management

2.5 Independent Variables on Dependent Variables Effect

2.5.1 Effect of Board Size on Earning Management

The board size is the number of members of the board in the company. Based on Law no. 40 of 2007, the board is the part in the responsibility of administering the management procedure, the course of the management in general, both the individual and the business of the company.

According to Patrick *et al*. (2015) and Iraya *et al*. (2015) board size is measured by total members of the board directors in the company. The board size has converted a significant role in the board's capability to efficiently keep an eye to management and effort together efficiently to supervise the consecutively of the corporate (Persons, 2006). According to the research by Chekili in 2012, Patrick *et al*. in 2015, Swastika in 2013, Alves in 2012 and Ishak *et al*. in 2011, proving that board size has a significant conclusion on earning management, whereby the larger size of a company's directors of board, the higher earning management practices are also performed.

The research of Aygun, Ic, and Sayim (2014) showed a significant negative effect among earning management and board size, where fewer board directors are probable to eradicate the use of accruals to control earning or profit. Uwuigbe *et al*. (2014) argue that firms with larger board sizes are more effective at controlling and hampering managers' mastery in earning management.

The results of Ujiyantho and Pramuka (2007), Rauf *et al*. (2012), Latif and Abdullah (2015), Rahman *et al*. (2010), Ajina *et al*. (2013), and Kamran and Shah (2014), indicates that the size of the board has no significant influence on earning management, which means that the board size of directors does not affect the firm's Earning level.

2.5.2 Effect of Board independent on Earning Management

According to (National Committee on Governance Policy, 2006) board independent is a the board of commissioners member who is not associated with the management, other members of the board of controlling shareholders and commissioners, and free from any business connection or another connection which may influence the skill to turn independently or turn solely for the benefit of the business. The percentage of board independent of commissioners is mensuration by the percentage meter of the board of commissioners from outside the company of all sizes of the board of commissioner's members of the firm (Ujiyantho & Pramuka, 2007).

Independent commissioners are one of the monitoring mechanisms used to defend the shareholders' interests by checking the management actions (Jensen & Fama, 1983). Given the higher percentage of independent commissioners, the likelihood of fraud within the company may decrease as independent commissioners are considered more just and effective in overseeing the management of the company (Beasley, 1996).

Independent commissioners can better examine the earning process than the insider, as it can easily withstand the company's insistence to manipulate Earning. Assigning an independent commissioner to the board to implement the corporate governance effectively for reducing assistance problems and then improving the quality of financial reporting. The results of Iraya *et al*. (2015), Abed *et al*. (2012), Swastika (2013), Uwuigbe *et al*. (2014), Ajina *et al*. (2013),

Roodposhti and Chashmi (2011) conclude that firms with the proportion of independent board members may influence earning management actions (Cornett *et al*., 2006).

The role of an independent commissioner is to bring an independent judgment to the board members (Yang *et al*., 2009). As an outside member, an independent commissioner does not show a direct part in the management of the company. Therefore, firms with large independence of board are more probable to control earning efficiently than opportunistic. Rezaei (2012) found that board independent has a significant positive influence on earning management. The study of Boediono (2005), and Ujiyantho and Pramuka (2007), Kurawa and Saheed (2014), Bala and Kumai (2015), Patrick *et al*. (2015), Al-Rassas and Kamardin (2015) revealed similar results.

On the other hand, research by Latif and Abdullah (2015), Shah *et al*. (2009), Hsu and Wen (2015), Ishak *et al*. (2011) and Soliman and Ragab (2013), found no significant influence among the board independent and earning management. This implies that the independent board size of commissioners does not have the ability to control the management so that it cannot reduce earning management.

2.5.3 Effect of Ownership Concentration on Earning Management

According to Hassan and Ahmed (2012), ownership concentration refers to the number of parts owned by a number of shareholders, which usually holds

above 5%. Concentrated ownership is a quantity of the presence of majority shareholders in a company (Pedersen & Thomsen, 2000).

The ownership concentration is one of the mechanisms that can be used to improve the effectiveness of monitoring because with large holdings the shareholders have significant access to information to offset the benefits of information owned by management. If this can be realized, then earning management action can be reduced (Hubert & Tine, 2002).

Core (2000) found that the ownership is focused in the hands of multiple shareholders, managers are more possible to turn in the securities of the owners, as well as reduce fraudulent practices and fraud. Blair and Ramsay (1993) suggest that ownership concentration affords incentives for bigger shareholders to observe management. Similar results were obtained by Iraya *et al*. (2015), Roodposhti and Chashmi (2011), Ayadi and Boujelbene (2014), Ajina *et al*. (2013), Mitani (2010), Ramadan (2015), Alves (2012), Kurawa and Saheed (2014), Usman and Yero (2012) and Kamran and Shah (2014), that the ownership concentration has a significant negative influence on Earning management.

