CHAPTER II

THEORETICAL BACKGROUND AND THE HYPOTHESIS DEVELOPMENT

2.1 Earnings Management

2.1.1 Definition and Motivations of Earnings Management

Earnings management is defined as the choice of managers over accounting policies, or real actions, affecting earnings to achieve some specific earnings objectives (Scott 2012, page 423). Based on earnings management motivation, earnings management can be divided into two categories; good earnings management and bad earnings management (Scott 2012, page 422).

A. Good earnings management (informational earnings management)

Good earnings management stems from the idea that earnings management is useful to communicate information within firms to external parties (Wardani and Kusuma 2011). Managers as agents usually obtain specialized information within firms, to informed every detail information to principal, it will costly (Scott 2012, page 436). Principals do not know everything about firms, so it is easier for them to understand the general picture of firms' performance. According to Demski and Sappington (1990), managers typically have inside information related to firms' future performance, it conveys in operating cash flows or even earnings. The inside information can be the new firms' strategies, changes in firms' characteristics or changes in market condition. Because the complexity to communicate overall information directly to the investors, the choice and disclosure over discretionary accruals are viewed as options to reveal the information (Scott, 2012).

B. Bad earnings management (opportunistic earnings management)

Bad motivation can lead managers to do earnings management opportunistically (Scott 2012, page 442). The motivation can be various, some motivation stem from the positive accounting theory.

1. The bonus plan hypothesis

According to Watts and Zimmerman (1986), managers' firms with bonus plan, tend to choose accounting procedures that shift reported earnings from future period to current period. This act is based on theory that, when the given bonus plan/remuneration, at least in part, depends on the reported net income, managers who want high bonus plan/remuneration [1], will response with the increased current reporting earnings. Healey (1985) also argue that managers would manage to maximize the net income in order to maximize their bonuses under firms' bonus plan.

2. The debt covenant hypothesis

According to Watts and Zimmerman (1986), the closer firms towards violation of debt-covenants, the more likely managers will choose accounting procedures that shift reported earnings from future period to current period. Most debt agreements contain covenants that borrowers must comply with. For instances, during the term of agreement, borrowers have to maintain

[1] If managers have the risk-averse nature, they tend to smooth reported earnings since a less variable bonus stream has higher expected utility than a volatile one

specified levels of interest coverage, debt-to-equity, working capital, or even shareholders' equity. If the covenant is violated, in consequence, there will be penalties, such as constraints on dividends or constraints to additional borrowing. Those penalties subsequently can restrain managers to manage firms. Managers who want to prevent the penalties will choose accounting procedures to raise current earnings. DeFond and Jiambalvo (1994), provide the evidence about the using of income increasing discretionary accruals in the year prior and to lesser extent in the year of covenant violation.[2]

3. The political cost hypothesis

According to Watts and Zimmerman (1986), the greater the political costs that are faced by firms, the more likely managers will choose accounting procedures that shift reported earnings from current to future period. The larger the firm's are/ the more profitable the firms are, the higher the political costs will be imposed. Because the firms attract media and consumer attention, in consequence, it attracts the politician to publish new taxes or other regulations.

Another factor, a competition with foreign company, will also make managers to choose the accounting procedures to decrease the current reported income. The goal is to convince the government that firms' profit suffers and the grant about import protection can be applied.

4. Seasoned-equity Offerings (Marquardt and Wiedman 2004)

Motivation to manage earnings also comes from managers who own stocks and can sell them due to seasoned equity offerings (Marquardt and

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[2] Not all managers want to increase current earnings, because it means increase the volatility of earnings, thus, increase the probability of future covenant violation

Wiedman 2004). Managers can use their position to influence the firms' financial reporting, giving them opportunity to manage earnings (Marquardt and Wiedman 2004). The objective is to sell managers' stocks at higher price in seasoned equity offerings.

2.1.2 Methods/Mechanism of Earnings Management

Earnings management can be managed either through accounting accrual or real activities.

1. Accruals earnings management

The measurement of accruals earnings management itself, originally, is through total accruals. It is because accruals earnings management focuses on the choice of accounting policies. A particular model is then assumed to generate the non-discretionary component of total accruals, thus, it allows total accruals to be divided into non-discretionary accruals and discretionary accruals (Dechow et al. 1995).

