CHAPTER II
THEORETICAL BACKGROUND AND HYPOTHESIS
DEVELOPMENT

2.1. Financial Statements

According to Marshall et al. (2002), financial statements are the end product of financial reporting process. The process begins from transactions that happen between company and individual or company and other company. The accountant of the company will select from many possible alternative of accounting method and procedures. This selection process will affect how information presented in financial statements. Complete financial statements consist of statement of comprehensive income, statement of financial position, statement of changes in owners’ equity, and statement of cash flows. Each statement presents different information that related to each other. Hence, in order to get complete understanding about company’s financial condition, users should assess all of the statements.

There are two groups of financial statements users. The first group is the external users, consists of investor, creditor, supplier, government, customer, and public. They are people outside the company and the primary users of financial statements. The second group is the internal users which is company’s employees. They are people inside the company and some of them compose financial statements. The primary users mainly use financial
statements to assist them in making economic decision, such as buy or sell securities and reject or accept debt covenant proposal.

International Financial Reporting Standards (IFRS) allow two accounting basis that can be used in preparing financial statements namely, cash basis accounting and accrual basis accounting. Cash basis accounting is used in preparing statement of cash flow, while accrual basis accounting is used in preparing the other three statements. Under accrual basis, company recognizes the elements in financial statements when they meet the definition and criteria for those elements in the International Accounting Standard Committee Framework. The consequence of using this basis is transactions and events will be recognized when they occur and it will be recorded and presented in the financial statement in the periods when they occur, regardless the involvement of cash.

2.1.1. The Objective of Financial Statements

According to IASC’s framework for the Preparation of Financial Statements, the objective of financial statements is to provide information to external users about the real condition of the company to assist them in making economic decision. The information in financial statements shows the performance of the company financially. Hence, it is one source of information needed by investors to make investment decision. However, this information cannot be used solely without any additional information, as it contains only the previous period information of company’s financial condition.
Financial statements also used by managers to account their activities to company’s resource provider. Investors and creditors are resource provider that requires periodic information about activities done by managers in using their resources. Managers as the party who held the authority given by investors to manage company’s activities are bearing responsibility to report their activities to resource provider. In this relationship, managers act as agent hired by investors, who act as principal along with creditors. This relationship will be explained further in agency theory section.

2.1.2. The Qualitative Characteristics of Financial Statements

Information in financial statements cannot be useful to make economic decision before it fulfill the qualitative characteristics of financial statements. According to IASC’s framework, there are four principal qualities that will make financial statements useful in assisting users in making economic decision.

1. Understandability

This quality requires the information presented to be easy to understand by users. Financial statements should present information in certain way to make the readers easily understand the information provided in each statement. However, it does not mean to omit complex information in order to make it more understandable. In addition, users also should have enough knowledge in assessing
information in financial statements, because some information may need specific knowledge in order to assess them well.

2. Relevance

This quality requires information to be able to assist users to make economic decision by evaluate past, present, or future events happen in the company. In addition, it requires the information to able to confirming or correcting users past evaluation. For instance, company’s previous five period of earnings information can be used by investors to make prediction about company’s future earnings.

3. Reliability

This quality requires information to be free from material error and bias and represent the actual activity or transactions happen in the company. Moreover, there are five specifications that should be fulfilled in order to present reliable information.

- Faithful Representation

Information presented in financial statements should represent or could be reasonably expected to represent the real activities and transactions happen in the company that construct each number presented in financial statements. For instance, the activities related to buying or selling plant assets will be accumulated and presented in statement of financial position. The difficulties come when company deal with transaction that hard to identify or
measured. Hence, information presented in financial statements may be lack of faithful representation.

- **Substance Over Form**
  Information should be presented in accordance with its substance and economic reality and not their legal form. This is due to substance of transactions differ from its legal form. For instance, the assets may be sold to other party and its legal ownership are transferred to the party who buy the assets, however, under certain agreements between both party, the seller may still receive economic benefit of the assets sold.

- **Neutrality**
  Information should be free from bias or neutral. It will not be presented in order to influence certain judgment or decision to achieve certain result or outcome. For instance, the choice of depreciation method that will result in certain number in financial statements to influence investor’s decision will decrease the neutrality of information.