Large shareholders have a tendency to use their ability to take over corporate resources that can improve earning management and information asymmetry (Bradbury, Mak, & Tan, 2006; Firth, Fung, & Rui, 2007). Hassan and Ahmed (2012) conclude that ownership concentration has an entrenchment effect that can increase the manager's tendency to manipulate earning. Al-Rassas and

Kamardin (2015) reveal the same results, where the ownership concentration has a significant positive influence on detecting earning management.

In contrast to research conducted by Perwitasari (2014) and Chekili (2012) which concludes that many of the least concentrated and widespread stocks will have the same control function over earning management practice by the managers. This indicates the great degree of ownership of concentration owned by a company does not affect the practice of earning management.

2.5.4 Effect of Institutional Ownership on Earning Management

Institutional ownership is defined as ownership of shares by parties in the form of institutes, such as banks, investment companies, insurance companies and other institutes (Boediono, 2005). Ownership institutional is measured by the percentage of the number of shares preserved by the institution to the total amount of shares outstanding in the company (Ujiyantho and Pramuka, 2007). According to Rachmawati and Triatmoko (2007), institutional ownership can be mensuration by the proportion of shares maintained by the institution.

Porter (1992), Claessens and Fan (2002) claim that institutional stockholders do not play an active part in observing management activities. Institutional investors may not be able to mobilize the monitoring and assessment role of managers, as it may influence their business connections through corporations (Rhoades & Rechner, Pound, 1988; Sundaramurthy, 2005). Bushee (1998) and Porter (1992) argue that institutional investors are too concentrated on short-term fiscal consequences to be less able to monitor management. Managers

may also fear that institutional investors may attract their interests within the company, thus being forced to manage to earn to meet institutional investors (Farouk & Hassan, 2014). This argument suggests that institutional investors do not border earning management policies and may rise management inducements to involve in earning management activities (Latif & Abdullah (2015), Boediono (2005), Isenmila & Elijah (2012), Rezaei (2012), Hsu & Wen, (2015), Alves (2012), Roodposhti & Chashmi (2011) and Emamgholipour *et al*. (2013).

Research Ujiyantho and Pramuka (2007), Guna and Herawaty (2010) Ajina *et al*. (2013), Perwitasari (2014), and Yang *et al*. (2009), found that the high level of institutional ownership had no effect on earning management. Relatively large institutional shareholdings should make institutional investors have more power in controlling the actions of managers. But in reality, institutional ownership does not have the ability to control management actions, which cannot increase or decrease earning management (Perwitasari, 2014).

2.5.5 Effect of Managerial Ownership on Earning Management

High managerial ownership can reduce the impulse of opportunistic manager behavior so as to reduce earning management. The interests of managers with shareholders are the same so that managerial ownership can reduce earnings management behavior. Ownership of managerial is a shareholding through company administration as mensuration by the proportion of total shares held by the management (Sujoko & Soebiantoro, 2007). According to Wahyudi and Prawestri (2006), managerial ownership can be interpreted as a shareholder by the

management who actively participate in corporate decisions (directors and commissioners). Christiawan and Tarigan (2007) mentioned that managerial ownership is a situation where the manager owns the shares of the company, or in other words, the manager also acts as the company's stockholder.

Claessens, Djankov, Lang (2000), La Porta, Lopez-de-Silanes and Shleifer (1999) suggest that ownership of managerial can decrease the contravention among the shareholders and the managers. This is estimated when ownership of managerial rises, enticements to control profit will be condensed. On the other side, research by Stulz in 1988 suggests the managers with huge ownership of managerial levels can manipulate management earning to maximize personal goals (Holthausen, Larcker, & Sloan (1995), Healy (1985) and Cheng & Warfield (2005).

Shah and Kamran (2014) argue that managers who are more established and have high levels of ownership be able to easily affect corporate choices and manipulate and control accounting data in such way to fulfill their own interests. Research conducted by Kurawa and Saheed (2014), Boediono (2005), Mitani (2010), Isenmila and Elijah (2012), Aygun *et al*. (2014), Ayadi and Boujelbene (2014) specify that the complex level of managerial ownership defines the greater amount of discretionary accrual.

Warfield *et al*. (1995) determine that there is an opposite relative among managerial ownership and earning management because as the proportion of managerial ownership increases, management interests and individual investor

interests become more coincidental. This will make management more dependent on long-term investments, thereby reducing earnings management practices. Research Abed *et al*. (2012), Hsu and Wen (2015), Ujiyantho and Pramuka (2007) Ajina *et al*. (2013), Hassan and Ahmed (2012) and Alves (2012) resulted that ownership of managerial had a negative significant influence through earning management.

