

## CHAPTER II

### LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

#### 2.1. Agency Theory

The practice of earnings management in a company is explainable by agency theory. Agency theory is a contractual relationship between principals and agents, where agents are hired by principals to make decisions in order to fulfill their objectives include delegating authority related to decision making (Jensen and Smith, 1985) that could lead to a divergence in the pursuit of managerial interests versus owners' interests (Jensen & Meckling, 1976) in Alves (2012). In a company which capital consists of shares, shareholders act as principal, whereas CEO act as agent. Principals have access for company's internal information, in the other side agents have their rights and knowledge of company's overall performance.

The difference in role and position may lead to agency conflict (Richardson, 1998). One of the causes is information asymmetry, a condition where managers have an access of company's information which is not publicly known by external parties (Rahmawati, et al., 2006). Information asymmetry could lead into several problems (Jensen and Meckling, 1976): moral hazard and adverse selection. Moral hazard is the risk that a party to a transaction has not entered into the contract in good faith, has provided misleading information about its assets, liabilities or credit capacity, or has an incentive to take unusual risks in a desperate attempt to earn a profit before the contract settles, and adverse selection, arises

when the agent uses private information that cannot be verified by the principal and thereby rendering the principal incapable of determining if the agent made the appropriate choice.

### **2.2.1. Ownership Structure**

According to the agency theory by Jensen and Meckling (1976), ownership structure defined as managerial and institutional ownership is an important part of monitoring mechanism in order to decrease agency cost. Separation of ownership by the principal (shareholders) and full control of the firm by agents (CEOs) in a firm tend to cause the agency conflict between principal and agent. To minimize agency conflict is by improving institutional and managerial ownership in the firm. The greater ownership by the firm's management, the management will tend to try to improve its performance for the benefit of the shareholders and for the benefit of their selves (Siallagan and Machfoedz, 2006). The greater ownership by institutional firms will encourage active monitoring in order to increase the firm's performance, because shares are owned by some "big" shareholders, representing such a power in the firm, and finally the tendency of management to manipulate earnings number will be lower.

#### **2.2.2.1. Institutional Ownership**

According to agency theory, one of the factors that may affect the company's performance is the institutional ownership. Institutional ownership is

where shares are held by financial institutions i.e. insurance company, banking company, pension fund company, and investment banking company (Siregar and Utama, 2005). Institutional ownership will encourage active monitoring in order to increase the firm's performance, because shares are owned by some "big" shareholders, representing such a power in the firm. Institutional shareholders as sophisticated investors is assumed that they have more knowledge and experience compared to other investors so it will increase the control and monitoring function in the company. Balsam et al. (2002) find an evidence that market reaction arising from the behavior of sophisticated investors (institutional investors) occurs earlier than that of non-sophisticated investors. They argue that sophisticated investors have access to more information from other sources and have more timely information. Bushee (1998) suggests that institutional ownership has a monitoring role that pushes managers to take actions that will not harm the company in the long run.

According to Jensen and Meckling (1976) institutional ownership plays an important role in order to minimize agency conflicts between managers and shareholders. The institutional shareholders, different than common shareholders, have ability and knowledge that do not belong to common shareholders so they can provide more active monitoring that is difficult for smaller, more-passive or less-informed investors (Almazan, Hartzell and Starks, 2005), making them possible to reduce the ability of managers to opportunistically manipulate earnings (Alves, 2012).

#### 2.2.2.2. Managerial Ownership

In agency theory, managerial ownership is one of the main components in order to reduce the agency problem, this is because when the management are owning company's shares, therefore they will have more motivation to increase their performance and eventually increase and maximize the shareholders' profit, where they also act as shareholders. According to Sujono and Soebiantoro (2007) in Sabrina (2010), managerial ownership is where shares are hold by the company's management measured by percentage of shares owned by management. Jensen and Meckling (1976) predicts that higher levels of managerial ownership structure increase firm performance.