- **Prudence**
  It is the requirement to include higher degree of caution when dealing with uncertainty in transactions or events. In certain transactions or activities or events, company will face the condition when the nature, measurement, result or outcome is hard to predict. For instance, the measurement of doubtful receivable
accounts, useful life of assets, claim and litigation will be hard to decide and each decision will influence how it will be presented in financial statements. This uncertainty situation should be assessed carefully by managers so that it can represent the real events or transactions.

- Completeness
  Information must be completed within the bounds of materiality and cost. It means all elements in transactions that happened should be included in the process of presenting financial statements. The omission of one element of the transactions that occurred may reduce its completeness.

4. Comparability
  Information in financial statements should be able to be compared from one period to another period. This will help users to determine the trends in its financial position and performance. In addition, information should be able to be compared with other company financial statements. This will assist users to compare company performance and average performance of companies in the same industry.

2.2. The Importance of Earnings

As mention in financial statements section, there are four components of financial statements namely, statement of comprehensive income, statement
of financial position, statement of changes in equity, and cash flow statement. Though all statement assists investors to assess company’s financial condition, most investors focus only on the statement of comprehensive income. Statement of comprehensive income shows how resources are used by managers and the outcome of resources used. This statement shows the performance of the company as well as manager’s ability in utilize resources provided by investors.

Earnings information in statement of comprehensive income attracts both investors and managers attention. From investors point of view, earnings will show the result of managers decision and activities in using resources provided by them. While managers see earnings as the form report that shows their ability in utilize resources provided by investors. It can also be one of way to convince investors that they undertake decision in order to maximize investor’s welfare. Due to its importance, its quality is highly demanded by investors so that they can fully use earnings information in making economic decision.

2.3. Earnings Quality

In the special issue of Foundations and Trends in Accounting Volume 1 Issue 4 year 2006 be entitled Earnings Quality, Francis et al. argue that the quality of information in the capital markets is important aspect viewed by market participant to make investment decision. One of information in capital markets is financial statements. It is the end product of financial reporting
process in the company and can be used to observe financial reporting quality. Finding the quality of financial statements can give deeper understanding on company’s financial reporting quality.

The key component of financial statements quality is the quality of its earnings information. Earnings quality is a summary indicator of financial reporting quality. This approach follows the stream of accounting research that views earnings as either a summary indicator or a premier component of the financial reporting package. Some argue that earnings is sufficient indicator to predict the quality of financial statements. Other believes that earnings is the most important component of financial statements.

There is no exact definition or theory about earnings quality, though many studies have been done in order to find the specific definition and measurement of earnings quality. Francis et al. (2006) mention earnings quality as context-specific term. It can have different meaning and measurement depend on the context used by researcher in conducting their study. Although no exact definition of earnings quality, they bravely stated that precision is the best attribute that shows earnings quality. They define precision as less uncertainty and useful to assess real condition of the company.

In more detail explanation, Francis et al. (2006) view earnings quality as influenced by two types of factors, namely innate features of business models and operating environments, and the financial reporting process per se. Both sources of earnings quality may have direct effects on market outcomes.
Research on earnings quality has been primarily concerned with the link between innate and reporting determinants of earnings quality. Innate sources of earnings quality arise from business models and operating environments, while reporting sources arise from the financial reporting process. This study mainly focuses on the reporting sources.

Francis et al. (2006) identify six determinants of earnings quality that involve financial reporting decisions, and therefore affect the discretionary portion of earnings quality. The reporting factors include management’s period-by-period reporting decisions, the quality of the firm’s information systems, the extent and quality of auditing, the quality of governance systems, regulatory scrutiny and enforcement, and accounting standards themselves. Each factor will be described in more detail as follows.

a) Management decisions

Many researches analyze management’s financial reporting decisions from an earnings management perspective, examining both incentives for earnings management and its consequences. Earnings management could increase or decrease earnings quality. Guay et al. (1996) discussion of the exercise of managerial discretion over accruals suggests that the discretionary component of earnings quality contains three subcomponents. The performance subcomponent reflects management’s attempts to improve the ability of earnings to reflect performance in a reliable and timely way. This subcomponent would
increase earnings quality. Conversely, the opportunism and noise sub-components would decrease earnings quality.