Research Chekili (2012), Latif and Abdullah (2015), and Rahman *et al*. (2010) found no significant effect on managerial ownership and earning management.

2.6 Control Variable on Dependent Variables Effect

2.6.1 Effect of Firm Size on Earning Management

Company size is a control variable that is often used in earning management. Small firms can be more likely to manipulate the accrual income of lowering taxes with the aim of undermining political visibility (Liu, 2012). According to Ferry and Jones (1979), firm size defines the size of a company specified by total sales, total assets, average total assets, and average total sales. So the size of the company is the size or amount of assets owned by a company. This observation explains firm size as a natural logarithm of the total firm assets (Rauf, 2012).

Research by Alves in 2012 evidences that firm size has significantly positive affect the earning management. These results are in line with Berghani

and Pajoohi (2013), Soliman and Ragab (2013), Rauf *et al*. (2012), Roodposhti and Chahsmi (2011) research, Uwuigbe *et al*. (2015), Hassan and Ahmed (2012), Patrick *et al*. (2015).

Boujelbene (2014), Ayadi and Aygun *et al*. (2014), Ramadan (2015), Ajina *et al*. (2013), Rezaei (2012), Mitani (2010), Kurawa and Saheed (2014), Bala and Kumai (2015), Limanto and Fanani (2014), Usman and Yero (2012), Ishak *et al*. (2011), Rahman *et al*. (2010), Swastika (2013), Latif and Abdullah (2015), Al-Rassas and Kamardin (2015) found that firm size negatively affects Earning management.

The results of Durrani, Zafar, and Shah (2009), Abed *et al*. (2012), Bagheri *et al*. (2013), Emamgholipour *et al*. (2013), Nurdiniah and Herlina (2015) states that large or small a company has no significant effect on Earning management.

2.6.2 Effect of Leverage on Earning Management

Leverage in an increasingly high company, then managers are more likely to choose to decrease revenue (Alves, 2011). These results can be decided that the leverage has a significantly positive influence on earning management. Ramadan (2015) defines leverage as a ratio of debt that can be calculated by distributing total debt to total assets of the firm. Leverage is an increased risk and rate of return through the use of fixed financing, such as debt (Gitman & Zutter,

2012). Leverage is the fraction used to mensuration a company's capability to fulfill the obligations to other parties.

Sweeney (1994) and Jiambalvo and DeFond (1994) concluded that managers using discretionary accruals to meet the terms of the debt agreement since firms with high leverage have greater incentives to increase revenue. Titman and Trueman (1988) claim that handling earning allows managers to decrease approximations of several strains on the instability or variability of corporate earning procedures, and lower the valuation of the prospect of bankruptcy.

Nurdiniah and Herlina (2015) found that leverage has a significantly positive influence on earning management, which it concludes that the level of corporate debt can contribute to managers in managing revenue. These results concur with the research of Usman and Yero (2012), Alves (2012), Al-Rassas and Kamardin (2015), Roodposhti and Chashmi (2011), Limanto and Fanani (2014), Emamgholipour *et al*. (2013) and Ujah and Brusa (2014). Matinfard and Ojaghi (2013), there is an increase in leverage, the opportunism of corporate management is also increasing in terms of earning management.

Ojaghi and Esfandabadi (2013) found that leverage has significantly negative influence to detect earning management. This advises that leverage increases tend to decrease earning management, as company directors become obstacles in the interests of creditors with requests for audited financial statements, and restrict debt contracts in applying earning management.

Uwuigbe *et al*. (2015), Ayadi and Boujelbene Research (2014), Isaac *et al*. (2011), Ajina *et al*. (2013), Abed *et al*. (2012), Latif and Abdullah (2015) and Mitani (2012) argues that leverage has no significant influence to detect earning management. This means that firms with high or low levels of leverage are not involved in earning management in an effort to have a report allowing firms to lure capital at a reasonable price or tariff.

2.7 Detecting Earning Management through Accrual and Revenue Models

Earning management which is the result of management in making policy (discretion) makes research on earning management indeed very attractive to the academic literature of accounting. Various studies to develop the Jones model in detecting earning management have been carried out. Researchers are very intense in determining proxies that can directly affect earning management such as cash income (Dechow, *et al*., 1995) as well as income and expenses (Stubben, 2010).