Jensen and Meckling (1976) states that in order to minimize the agency conflict it is needed to increase the percentage of managerial ownership in the company. Ross et al. (1999) suggest that the greater the management ownership in the company, the management will tend to try to improve its performance for shareholders' benefits and for their own interests. Shleifer and Vishny (1986) in Ujiantho and Pramuka (2007) states that the greater managerial ownership will lead to the incentives to monitor, so the agency issues were assumed to be disappeared if a manager is also as an owner. The greater the proportion of management ownership in the company, the management will tend to work harder for the shareholders' benefits are also included their selves, which indicates the importance of managerial ownership in the ownership structure of the company (Suprayuga, 2006).

A higher level of managerial ownership is considered as one of the important things to motivate managers (Warfield et al., 1995) in Mehmet et al. (2014). If the managers do not have a high level of shares in the firm, they may not perform most likely in behalf of shareholders. It can be expected when managerial ownership increase, the tendency to altering earnings will reduce (Mehmet et al., 2014).

### **2.3. Audit Quality**

According to DeAngelo (1981), audit quality is auditors' market-assessed ability to detect material misstatements in financial statements and report the material misstatements. A good quality auditor also acts as an effective deterrent of earnings management as management would be punished and the company value would be low due to fake financial reporting if it is detected and exposed. Herawaty (2008) stated that audit quality is assessed from the role of auditors that having more accurate and effective training and auditing procedures, auditor independency, and the amount of human resources in order to provide certainty related to accounting numbers reported by the management. The role of a high audit quality is crucial, as the user of financial statements will make decisions based on financial statements that have been audited by external auditors, therefore auditor as an independent party is expected to be able to limit any violence in accounting regulations and increasing trustiness of company's financial statements (Setiawan, 2014). Higher quality audit is assumed as an ability and capability to increase the quality of reported earnings, and higher

quality of reported earnings means higher investors trust. Ardiati (2005) argued that high quality auditing lead to effective deterrent of earnings management, because management reputation will be ruined and the company value will go down if there is any incorrect earnings statement detected and exposed to the public.

According to Johnson et al., 2002; Balsam et al., 2003, quality auditors may reduce accrual earnings management practice that may effect on accounting inflexibility of the clients. As the clients have such inflexibility, they have an alternative that is practicing real earnings management rather than accrual earnings management. The clients with stronger motivations to manipulate earnings will be more likely to engage in real earnings management (Radityo, 2013). Roychowdury (2006) argued that real earnings management is less attractive to auditors compared with accrual earnings management because in real earnings management, operational decisions made by managers related to determining product price, expenditures limitations, and production amount is not in auditors' concern and responsibilities (Radityo, 2013). Therefore, there is an assumption that high quality auditors may not have such a capability to hinder the real earnings management practice (Radityo, 2013).

#### **2.4. Firm Size**

According to political cost hypothesis in positive accounting theory which has become the basis of the development of hypothesis to detect earnings

management (Watts and Zimmerman, 1986), firm size is commonly used for political cost guidelines, where political cost increases along with size and risk of the firm. Following the theory, earnings management is practiced by the bigger firms because the management has a motivation to lower the number of earnings thus the political cost will decrease. Political cost hypothesis also explains that earnings management practice is caused by government's regulation, for instance, tax establishment. If the company's income is high, it will make tax paid by the company higher, and vice-versa. This condition motivates manager to arrange the number of earnings not too high so the amount of tax paid will also not be too high. The government's subsidy may also be being a consideration for the firm if they have a motivation to get subsidy from the government, so the firm will try to manipulate earnings lower than the actual.

The bigger firms are expected to engage more in earnings management compared to smaller firms, because the political cost hypothesis assumes that bigger firms will tend to show their profits lower by using different accounting methods and procedures so that the firm does not attract the attention of politicians, who will have an eye on high profit industries (Deegan, 2009).