b) Information systems

Existing research tends to focus on earnings or the accrual component of earnings as a summary of output signal, hence it makes information system quality have minor effects. This may be because it is not practicable to identify a proxy for the quality of firms’ information systems that is separate from a measure of the quality or precision of the outputs from those systems. Nonetheless, the importance of information systems in enhancing earnings quality increase as financial reporting requires sophisticated measurements.

c) Auditing

Many researches find relation between characteristics of auditor and company’s earnings quality. The key auditor characteristics studied are expertise and independence. Empirical research refers to behavioral auditing research demonstrating that experience enhances performance (Bonner and Lewis (1990); Bedard and Biggs (1991); Wright and Wright (1997)) to examine the link between auditor experience and the quality of client’s financial reporting (proxied by absolute abnormal accruals). Khrisnan (2003) finds that client-firms audited by specialist auditors (i.e., auditors with high concentrations of clients in the same industry as the client-firm) have smaller absolute abnormal accruals than those audited by non-specialist audit firms.
d) Governance structures

Francis et al. (2006) believe there is relationship between governance structures and earnings quality. They suggest researcher to differentiate innate and discretionary quality, because governance structures give different impact on both quality. Result of previous research on the impact of governance structures to discretionary earnings quality find that firm with greater board independence, greater ownership of stock and greater external monitoring have better earnings quality.

e) Regulatory scrutiny and financial reporting standards

Regulatory scrutiny is the elements of the securities laws that pertain to financial reporting plus the related enforcement mechanisms. While financial reporting standards is International Financial reporting Standards or IFRS. Previous researches find different impact of regulatory scrutiny and financial reporting standards to earnings quality. For instance, Palmrose et al. (2004) in their research entitled ‘Determinants of market reactions to restatement announcements’ discover that entities that restate their earnings to avoid GAAP violation will suffer share price decrease.

Through deeper investigation on previous studies about earnings quality such as Dechow and Schrand (2004), Schipper and Vincent (2003), and the 2002 special issue of The Accounting Review devoted to research on earnings quality, Francis et al. (2006) found different measurement on earnings quality. Those researcher findings exhibit the complexity of
earnings quality. Francis et al. (2004) identify seven measures of earnings quality that have been widely used in accounting research. They separate seven measures of earnings quality into two groups, namely accounting-based and market-based depending on the underlying assumptions about the function of financial reporting. This study is focus on accounting-based earnings measure.

The accounting-based measurement uses accounting data to measure the earnings quality. Specifically, it assumes that the function of earnings is to allocate cash flows to reporting periods via accruals. The accounting-based earnings measures are accruals quality, abnormal accruals, persistence, predictability, and smoothness. Each accounting-based measurement will be explained in more detail.

a) Accruals quality

This measurement views the relation between earnings number and cash flows. The more earnings number reflects the cash flows, the higher its quality. Dechow and Dichev (2002) measurement captures the mapping of working capital accruals into last-period, current period, and next-period cash flows from operations. Below is the model developed by Dechow and Dichev (2002) to measure earnings quality:

\[
\frac{TCA_{it}}{Assets_{it}} = \alpha + \beta_1 \frac{CFO_{it-1}}{Assets_{it}} + \beta_2 \frac{CFO_{it}}{Assets_{it}} + \beta_3 \frac{CFO_{it+1}}{Assets_{it}} + v_{it}
\]

Where,
\[ TCA_{i,t} = \text{total current accruals in period } t = \Delta CA_{i,t} - \Delta CL_{i,t} - \Delta Cash_{i,t} + \Delta STDEBT_{i,t} \]

\[ Assets_{i,t} = \text{average total assets in period } t \text{ and } t-1 \]

\[ CFO_{i,t} = \text{cash flow from operating activity in period } t \]

\[ v_{i,t} = \text{residual} \]

The accrual quality represent by the standard deviation of residual value.