Healey (1985) and DeAngelo (1986) model fit well for an assumption that non-discretionary accruals is constant over time. However, Kaplan (1985) argues that non-discretionary accruals is not constant over time, it changes to response the changes in economic circumstances. As a result, there is a need to propose a new non-discretionary accruals model, and the Jones model set in place.

Jones (1991) model attempts to control the effect of changes in firms' economic circumstances on non-discretionary model. The Jones model for non-discretionary accruals can be seen below.

$$\mathrm{NDA}\tau = \alpha_1\,(1/\mathrm{A}\tau_{-1}) + \alpha_2\,(\Delta\mathrm{REV}\tau) + \alpha_3\,(\mathrm{PPE}\tau)$$

Explanation:

$A\tau_{-1}$: total assets at τ_{-1}
$\Delta REV\tau$: revenue in year τ minus revenue in year τ_{-1} scaled by total assets at τ_{-1}
$PPE\tau$: gross property, plant, and equipment in year τ scaled by total assets at τ_{-1}
$\alpha_1, \alpha_2, \alpha_3$: firms specific parameters

The assumption used is that revenue is part of non-discretionary accruals. However, some part of revenue is established by managers' discretion. There is probability that managers accrue revenues when cash is not yet received at the year-end, thus it will be questionable whether revenues have been earned or not (Dechow et al. 1995). If revenues is accrued, but not yet earned, the revenues amount and total accruals (receivables) are more likely to be increased (Dechow et al. 1995).

To adjust with the assumption that not all revenues are non-discretionary accruals, the modified Jones completed the model.

$$NDA\tau = \propto_1 (1 / A\tau_{-1}) + \propto_2 (\Delta REV\tau - \Delta REC\tau) + \propto_3 (PPE\tau)$$

Explanation:

$A\tau_{-1}$: total assets at τ_{-1}
$\Delta REV\tau$: revenue in year τ minus revenue in year τ_{-1} scaled by total assets at τ_{-1}
$\Delta REC\tau$: net receivables in year τ minus net receivables in year τ_{-1} scaled by total assets at τ_{-1}
$PPE\tau$: gross property, plant, and equipment in year τ scaled by total assets at τ_{-1}
$\alpha_1, \alpha_2, \alpha_3$: firms specific parameters

The assumption prevails is all changes in credit sales results from earnings management (Dechow et al. 1995). It is easier to manage earnings through discretion over revenue recognition on credit sales than cash sales (Dechow et al. 1995).

2. Real earnings management

Real earnings management uses real activities manipulation to manage earnings. Roychowdhury (2006) defines real activities manipulation as 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. It usually results in abnormal cash flow from operation, discretionary expenses, and production costs.

There are three manipulation methods that raise the abnormal value; sales manipulation, reduction of discretionary expenses, and overproduction (Roychowdhury 2006).

A. Sales manipulation

Sales manipulation is an attempt by managers to increase sales temporarily through price discount offer or more lenient credit terms (Roychowdhury 2006). The price discount offer will likely to retain higher current sales because higher current sales volume. However, the increased sales volume will disappear, as the old price is re-established (Roychowdhury 2006). The consequence, it will make the lower future cash flows because customers expectation regard future discount price (Wardani and Kusuma 2011). The higher the sales volume, the lower the margins, thus it will make the production costs relative to sales to be abnormally high.

Another method to boost sales is through more lenient credit terms. The more lenient credit terms, the lower cash inflow regards with the future receivable collectability (Wardani and Kusuma 2011). It can be concluded that sales manipulation results higher production cost and lower current period CFO than the normal level (Roychowdhury 2006).

B. Reduction of discretionary expenses

Managers will reduce the discretionary expenses (R&D, advertising, and SG&A expenses) because they do not generate immediately revenue and income. It will result in unusually low discretionary expenses, and if it is in the form of cash, it leads to lower cash outflows (Roychowdhury 2006). In the end, it gives positive effect on abnormal cash flow from operation in the current period (Roychowdhury 2006).

C. Overproduction

Overproduction means lower fixed costs per unit, hence, reduction in total cost per unit. In the income statement, it will affect the cost of goods sold number; it becomes lower and firms report higher operating margins. The incremental marginal costs incurred in producing more inventories, results in higher annual production costs relative to sales (Roychowdhury 2006).