## **2.5. Earnings Management**

### **2.5.1. Definition of Earnings Management**

According to Healy and Wahlen (1999), earnings management is a situation in which managers use judgment in financial reporting and in structuring

transactions to change financial reports either to mislead some stakeholders about the firms' performance or to influence contractual outcomes by using accounting practices. Earnings management can be classified into two types: an accounting action and a real economic action. The accounting action is commonly known as accrual-based earnings management in which certain accruals are manipulated with no direct cash flow effect. The accrual-based earnings management is related to unreasonable change in accounting policy or accounting estimates (e.g. the useful life of assets, the residual value of assets, the amount of doubtful accounts) and change in accounting choices (e.g. depreciation method) to meet target earnings numbers (Kiattikulwatana, 2014).

The second type of earnings management is also known as real-based or transaction-based earnings management, where this type of earnings management affects cash flow. According to Healy and Wahlen (1998), real-based earnings management points to the acceleration of sales, the alteration in shipment schedules, the delay of research and development expenses, the delay of maintenance expenditure, and the increase in production as examples of the real earnings management methods available to managers. Roychowdhury (2006) demonstrates that sales manipulation, reduction in discretionary expenditures (e.g. research and development, advertising, and maintenance), and overproduction activities can be detected from abnormal cash flow from operations, abnormal discretionary expenses, and abnormal production costs, respectively.

Earnings management can be defined as interference in the management of the financial reports in order to achieve personal interest. Earnings management

benefits only for the management who manages the number of earnings, while on the other hand will harm others who use the information in the financial statements because of what is showed in the financial statements does not reflect the actual situation in the firm.

### **2.5.2. Theory of Earnings Management**

Positive accounting theory which consists of three hypotheses: bonus plan, debt covenant, and political cost hypothesis (Watts and Zimmerman, 1986), may be used as a basis of earnings management practice. According to Scott (2003), positive accounting theory is related to prediction of managerial accounting choice and performance and how the managers react to accounting policies and newly proposed accounting standards in different circumstances and across different types of firm. In positive accounting theory, firms are organizing their selves by using the most efficient way in order to maximize their prospects for survival.

Positive accounting theory can be associated with the contractual view of the firm. The firm is associated as a “nexus of contracts” which means that firms are nothing more than a collection of contracts between different parties – primarily shareholders, directors, employees, suppliers, and customers (Jensen and Meckling, 1976). Because there is a need to be efficient, the firm will try to minimize the costs associated with contracts by choosing the accounting policies that best acknowledge the need for minimization of contract costs.

Positive accounting theory recognizes that changing circumstances require managers to have flexibility in choosing accounting policies, which will make opportunistic behavior occurs. Opportunistic behavior happens when the management will act based on their own will and interest, therefore management will try to maximize its own profit regardless of the firm's interests.

There are three hypotheses in positive accounting theory: bonus plan hypothesis, debt covenant hypothesis, and political cost hypothesis (Watts and Zimmerman, 1986). The explanation of these hypotheses are:

#### 1. The Bonus Plan Hypothesis

In this hypothesis, there is a relationship between managerial accounting choice and bonus plan of managers. In business contracts, it is a common thing for shareholders to give bonuses to managers as a feedback or evaluation for company's performance in a year. When managers have performed well, it will make the company can achieve the targeted performance then bonuses will be given to managers as a reward. One of the performance benchmark of a company is income. Performance benchmark based on income will motivate managers to report better income so there is a possibility for the managers to manipulate accounting method and figures to show the accounting performance better than it should be (Deegan, 2009). Such example is managers will choose different depreciation method allowing lower profits at the start and higher profits towards the end, while another will tend to ignore any research and development costs because it will lower current year profits and eventually affecting their income.

## 2. Debt Covenant Hypothesis

Besides having business contracts with shareholders, managers also have an agreement with creditors. If the managers have a motivation to make creditors interested to invest in their firm, certainly managers will try to give their best efforts to perform well in order to increase firm's performance. While trying to increase company's performance, managers may manipulate accounting numbers in order to show the accounting performance better than it should be.