This study seeks to find the level of effectiveness of the measurement model of earning management between Conditional Revenue Model and Modified Jones Model. Earning management is a financial report manipulation activity that can reduce the credibility of financial statements that are also used by external parties to assist in making decisions. The existence of earning management will

greatly disrupt the relevance and accuracy of financial statements so that it will affect users of financial statements.

Revenue is an easy target in detecting earning management. There are two choices in manipulating income. Management can get a period of recognition of income so that the company's profit becomes higher or slows down the period of recognition of income so that the company's profit is lower. Expenses that will also affect company profits are often subject to manipulation. Because the profit itself is the result of the difference between income and expense. Like income, the burden can also be capitalized by increasing policy set at the discretionary expense (Roychowdhury, 2013).

Research conducted by Stubben (2010) concerning revenue models and accrual models in detecting earning management of manipulated income and expenses shows that revenue models are more effective, stronger, and unbiased in detecting earning management that is manipulated.

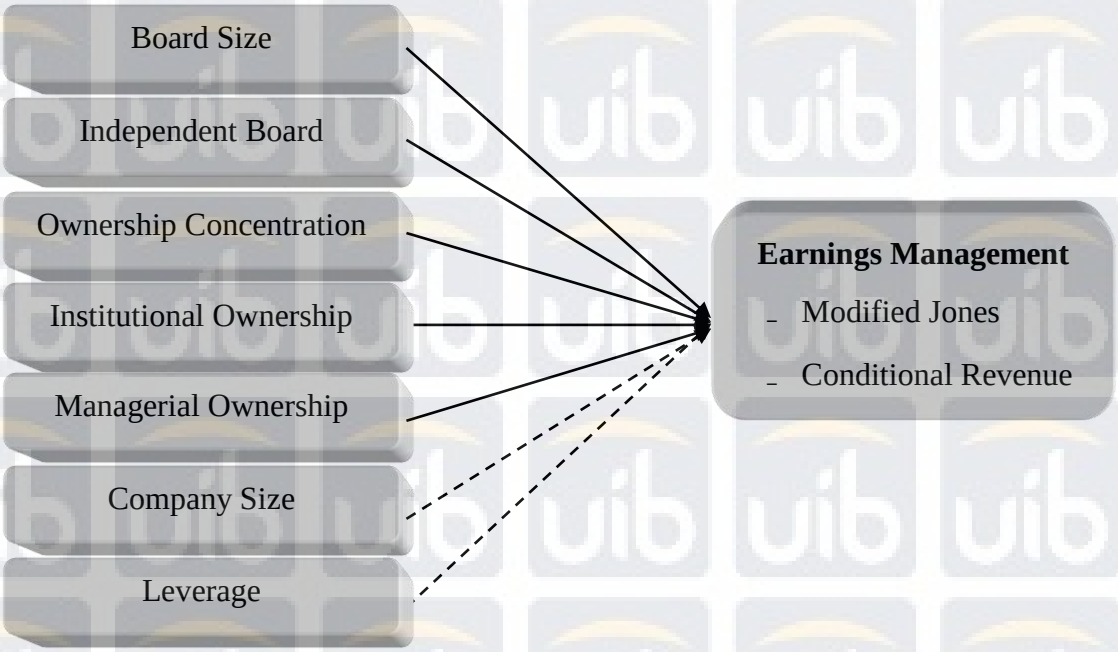
2.8 Research Model

The research model used in this research is earning management as the dependent variable, board size, board independent, ownership concentration, foreign ownership and managerial ownership as an independent variable, as well as firm size and leverage as a control variable.

Figure 1 is a research model that describes the variables that affect earning management. The aim of this study is to see how big the influence or the

effect of the independent variable and the control variable to earning management as the dependent variable.

Build upon the description before, the model used in this research is as follows:



Source: Author research, 2019.

Figure 1

Research Model Corporate Governance on Earning Management in Indonesia: A Study of Modified Jones Mode and Conditional Revenue Model

2.9 Hypothesis Development

Based on the description and framework above, the theory hypothesis for this research is formulated as follows:

a. Modified Jones Model

H_{1a}: Managerial ownership has a significantly negative influence on earning management.

H_{2a}: Institutional ownership has a significantly negative influence on earning management.

H_{3a}: Ownership concentration has a significantly negative influence on earning management.

H_{4a}: Board size has a significantly positive influence on earning management.

H_{5a}: Board independent has a significantly negative influence on earning management.

b. Conditional Revenue Model

H_{1b}: Managerial ownership has a significantly negative influence on earning management.

H_{2b}: Institutional ownership has a significantly negative influence on earning management.

H_{3b}: Ownership concentration has a significantly negative influence on earning management.

H_{4b}: Board size has a significantly positive influence on earning management.

H_{5b}: Board independent has a significantly negative influence on earning management.