2.1.3 Patterns of Earnings Management

Earnings management doing creates some patterns. Those patterns are listed below.

A. Taking a bath

When firms have to report loss, it is most likely that managers will report a large amount of loss. Managers do this to enhance the probability of future reported profits, because of the accruals reversal. Accruals reversal means that when managers report greater amount of loss in current period, the subsequent period will force the future earnings upwards (Scott 2012, page 425).

B. Income minimization

Managers will do income minimization during the period of high profitability. Managers do not want to report the high income for some reasons; income tax is one of the reasons (Scott 2012, page 425).

C. Income maximization

Managers will do income maximization for bonuses purposes and to hinder from the violation of debt covenant (Scott 2012, page 425).

D. Income smoothing

Income smoothing makes the less volatility/ less variable of income numbers (Fudenberg and Tirole 1995 in Bao and Bao 2004). However, not all smoothed income results from earnings management. Albrecht and Richardson (1990) in Bao and Bao (2004) classify two types on income smoothing; natural and intentional smoothing. Natural smoothing is natural result from income-generating process (no manipulation). Meanwhile, intentional smoothing refers to real smoothing (managers' change of the economic event) and artificial smoothing (managers' change of the timing of accounting entries). It can be concluded that the intentional smoothing results from earnings management.

Income smoothing feature attracts many users to utilize it. Managers that are risk averse, tend to smooth earnings to get constant bonus/compensation (Scott 2012). Not only managers, but also investors also prefer less variability of income numbers because it is less risky (McInnis 2010).

In this context, the earnings management method used is accruals earnings management. Previous research documented the mean of accruals earnings management in Indonesia and Philippines are higher compare to Malaysia, Singapore, and Thailand (Wardani and Kusuma 2011). It can be interpreted that accruals earnings management is mostly used in Indonesia (Wardani and Kusuma 2011).

According to Leuz (2003), when the investor protection in certain country is weak, it will result into high probability of private benefit control phenomenon. In turn, the frequency of earnings management happens will be high.

Looking at Indonesia country, Indonesia can be classified as weak investor protection country[3]. Furthermore, the characteristic of concentrated ownership makes Indonesia vulnerable to private benefit control phenomenon[4]. As a result, the chance of doing earnings management in Indonesia is quite open wide.

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[3] Leus (2003) implicitly indicates that Indonesia is classified as weak investor protection country

[4] Benos and Weisbach (2003) in Hwang (2004) define private benefit control as “benefits that accrue to managers/shareholders that have control over firms, but not to minority shareholders”. It prevails in the firms with concentrated ownership.

It is quite relevant that earnings management happen in Indonesia because the listed factors. However, if the question address to which is dominant, opportunistic or informational earnings management, it is still quite mixed. Siregar and Utama (2008) found that earnings management in Indonesia tends to be informational/efficient because of a high proportion of family ownership. Another finding, earnings management is present around initial public offering (IPO) and the operating performance and stock returns subsequently underperformed (Saiful, 2004). It implicitly indicates the opportunistic earnings management. In this research, the opportunistic earnings management is the lead.

2.2 Value Relevance of Earnings

2.2.1 Financial Statement and Financial Reporting

SFAC number 1 paragraph 6 and 7 stated the description of financial statement and financial reporting as follows.

Financial statements are a central feature of financial reporting. They are principal means of communicating accounting information to those outside an enterprise.

Financial reporting includes not only financial statements but also other means of communicating information that relates, directly or indirectly, to the information provided by the accounting system-that is, information about an enterprise's resources, obligations, earnings, etc. Management may communicate information to those outside an enterprise by means of financial reporting other than formal financial statements either because the information is required to be disclosed by authoritative pronouncement, regulatory rule, or custom or because management considers it useful to those outside the enterprise and discloses it voluntarily.

Both financial statement and financial reporting have the function as a communication tool towards firms' outsider. The objective of financial reporting (SFAC number 1; bullet 5, point 1) is stated as follow.

Financial reporting should provide information that is useful to present and potential investors and creditors and other users in making rational investment, credit, and similar decisions. The information should be comprehensible to those who have a reasonable understanding of business and economic activity and are willing to study information with reasonable diligence

To achieve the objective, the financial reporting has to have several qualitative characteristics within. SFAC number 2 provides the guidelines about those qualitative characteristics. In general, the qualitative characteristics are split into two perspectives, the users' perspective and the financial statement/reporting itself.