The relationship between managers not only about the managers trying to attract creditors' interest to invest in their firm, but also the managers that trying to keep the debt agreement. If managers want to maintain the debt agreement between managers and creditors, then they will make the best efforts in order to maintain financial ratios i.e. debt to equity ratio and minimum working capital ratio. If it is violated, certainly creditors will cancel the agreement.

## 3. Political Cost Hypothesis

The political cost hypothesis assumes that firms will tend to show their profits lower by using different accounting methods and procedures so that the firm does not attract the attention of politicians, who will have an eye on high profit industries. Allowing lower profits steers away any attention by the public and the eyes of the government, who will place higher regulation on high earning firms (Deegan, 2009). This hypothesis commonly happens on a big firm that has widespread business nationally. Managers tend to manipulate firm's earnings numbers because they want to avoid political cost that is occurred by government

e.g. taxation and tariff regulation. To avoid political cost, managers are likely to report their earnings numbers lower than it should be.

### **2.5.3. Motivation of Earnings Management**

According to Scott (2003), managers' motivation for engage in earning management are as follows:

#### **1. Bonus Scheme**

Managers that have a bonus scheme will tend to choose accounting policies that will optimize their bonuses. The manager will tend to choose accounting policies to maximize revenue and minimize the expenses in the current period to achieve the targeted profit in a bonus scheme. However, if the profit earned by the company is expected to surpass the target profit, the manager will select more conservative accounting policies to make savings and shift profit to the next period.

In the bonus scheme there are cap and bogey. Cap is the maximum income level to receive an additional bonus. If profit achieved already exceeded the cap, the bonus received will not be increasing. Meanwhile, the minimum income level which is called bogey must be achieved in order to receive the bonus. Managers will select accounting policies that will maximize profit beyond bogey. When the company's profit has reached the cap, the manager will not receive any additional bonus so managers will no longer have motivation to engage in earnings

management. Instead, managers will be motivated to choose more conservative accounting policies and shift current period income to the next period.

## 2. Another Contractual Motivation

Earnings management is the manager's opportunistic behavior to maximize their own utility in dealing with compensation, the debt covenant and political costs. In addition, earnings management can also be viewed from the standpoint of efficient contracts. One of the contracts held by the firm are long-term debt contracts.

Long-term debt agreement encourages managers to manage the earnings in order to make the companies have enough profit and sufficient cash to pay interest and principal to creditors. When the company can fulfill the contract, firms will have a good reputation and this will make a good impact for the company. The company will be able to obtain debt with longer terms and lower interest rate from the creditors.

## 3. Political Aspects

Political aspects are inseparable from the firm, particularly large and strategic firm that its business activities widespread around the country engaging in public services e.g. public transportation, electricity, water, infrastructure, communication which often receive attention from the government. Such companies tend to lower earnings to reduce its profit, especially during periods when the firm generate higher profit than usual or when a firm is on prosperity stage. This action is performed in order to gain subsidy from government.

#### 4. Taxation

In motivation of taxation, the company performs earnings management to lower profit before taxes are reported so that the tax expenses paid by the company will be lower. One of the things that the managers can do is that when firms make purchases of new assets in the period, managers will choose the double-declining balance depreciation method so that will make depreciation expense of companies high and profit before taxes reported for the current period in the financial statements low.

#### 5. CEO Substitution

Various motivations appear around the time change CEO. For instance, CEOs that soon will retire will engage in earnings management so it will improve the company's earnings therefore bonuses will increase. Whereas CEOs who performed under performance will tend to maximize profits in order to prevent his dismissal. Different motivations appear when a new CEO is appointed to replace the old CEO. The new CEO will tend to "take a bath" by recognizing higher expense in the current period in order to increase the possibility of generating higher earnings in the following period.