b) Abnormal accruals

Abnormal accruals can be used as earnings quality measurement. It is one example of earnings management approach. This measurement captures management decision in making financial statements. The equation to find abnormal accruals is developed by Jennifer Jones and famously known as Modified Jones Model. The larger the value of abnormal accruals (discretionary accrual) means the lower its earnings quality.

\[
\frac{TA_{i,t}}{A_{i,t-1}} = \alpha - \frac{1}{A_{i,t-1}} + \beta_1 \left( \frac{\Delta REV_{i,t} - \Delta AR_{i,t}}{A_{i,t-1}} \right) + \beta_2 \frac{PPE_{i,t}}{A_{i,t-1}} + \epsilon_{i,t}
\]

Where

\[ TA_{i,t} = \text{total accruals in period } t \]

\[ \Delta REV_{i,t} = \text{The change in revenue} \]

\[ \Delta AR_{i,t} = \text{the change in account receivable} \]

\[ A_{i,t-1} = \text{total assets in period } t-1 \]

\[ PPE_{i,t} = \text{the sum of property, plant, and equipment} \]
Total accruals in period $t$ or $TA_{i,t}$ can be found by equation below

$$TA_{i,t} = NI_{i,t} - CFO_{i,t}$$

Where

$TA_{i,t}$= total accruals in period $t$

$NI_{i,t}$= net income in period $t$

$CFO_{i,t}$= cash flow from operational activity in period $t$

Total accruals consist of two components, namely discretionary and non-discretionary accrual. The abnormal accrual is represents by discretionary accrual. Discretionary accrual in the regression model is the $\varepsilon_{i,t}$.

$$DA_{i,t} = |\varepsilon_{i,t}|$$

Where,

$DA_{i,t}$= Discretionary accruals in period $t$

c) Persistence

Earnings persistence can be also called sustainable earnings. The more sustainable earnings mean the higher its quality. Following Francis et al. (2006) research, earnings persistence is measured as the slope coefficient estimate, $\Phi_{1,t}$, from an autoregressive model of order one (AR1) for annual split-adjusted earnings per share ($X_{i,t}$, measured as firm $i$’s net income before extraordinary items in year $t$ divided by the weighted average number of outstanding shares during year $t$):
The estimate value of $\phi_{1,i}$ represent the level of earnings persistence. The value close to one means high earnings persistence, while the value close to zero low earnings persistence.

d) Predictability

Reported earning number that can be used to predict future period earnings is called good earnings quality. Francis et al. (2006) use the same firm-specific models used to estimate earnings persistence to measure earnings predictability.

$$\text{Predictability} = \sqrt{\sigma^2(v_i)}$$

The larger the Predictability value means the lower its quality.

e) Smoothness

Francis et al. (2004) suggest that capital market participants reward smoother earnings streams with reduced costs of equity and debt capital. Their findings support the view that earnings smoothness is desirable. In other words, earnings smoothness represents good earnings quality. Earnings smoothness is measured by the ratio of firm $i$’s standard deviation of net income before extraordinary items divided by beginning total assets, to its standard deviation of cash flows from operations divided by beginning total assets.
2.4. Earnings Management

The relationship form by the managers and the owners is called agency relationship. Jensen and Meckling (1976) in their research entitled Theory of The Firm define agency relationship as a contract under which the principal engage the agent to perform some service in their behalf by giving them authority in making certain decision. The principal is the owners of the company who provide resources that will be used by the managers. The managers act as an agent hired by the principal to use resources provided by them. Both parties are bond with contractual agreement.

The contractual agreement between the principal and the agent stated that managers will act in order to maximize owner’s wealth, while the owners provide incentives for the managers in return. In this agreement, both parties will receive benefit by doing their part. However, in reality, it is hard to fulfill this agreement, as the interest of the managers at some point may be different from the owners. The managers may take decision based on their interest which will harm owner’s interest. Hence, the owners should monitor the way the managers manage the company and the result of every decision they made.