For the users' perspective, the users of financial statement/reporting are obliged to have understanding of the information content of financial statement/reporting. It is written in SFAC number 2; paragraph 7 as follow.

Information cannot be useful to decision makers who cannot understand it, even though it may otherwise be relevant to a decision and be reliable.

Meanwhile, from the financial statement/reporting itself, it has to contain the inherent qualitative characteristics. It is termed as the primary decision specific qualities. The primary decision specific qualities consist of relevance and reliability. The definition of relevance and reliability according to SFAC number 2 can be describes below.

- Relevance

To be relevant, accounting information must have predictive value/feedback value and must be timely. It is capable of making difference in users' decisions by helping them to predict about the outcomes of past, present, and future events or to confirm or correct prior expectations. Information can make a difference decision by improving decisions maker capacities to predict the results of similar future actions. Meanwhile, timeliness means having information available to decision makers before it loses its capacity to influence decision. If information is not available in the time when it is needed or becomes available quite awhile after the reported events that it has no value for future action, it is interpreted as lack relevance and is of little or no use.

- Reliability

To be reliable, information must have representational faithfulness and it must be verifiable and neutral. The reliability of a measure rests on the faithfulness with which it represents what it purports to represent, coupled with an assurance for the users that it has that representational quality.

Aside from the primary decision specific qualities, there is also the secondary quality that interacts with relevance and reliability, that is comparability (include consistency). Financial reporting (financial statement) has to be comparable among firms and consistent in the method application over time.

To be concluded, the accounting information is useful when the users of financial statement/reporting able to understand the content and when the financial statement/reporting has the major characteristics of relevance and reliability.

2.2.2 Elements of Financial Statement

The elements of financial statements that most frequently provided are statement of financial position, income statement, statement of changes in equity, statement of cash flow, and financial statements' notes (PSAK 1 2009 revision, SFAC number 1). The explanation of financial statements' elements is listed as follow.

A. Statement of Financial Position

In general, statement of financial position provides information about firms' assets, liabilities, and firms' equities.

B. Income Statement

It captures the information about the revenues and costs that firms generated. In the end, earnings information is on the focus because it is important as indicator of firms' performance.

C. Statement of Changes in Equity

It reflects the changing of equity from the beginning of accounting period till the end of accounting period. The changing of equity is affected by income of the year and dividends.

D. Statement of Cash Flow

It reflects the cash inflow and cash outflow of the firms. Statement of cash flow consists of cash flow from operating activities, cash flow from investing activities, and cash flow from financing activities.

E. Notes

It is a summary of significant accounting policies and other explanatory notes. It provides more detail information about statement of financial position, income statement, statement of changes in equity, and statement of cash flow.

2.2.3 Earnings

Earnings is the end result of the income statement. It comes into many financial statement/reporting users because it provides a measure about how well firms currently deployed it resources to generate profit (Burgstahler and Dichev 1997). In Sitanggang (2006), earnings is described as follow.

1. Earnings is used as the basis of income taxes and the wealth return of investors.
2. Earnings is considered as the benchmark of dividend policy and retained earnings.
3. Earnings is viewed as significant predictor of future earnings and cash flow.
4. Earnings is used as efficiency measurement. It is a measurement of management stewardship over the firms' resources and how to manage it well.

2.2.4 Earnings and the Qualitative Characteristics of Financial Reporting

According to Barth et al. (2001), when accounting information has the quality of relevant and reliable, then accounting information can be termed as having value relevance.[5] In another words, value relevance is a measurement of decision usefulness of earnings (Gaio and Raposo 2011). Value relevance also defined as the association between accounting information and equity

[5] Value relevance is an empirical operationalization of relevance and reliability (Barth et al. 2001)

market values/returns (Francis and Schipper 1999, Barth et al. 2001, Himma 2013). In particular, earnings is termed as value relevance if it can explain the variance of stock prices/stock returns (Gaio and Raposo 2011). To be concluded, value relevance is a measurement of decision usefulness of earnings, thus, this will reflect in stock prices/returns.

Several studies documented the relation between earnings and stock prices/returns. Whelan and McNamara (2004) and Himma (2013) documented that earnings is related with the movement of stock prices. Another researchers, Collins and Kothari (1989) documented the change of stock prices associated with given unexpected earnings change.