#### 6. Initial Public Offering

When the company conducted an IPO, the company does not have market value yet. One way to look at the value of the company is at financial information contained in the prospectus as a source. Information obtained from prospectus is used as a signal to potential investors about the company's value. This motivates the company to perform earnings management to increase the reported earnings

so that the company's financial performance will look better than it should be. Earnings management practice before IPO is expected to increase the price of shares, so the company will get higher shares price. Higher share prices will increase the company's working capital so the company will be able to improve company's performance.

#### **2.5.4. Patterns of Earnings Management**

According to Scott (2003), there are four patterns of earnings management performed by the management:

##### **1. Taking a Bath**

This pattern occurs when the appointment of a new CEO happens with a way to report a loss in large numbers with an expectation of increase in earnings in the future. Commonly, companies that engage in “taking a bath” do remove assets and/or decrease the value of assets and shift the incoming expenses into the current period.

##### **2. Income Minimization**

This pattern is similar with “taking a bath” pattern. Income minimization is done when a company has a high level of profitability and the managers want to avoid the higher taxes paid so the managers will decrease the reported earnings in the current period. Income minimization is done by choosing accounting policies which can decrease the number of earnings e.g. removing several tangible and

intangible assets and recognizing expenses e.g. marketing expense and research and development (R&D) expense in the current period.

### 3. Income Maximization

Income maximization is done when earnings are decreasing in order to report higher net income so the managers will reach the bogey level therefore the managers will get the bonuses as promised. This pattern will no longer be performed by the managers if the earnings have achieved the cap level.

### 4. Income Smoothing

This pattern is done when the managers want to “smooth” the number of earnings by keeping the number of earnings between the bogey and cap level. Bonuses will be given (as explained in the bonus scheme) if the managers are able to keep the earnings number in the level between bogey and cap. Companies performing income smoothing have a motivation for external reporting to show to external users that earnings generated is relatively stable.

#### **2.5.5. Earnings Management through Real Activities Manipulation**

According to Roychowdury (2006), real earnings management is departures from normal operational practices, motivated by managers’ desire to mislead at least some stakeholders into believing certain financial reporting goals have been met in the normal course of operations. Cohen and Zarowin (2010) argued that accrual earnings management do not have direct effect towards cash flow, whereas real earnings management do have. Real earnings management are performed in

order to increase the current period earnings by avoiding to report losses to meet analyst forecasts and to meet certain goals. Nowadays, companies that have motivation to manipulate its earnings tend to engage in real earnings management rather than accrual earnings management, as proved by Graham et. al (2005) where it is found that 80% of the managers manipulate earnings through real activities manipulation rather than accrual earnings management. There are two reasons behind this happening. First, accrual manipulation often becomes the center of observation or inspection by the auditors and the regulators. Second, focus attention only on accrual manipulation is a risky action because the company may have limited flexibility to manage accrual (Graham et al., 2005) in Lukito (2016).

Real earnings management may be effective for the current period as it will show higher and smooth earnings in current years, but not for the subsequent period as it will have consequences. Leggett et. al. (2010) in Tabassum et al. (2013) demonstrated that firms which are engaged in real activities manipulation to report higher current earnings have poor earnings in subsequent years. Gunny (2005) investigated the impact of real earnings management on future performance and assessed that firms which are engaged in real activities manipulation to report higher earnings have poor earnings in consequent years.

Real activities manipulation can be done in three ways:

1. Sales Manipulation

Sales manipulation according to Roychowdury (2006) is managers' attempts to temporarily increase sales during the year by offering price discounts or more lenient credit terms. By reducing the price with using price discounts, sales volume will be increased therefore earnings will also be increased temporarily, while in the other hand cash flow from operations will be decreased. The increased sales volumes as a result of the discounts are likely to disappear when the firm re-establishes the old prices (Roychowdury, 2006).