The differences in both parties interest may result in agency problem. This problem defined by Jensen and Meckling (1976) as conflict happened between principal and agent when both interests contradict one another. When this conflict happens, the owners are in unfavorable position, due to their lack of knowledge and information about activities done by the
managers. Investor lack of knowledge compare to managers sometimes called as information asymmetry. In order to decrease the agency problem, the owners will induce agents to make both interests in line with each other. The way to induce management is through huge compensation incentives. In return for huge compensation incentives, managers should make decision that will maximize owner’s interests.

Scott (2011) on one section of his book “Financial Accounting Theory” write about manager’s information advantage. He stated that manager performance can be measure using earnings. This possibility may lead to manager decision to manage reported earnings. There is a huge room that manager can used to manage earnings for their own benefit. The way they manage reported earnings is by choosing certain accounting policies that will result in desirable reported earnings. Investors as the party who earn less information will depend on earnings number reported by managers. Due to the use of certain accounting policies to manage reported earnings, information reported to investors may decrease in quality.

Management advantage over investors leads to the practice of earnings management. Earnings management is the act of managers in manipulate the reported earnings number in order to achieve their goals. Management position in agency relation gives them opportunity to practice earnings management. Watts and Zimmerman (1986) find three motivations of manager in performing earnings management.

1) Bonus plan
Managers will manipulate earnings number if their bonus or incentives depend on reported earnings. In this situation, the higher the reported earnings result in higher bonus or incentives. Hence, managers choose accounting policies that lead to higher current reported earnings number. The consequence of this practice is the future earnings will not reflect the actual condition of the company, as it will be lower than the actual earnings number. This is due to the nature of accrual accounting basis when managers reporting as high a net income as possible in current period, the future period earnings will be lower.

2) Debt covenant

When company signing an agreement to borrow money from creditor, it should retain certain condition in order to fulfill creditor’s demand. It may happen at some point where company’s financial condition is bad and unstable. Company’s bad condition could lead to the violation of debt covenants. To avoid or postpone the violation of debt covenants, managers manipulate the earnings number to make current period earnings higher. As the firm approaches default, or if it actually is in default, it is more likely to do earnings management.

3) Political cost

Different from the two previous motivations, this motivation will lead managers to make earnings lower in current period. High earning number may attract public to give more attention to the company. This situation drives politicians to increase tax rates and create new
regulation. Hence, managers will manage earnings downward to reduce company’s political cost. The result of accounting policies chosen by managers to decrease current period earnings is higher future period earnings. Higher future period earnings will not reflect the actual condition of the company.

Scott view of earnings management is similar with Kimmel et al (1998) who define earnings management as the practice of managers to recognize gains and losses in time when the impact of the recognition will be less affected to earnings. It means the company does not recognize gains and losses in time when they are occurred. The management delayed the recognition until it gives minimum impact on earnings. This practice will reduce the completeness of financial statement. Eventually, it will reduce the quality of information reported.

One technique used by managers in performing earnings management is through accrual policy. Financial statements are reported using accrual based accounting. This accounting basis record revenue and expenses as they are incurred and not when cash received or paid. The used of this accounting basis will create opportunity for managers to manage earnings number. There are two components that form total accruals, namely discretionary accruals and non-discretionary accruals. The use of accrual policy because managers have intention to achieve certain earnings number is called discretionary accruals. While non-discretionary accruals is the use of accrual policy because company condition require the adjustment and change in certain
policy such as allowance for doubtful accounts or change in estimated life of plant assets due to maintenance.

Moreover, discretionary component in total accruals show managers decision or discretion in choosing certain method and policies. Their decisions affect the amount of earnings stated in financial statements. The value of discretionary component can be used to know the level of earnings management in the company. Discretionary component is widely known in accounting fieldwork as abnormal accrual. As mention previously, abnormal accruals can be used to assess the earnings quality. The higher the abnormal accrual means the lower its earnings quality.