2.3 Previous Research

The research about earnings management and the value relevance of earnings has been explored previously. The list of previous research is listed in table below.

Table 2.1
Previous research of Earnings Management and the Value Relevance of Earnings

No	Title and Author Publication	Result
1	"Impact of Earnings Management on Value Relevance of Accounting Information of the firms listed on the Tehran Stock Exchange" Razie Fattahi, Mahmoud MoeinAddin, and Yahya Abtahi (2014)	There is no significant relationship between earnings management and value relevance of accounting information
2	"The Impact of Earnings Management on the Value Relevance of Financial Statement Information" Catherine Whelan and Ray McNamara (2004)	Earnings management has an impact on value relevance. Earnings management via long term discretionary accruals has a greater impact on the value relevance of earnings and book value than

		earnings management via short term discretionary accruals
3	"The Effect of Earnings Management on the Value Relevance of Earnings and Book Value" Himma Putri Sholilah (2013)	Earnings and book value are value relevant and earnings management reduces the value relevance of earnings
4	"The Effect of Earnings Management on the Value Relevance of Accounting Information" Carol A. Marquardt and Christine I. Wiedman (2004)	Earnings management decrease the value relevance of earnings for MGMT group (managers who own stock and sell it due seasoned equity offering) that do not release a forecast
5	"Is Earnings Management Informational or Opportunistic? Evidence from ASEAN Countries" Dewi Kusuma Wardani and Indra Wijaya Kusuma (2011)	Real earnings management is opportunistic in Indonesia. Meanwhile, accruals earnings management is neither opportunistic nor informational
6	"Detecting Earnings Management" Patricia M. Dechow, Richard G. Sloan, and Amy P. Sweeney (1995)	Modified Jones Model exhibits the most power in detecting earnings management
7	"The relevance of the value relevance literature for financial accounting standard setting: another view" Mary E. Barth, William H. Beaver, and Wayne R. Landsman (2001)	Value relevance assess how well accounting amount reflects information used by equity investors
No	Title and Author Publication	Result
8	"Earnings quality and firm valuation: international evidence" Christina Gaio and Clara Raposo (2011)	There is significant relation between firm valuation and an aggregate earnings quality measured by seven attributes

2.4 The Hypothesis Development

2.4.1 Earnings Management and Value Relevance of Earnings

Earnings, as part of financial statement, has to have qualitative characteristics of relevance and reliability to enhance investor decision-usefulness (SFAC number 2). Relevance means earnings possess predictive value and it is timeliness and reliability means earnings possess representation faithfulness, verified information, and a neutral information (SFAC number 2). When earnings is both relevant and reliable, it can be interpret that earnings is value-relevant. [6] Earnings that is value relevant is deemed as having high earnings quality. In turn, high earnings quality can enhance investor decision-usefulness (Gaio and Raposo 2010). Earnings can predict stock prices movement (Gaio and Raposo 2010).[7]

Earnings management can affect the value relevance of earnings (Whelan and McNamara 2004, Fattahi, MoeinAddin, and Abtahi 2014). Opportunistic earnings management will result into less relevant and less reliable of earnings information (Fattahi, MoeinAddin, and Abtahi 2014, Badertscher, Collins and Lys 2007, Whelan and McNamara 2004). Earnings possesses less relevant and less reliable information, is deemed as having lower earnings quality (Dechow et al. 2009). Low earnings quality cannot

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[6] Barth et. al (2001) state that value relevance is an attempt to operationalize the characteristic of relevance and reliability of accounting information.

[7] Accounting amount is defined as value relevant if it has predicted association with equity market values (Barth et. al 2001).

enhance investor decision-usefulness (Gaio and Raposo 2010). Earnings has less ability to predict the stock prices movement (Gaio and Raposo 2010).[8]

Previous research by Fattahi, MoeinAddin, and Abtahi (2014) and Whelan and McNamara (2004) supports that earnings management decreases the value-relevance of earnings information. Based on previous research and hypothesis development above, the alternative hypothesis can be formulated as follow.

H_{a1} = Earnings management negatively affects the value relevance of earnings

[8] Barth et al. (2001) state "accounting amount will be value relevant, i.e., have a predicted significant relation with share prices, only if the amount reflects information relevant to investors valuing the firm and is measured reliably enough to be reflected in share prices".