The lower cash flow from operations can be detected by using abnormal cash flow from operations proxy. Abnormal cash flow from operations is measured by difference in actual and normal cash flow from operations. Abnormal cash flow from operations is calculated by using Roychowdury model (2006):

$$\frac{CFO_t}{A_{t-1}} = \alpha_0 + \alpha_1 \left( \frac{1}{A_{t-1}} \right) + \beta_1 \left( \frac{S_t}{A_{t-1}} \right) + \beta_2 \left( \frac{\Delta S_t}{A_{t-1}} \right) + \varepsilon_t$$

Description:

$CFO_t$  = Cash flow from operations at year t

$A_{t-1}$  = Total assets at year t-1

$S_t$  = Sales at year t

$\Delta S_t$  = Sales change at year t

$\varepsilon_t$  = Residual value of abnormal cash flow from operations at year t

## 2. Overproduction

Overproduction is when managers of manufacturing firms can produce more goods than necessary to meet unexpected demand to manage earnings upward (Roychowdury, 2006). With higher production levels, fixed overhead

costs are spread over a larger number of units, lowering fixed costs per unit, then total cost per unit declines. This implies to reported cost of goods sold (COGS) will be lower, and the firm reports better operating margins (Roychowdury, 2006).

However, after the overproduction period ends, the over-produced items that are not sold will incur production and holding cost to the firm. As a result, cash flows from operations are lower than the normal. The increase in production due to overproduction is able to be detected by using abnormal production, where increase in production level is categorized abnormal because the production level is unusual compared to normal level. Abnormal production is calculated by using Roychowdury model (2006):

$$\frac{Prod_t}{A_{t-1}} = \alpha_0 + \alpha_1 \left( \frac{1}{A_{t-1}} \right) + \beta_1 \left( \frac{S_t}{A_{t-1}} \right) + \beta_2 \left( \frac{\Delta S_t}{A_{t-1}} \right) + \beta_3 \left( \frac{\Delta S_{t-1}}{A_{t-1}} \right) + \varepsilon_t$$

Description:

$Prod_t$  = Sum of cost of goods sold and change in inventory at year t

$A_{t-1}$  = Total assets at year t-1

$S_t$  = Sales at year t

$\Delta S_t$  = Sales change at year t

$\Delta S_{t-1}$  = Sales change at year t-1

$\varepsilon_t$  = Residual value of abnormal production at year t

### 3. Reduction in Discretionary Expenses

Companies can reduce discretionary expenses by removing expenses e.g. advertising expenses, research and development (R&D) expenses, sales, general and administration (SG&A) expenses. The effect when a company lower its

discretionary expenses is cash flow from operations will increase. Companies reduce discretionary expenses when it is indirectly related to an increase in earnings. For example, companies will stop advertising its products that have been well known and generate a good amount of sales, or companies can defer or remove R&D expenses when a product has been well known and do not need any further innovation in a short term.

Reduction in discretionary expenses will have an impact towards outflow cash, therefore it will have a positive impact towards cash flow from operations in a current period, but it soon will have a negative impact towards cash flow from operations in subsequent period. A reduction in discretionary expenses can be detected by using abnormal discretionary expenses, as a reduction in discretionary expenses is considered abnormal because reported discretionary expenses are lower than normal discretionary expenses (Ivani, 2015). Abnormal discretionary expenses are calculated by using Roychowdury model (2006):

$$\frac{\text{DiscExp}_t}{A_{t-1}} = \alpha_0 + \alpha_1 \left( \frac{1}{A_{t-1}} \right) + \beta \left( \frac{S_{t-1}}{A_{t-1}} \right) + \varepsilon_t$$

Description:

$\text{DiscExp}_t$  = Sum of advertising expenses, research and development (R&D) expenses, and sales, general, and administration expenses (SG&A)

$A_{t-1}$  = Total assets at year t-1

$S_{t-1}$  = Sales at year t-1

$\varepsilon_t$  = Residual value of abnormal discretionary expenses at year t

## 2.6. Previous Researches and Hypotheses Development

### 2.6.1. Previous Researches

Previous researches related to the impact of institutional ownership, managerial ownership, audit quality, and firm size toward earnings management through real activities manipulation is not much widely done. There are two previous researches which have similarities to this research, that conducted by Hamijaya (2015) and Fitria (2015).