2.5. Conservatism

There is no theory that explained explicitly about accounting conservatism. However, certain accounting standard such as United States Generally Accepted Accounting Principles (US GAAP) described conservatism. Under current US GAAP, conservatism leads accountants to choose accounting methods that favor slower recognition of revenues as compared to expenses that reduce valuations of net assets (Wolk, Tearney, and Dodd 2001, 144). Recent literature starting from Basu (1997) defines conservatism as an accountant’s tendency to require a higher degree of verification to recognize good news as gains than to recognize bad news as losses (Basu 1997, 7; Watts 2003; Pae, Thornton, and Welker 2005).
According to Kimmel et al. (1998) book entitled “Financial Accounting: Tools for Business Decision Making”, conservatism is one of constraints that are permitted to use by company to modify accounting principles without reduce the usefulness of the information. Conservatism chooses the way to not overstated assets and income. However, it does not permit the understatement of assets and income also. Conservatism mostly used when dealing with difficult situation, especially where there is existence of doubt. The basic guideline given by conservatism in doubtful situation is chose the way that will not overstate assets and income.

Supporting Kimmel et al. (1998) view of conservatism, Marshal et al (2002) in book entitled “Accounting: What the Numbers Mean” define conservatism as the way accountant make judgment and estimates that will result in lower profits and asset valuation estimates. The simple rule is avoiding the overstatement of reported profit. The principle of conservatism is eliminated the wishful thinking about something that is uncertain. When dealing with uncertainty, accountant needs to be realistic. It is not always mean to think negatively about something, but if there is no strong evidence of positive result will happen, accountant should not record it in the financial statement.

Conservatism is not a mandatory principle that should be implemented in company. It is not one of principle stated in international standard or IFRS. United States Generally Accepted Accounting Principles (US GAAP) permit the use of conservatism principle. Hence, conservatism is one of choices that
can be used by managers in the way they report company’s financial condition. Many research findings suggest that conservatism is widely used in many companies around the world.

Conservatism principle helps managers to overcome uncertainty condition. Uncertainty condition is a condition where the result cannot be clearly seen. Different decision could lead to different impact and eventually different result. Hence, this principle requires managers to be more caution to make decision where uncertainty involved, as it may give bad impact on company’s financial condition. Conservatism also suggests managers to not overstate earnings and assets in reported financial statements.

Uncertainty condition can be an opportunity for managers to achieve their own goals. When their performance mainly assess through reported earnings number, they will perform earnings management to manage reported earnings upward. However, conservatism principle will reduce earnings management practice as increasing earnings number is prohibited under conservatism principle. When company deal with bad economic condition, it may close to the violation of debt covenant as their assets deteriorating. Managers attempt to increase company assets also cannot be done when they implement conservatism principle, as it is prohibited under conservatism principle.

There are three measurement that mostly used by researchers to measure the level of conservatism.

1. Market to Book value
Beaver and Ryan developed a model to measure conservatism based on view that conservatism principle require managers to not overstated company’s assets. This measurement is called market to book value. The model is given as follow:

$$CONACC_{i,t} = \frac{(Number of shares_{i,t} \times Shares\ price_{i,t})}{Total\ equity_{i,t}}$$

Where,

- $CONACC_{i,t} =$ the level of conservatism
- $Number of shares_{i,t} =$ company’s outstanding shares at the end of period
- $Shares\ price_{i,t} =$ company’s shares price at the end of period
- $Total\ equity_{i,t} =$ company’s total equity

The value of $CONACC_{i,t}$ more than one means the company implement conservatism, as its book value is recorded below its market value.

2. Basu Asymmetric Timeliness

Basu (1997) developed a model to measure the level of conservatism. This model is based on view of conservatism principle that record loss more timely than revenues. However, Khan and Watts (2009) stated that this model ignore the timing of changes in the conservatism level for each individual firm. Thus, Khan and Watts (2009) modified the original Basu Asymmetric Timeliness model as follow:

$$X_t = \alpha_0 + \alpha_1 DR_t + R_t(\beta_0 + \beta_1 Size_t + \beta_2 Mb_t + \beta_3 Lev_t) + DR_t * R_t(x_0 + x_1 Size_t + x_2 Mb_t + x_3 Lev_t) + \delta_t$$
Where:

\[ X_t = \text{earnings before extraordinary items per share for year } t, \text{ scaled by} \]

the stock price per share at the beginning of year \( t \)

\[ R_t = \text{the annual stock return from nine months before fiscal year-end } t \]

to three months after fiscal year-end \( t \)

\[ DR_t = \text{a binary variable equal to 1 if } R_t \text{ is negative, and 0 otherwise} \]

\[ \text{Size}_t = \text{the natural logarithm of total assets at the end of year } t \]

\[ \text{Mb}_t = \text{the ratio of market to book value at the end of year } t \]

\[ \text{Lev}_t = \text{the ratio of total liabilities to total assets at the end of year } t \]

The equation above is used to obtain the value of \( x_0, x_1, x_2, \) and \( x_3 \).

Those values will be used to find the level of conservatism using equation below:

\[ \text{Cons}_t = x_0 + x_1 \text{Size}_t + x_2 \text{Mb}_t + x_3 \text{Lev}_t \]

Where:

\( \text{Cons}_t = \text{the level of conservatism} \)

The high value of \( \text{Cons}_t \) implies the high level of conservatism.

3. Negative non-operating accruals

Givoly and Hayn (2000) develop model to measure conservatism. Their model is based on conservatism principle that recognized loss immediately when it incurred. The equation developed by Givoly and Hayn (2000) is given as follows:
While the operating accruals component will be calculated using the equation below:

\[ \text{Operating Accruals} = \Delta \text{Accounts Receivable} + \Delta \text{Inventories} + \Delta \text{Prepaid Expenses} - \Delta \text{Accounts Payable} - \Delta \text{Tax Payable} \]

After finding the value of total accruals and operating accruals, non-operating accrual will be calculated using the following equation:

\[ \text{NonOperatingAccruals} = \text{Total Accruals} - \text{Operating Accruals} \]

The level of conservatism is shown by the negative value of NonOperatingAccruals. It shows that the company records loss more than it records revenues. The higher the negative value means the higher the level of conservatism.

2.6. Hypothesis Development and Previous Studies

Earnings quality is the quality of earnings information reported in financial statements. Good earnings quality should be able to help users in assessing company’s financial condition. In order to be useful in helping users to make economic decisions, information should be presented faithfully and contain no error and bias. In addition, earnings information should be precise or contain less uncertainty.

In reality, good earnings quality sometimes does not please investors. This is due to the actual earnings number appeared low or negative in financial statements.
statements as company face bad economic condition. When managers deal with such condition, it is hard to achieve appealing earnings number. Hence, they will try to manipulate earnings number to pleased investors. This manipulation practices are widely known in accounting fieldwork as earnings management.

In company’s life cycle, uncertainty conditions are difficult to avoid. It gives management room to choose different accounting method and policies. As often happens, opportunistic managers may choose different accounting method and policies to obtain personal goals. Their action will eventually lead to earnings manipulation practices or known as earnings management. Since earnings management result in bias and less precise earnings information, earnings management practice decrease earnings quality.

In order to reduce the opportunistic behavior of managers in uncertainty condition, accounting standards propose conservatism principle. Under conservatism principle, managers are required to have higher degree of caution in dealing with uncertainty situation. It also requires managers to choose accounting method and policies that will not overstate income and assets. Hence, managers have limited accounting method and policies to choose in order to fully implement conservatism.

Watts study entitled “Conservatism in Accounting” (2003) mentioned that conservatism asymmetric verification limits incentives and opportunity of manager to give bias and noise information. In other word, conservatism limits manager opportunity in practicing earnings management. This bias and
noise information decrease earnings quality, as good earnings quality should faithfully represent company’s real condition and contain no bias and error. Watts suggest that conservatism decrease earnings management and eventually lead to higher earnings quality.

Supporting Watts (2003) study, Lafond and Watts (2008), Lara et al. (2012), and Haniati and Fitriany (2010) also found conservatism implementation decrease earnings management. Due to its requirement to not overstated assets and earnings, managers attempt to perform earnings management that lead to higher earnings number is decreased. This study attempts to find the same result as previous studies, which is conservatism lead to good earnings quality. The way conservatism increase earnings quality is with decreasing management opportunity in practicing earnings management. These arguments lead to the following hypothesis:

**H1**: Conservatism increase earnings quality of listed companies in Indonesia.