Hamijaya's research entitled "*Pengaruh Tata Kelola Perusahaan, Struktur Kepemilikan, dan Kualitas Auditor terhadap Manajemen Laba Riil*" uses four independent variables which are managerial ownership, institutional ownership, and audit quality towards earnings management through real activities manipulation. Audit quality is confined by public accounting firm (KAP) size. Samples used are the whole listed companies (122 samples) in IDX for the year 2010-2013 except banking and securities companies. The research result shows that managerial ownership and institutional ownership have significant negative impact towards real earnings management, while audit quality does not have any impact towards real earnings management.

The second research conducted by Fitria (2015) which entitled "*Pengaruh Struktur Kepemilikan, Ukuran Perusahaan, dan Kualitas Audit terhadap Manajemen Laba*" uses institutional ownership, managerial ownership, firm size, and audit quality as independent variables and discretionary accruals, which is the dependent variable, as the model for earnings management. Firm size is defined

by natural logarithm of current year total assets and audit quality is proxied by public accounting firm size (KAP) size. The research result shows that firm size has a positive significant impact towards earnings management, while ownership structure and audit quality does not have any impact towards earnings management.

### **2.6.2. Institutional Ownership and Real Earnings Management**

Institutional ownership as one of the main components of agency theory is intended to reduce the information asymmetry between shareholders and the management. Jensen and Meckling (1976) states that by increasing the percentage of institutional ownership will increase the power of institutional owners to effectively monitoring the management as the sophisticated investors in order to reduce the earnings management practice (Jensen and Meckling, 1976).

Institutional investors as sophisticated investors will be able to control decisions made by the management through effective monitoring process. Institutional shareholders are assumed that they have more knowledge and experience compared to other investors so it will increase the control and monitoring function in the company. The institutional shareholders, different than common shareholders, have ability and knowledge that do not belong to common shareholders so they can provide more active monitoring that is difficult for smaller, more-passive or less-informed investors (Almazan, Hartzell and Starks,

2005), making them possible to reduce the ability of managers to opportunistically managing earnings (Alves, 2012).

Several studies by Koh (2003), Ebrahim (2007), and Mehmed et al., (2014) have proved that institutional ownership effectively hinder the earnings management practice. In the other hand, different research result was found by Midiastuty and Machfoed (2013) and Tarjo (2008) where it was found higher institutional ownership were not able to reduce earnings management practice. The greater ownership of financial institutions, the greater the power of financial institutions to monitor the management and eventually the management is expected to be less engaged in earnings management practice through real activities manipulation. So, the hypothesis will be formulated as:

**H1 = Institutional ownership has a negative impact toward real earnings management.**

### **2.6.3. Managerial Ownership and Real Earnings Management**

Managerial ownership has the same function as institutional ownership, as it is intended to reduce the information asymmetry between shareholders and the management. The presence of managerial ownership is important in order to reduce information asymmetry, as stated by Jensen and Meckling (1976) that by increasing the percentage of managerial ownership, the shareholders' interests can be aligned with managers' interests so it will reduce information asymmetry.

Conflict of interests in a firm caused by agency problem as explained in the agency theory may lead to opportunistic behavior by managers and will make managers manage the earnings number in order to achieve personal interests. Therefore, an alignment of interests must be done in order to reduce conflict of interests. Jensen and Meckling (1976) stated that integrating interests of owners and managers may reduce the conflict of interests by giving shares to managers. If managers are owning company's shares, managers will have more motivation to increase firm's performance, where they also act as shareholders.

Warfield et. al. (1995) and Yohana (2010) found that managerial ownership negatively related with earnings management, which means if the level of managerial ownership is high, thus earnings management level will be low. The same result also was found by Noviatara (2013) where managerial ownership negatively affected toward earnings management. Otherwise, Fitria (2015) proved that managerial ownership does not give any impact toward earnings management. The higher the managerial ownership, the lesser real earnings management practice engaged by the management. So, the hypothesis will be formulated as:

**H2 = Managerial ownership has a negative impact toward real earnings management.**

#### **2.6.4. Audit Quality and Real Earnings Management**

Earnings management practices can be explained by the agency theory. Agency theory assumes that the agents have more information than the principals, because the principal cannot sustainably observe the agents' activities. In a such condition, it is necessary to have a third party, namely auditor that is considered capable of aligning the interests of the principals (shareholders) and the agents (management) in managing and supervising the financial statements. Ardiati (2005) mentioned that high quality auditor is able to act as an effective deterrent for earnings management. Herawaty (2008) stated that audit quality is assessed from the role of auditors that having more accurate and effective training and auditing procedures, auditor independency, and the amount of human resources in order to provide certainty related to accounting numbers reported by the management.

Higher quality audit is assumed as an ability and capability to increase the quality of reported earnings, and higher quality of reported earnings means higher investors trust. Ardiati (2005) argued that high quality auditing lead to effective deterrent of earnings management, because management will have a bad reputation and the company value will be lower if there is any incorrect earnings statement detected and exposed to the public.

According to Johnson et al., 2002; Balsam et al., 2003, quality auditors may reduce accrual earnings management practice that may effect on accounting inflexibility of the clients. As the clients have such inflexibility, they have an

alternative that is practicing real earnings management rather than accrual earnings management. The clients with stronger motivations to manipulate earnings will be more likely to engage in real earnings management (Radityo, 2013). Roychowdury (2006) argued that real earnings management is less attractive to auditors compared with accrual earnings management because in real earnings management, operational decisions made by managers related to determining product price, expenditures limitations, and production amount is not in auditors' concern and responsibilities (Radityo, 2013). Therefore, there is an assumption that high quality auditors may not have such a capability to hinder the real earnings management practice (Radityo, 2013).

Few studies have been conducted in order to find a relationship between audit quality and real earnings management. Ratmono (2010) found that higher auditor quality negatively associated with accrual earnings management, while auditor quality did not have any relationship with real earnings management. In the other hand, Chi et al. (2011) and Radityo (2013) found that audit quality positively associated with real earnings management. The higher the quality audit, the higher level of real earnings management. So, the hypothesis will be formulated as:

**H3 = Audit quality has a positive impact toward real earnings management.**

### 2.6.5. Firm Size and Real Earnings Management

Firm size is a value that indicates the size of the company. There are various proxies usually used to represent the size of the company, i.e. the number of employees, total assets, total sales, and market capitalization. The greater the assets, the more capital invested, the more sales, the more money earned, the bigger the market capitalization and greater the popularity of the firm (Sudarmadji and Sularto, 2007).

According to political cost hypothesis, earnings management is practiced by the bigger firm because the management has a motivation to lower the number of earnings thus the political cost will decrease. Political cost hypothesis also explained that earnings management practice is caused by government's regulation, for instance, tax establishment. If the company's income is high, it will make tax paid by the company higher, and vice-versa. This condition motivates manager to arrange the number of earnings not too high so the amount of tax paid will also not be too high.

The bigger firms are expected to engage more in earnings management compared to smaller firms, because the political cost hypothesis assumes that firms will tend to show their profits lower by using different accounting methods and procedures so that the firm does not attract the attention of politicians, who will have an eye on high profit industries (Deegan, 2009).

Prior researches related to the impact of firm size on earnings management were done by Choutrou et al. (2001), where firm size in United States of America

negatively affected on earnings management. Handayani and Rachadi (2009) found that large-sized companies do not engage more earnings management than small firms. In the other hand, Restie (2009) found that firm's size gives a positive significant impact toward earnings management. The bigger the size of a firm, the higher level of real earnings management. So, the hypothesis will be formulated as:

**H4 = Firm size has a positive impact toward real earnings management.**

