

**EARNINGS MANAGEMENT PRACTICES  
ON COMPANIES IN THE SHARIAH INDEX  
(The comparative studies between STDAM and LTDAM  
in Indonesian stock exchange during 2004-2010 period)\***

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**Abstract**

Earning Management (EM) is a behavior of managers in presenting the financial statements. Managers choose accounting methods based on accounting standards for the increase (decrease) in income for the period of the business unit responsibilities, without causing an increase (decrease) in the unit of economic profitability in the long run (Gul and Tsui, 2001; Aljifri, 2007; Cohen and Zarowin, 2010; Louis and Robinson, 2005; Hastuti dan Utama, 2010). This study developed a modified model of Jones (Kang and Sivaramakrishnan, 1995; Kothari, 2001; Fields, Lys, and Vincent, 2001; Whelan dan McNamara, 2004). The model is divided into short-term discretionary accruals (STDAM) and long-term discretionary accruals (LTDAM). STDAM is an EM caused by the use of accounting methods through changes in current assets that have an impact on revenues or costs, while LTDAM is an EM of changes in fixed assets that have an impact on revenues and expenses. This study aims to analyze differences between methods STDAM with LTDAM of companies listed on the shariah index (JII). This study is a cross-sectional study that takes the data from the years 2004-2010. The sample in this study amounted to 130 firm years.

The result shows a difference between models of STDAM with LTDAM on companies in the shariah index. Difference between STDAM with LTDAM occurs due to STDAM tends to be lower than LTDAM. Where differences in the use of accounting methods on current assets such as credit sales, accounts receivable, and inventory tend to give lower income/reduced. While the use of accounting methods on fixed assets such as fixed assets depreciation method tends to give higher income or increase.

**Key Word:** *Earning Management, Short Term Discretionary Accrual, Long Term Discretionary Accrual.*

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## **A. Introduction**

Earnings is one measurement of the company. Earnings are calculated using the accrual of income. Accrual earnings is the accounting earnings that has better results in measuring the performance compared to operating cash flow. In accounting earnings, management is allowed to choose the method of accounting in accordance with the company. Because of the freedom for management to choose the method of accounting, management can make the practice of earnings management.

Earnings management is a controversial action. Earnings management practices can be viewed from two different perspectives, that is as wrong actions (negative) and management actions should be doing (positive). Healy and Wahlen (1998) consider earnings management as an act of misleading and deceiving shareholders. This is due to asymmetric information about the management has a firm condition.

The financial statements of an organization's management policy reflects substantially in choosing accounting methods and estimates. While some previous studies suggested that the selection of discretionary accounting methods will increase the value of income information (Schelleman and Knechel, 2010)

The study follows a research Prasnowo (2011). This study about the practice of earnings management in companies that have gone public and listed on the Stock Exchange and entered in the Jakarta Islamic Index (JII). JII is one of the stock index in Indonesia that uses Islamic principles. JII has been formed by PT. Indonesia Stock Exchange (IDX) that was known as the Jakarta Stock Exchange (JSE) in cooperation with PT. Danareksa Investment Management (DIM). JII began publication on July 3, 2000. JII calculation methodology is based on Weight Average Market Value Index. The number of shares included in the list JII always consistent every year as many as 30 stocks. These shares will be reviewed every six months i.e. every January or July, but this period may change with the regulations BAPEPAM-LK.

Issues in the study were: 1. How big is the practice of earnings management in publicly listed company incorporated in the index JII with long term approach to accrual model?; 2. How big is the practice of earnings management in publicly listed company incorporated in the index JII with short term approach to accrual model?; and 3. Are there differences in earnings management practices approach to short term and long term accruals in the model that incorporated the company went public in the index JII?

Issues Based on research that has been disclosed previously, the researcher sets out the following research objectives: 1. To analyze the magnitude of earnings management practices in companies that have gone public and are incorporated in the JII with long term approach to accrual model ; 2. To analyze the magnitude of earnings management practices in companies that have gone public and are incorporated in the short term JII approaches accrual model; and 3. To test for differences in earnings management practices in companies incorporated in the JII, a difference between approach for long term accrual model with short term accrual model.

## **B. Agency Theory**

Theory of agency (Agency Theory) states that the agency relationship arises when one person or more principal employ another person as agent to provide a service and then delegate the decision-making authority to the agent (Ujiyanto and Boy Scouts, 2007). The relationship between principal and agent can lead to an imbalance condition information (asymmetrical information) because the agent is in a position that has more information about the company than the principal (Prasnowo, 2011). Under conditions

of asymmetry of the agent can influence accounting figures presented in the financial statements by way of earnings management. As for the owners of capital will be difficult to control effectively the actions of management.

Problem of agency (agency problem) actually appears as the principal difficulty to ensure that agents act to maximize the welfare of principal. According to agency theory one of the mechanisms that are widely used and is expected to align its principal and the agent is through the mechanism of financial reporting that contain components of the involvement of management and lack of management involvement. (Sugiri, 1998).

### **C. Earnings Management**

Earnings management is described as an act of legal and acceptable in decision-making and management of financial reporting in order to achieve a stable financial condition and predictable. Scott (1997) in Halim et al (2005) share an understanding of how earnings management in two. First, look at it as opportunistic behavior of managers to maximize their utility in the face of the compensation contract, contact the debt, and political costs (Opportunistic Earnings Management).

Secondly, with regard to earnings management from the perspective of efficient contracting (Efficient Earnings Management), where earnings management to give managers the flexibility to protect themselves and the company in anticipation of events that are unexpected for the benefit of the parties involved in the contract. Thus, managers can influence the market value of company stock through earnings management, for example by making the smoothing earnings (income smoothing) and earnings growth over time.

### **D. Approach to Long Term and Short Term Discretionary Accrual Model**

Whelan and McNamara (2004) stated that the nature of the accruals is to give an opportunity for managers to manipulate discretionary accruals in the long term, so that managers are able to manipulate the market players involved. Thus the impact that the use of long-term discretionary accruals will be larger than the short-term discretionary accruals.

Discretionary accruals divided into short term and long term discretionary accruals. Short term discretionary accruals are affecting the working capital account and reflect on current assets smoothly. Long term discretionary accruals made up of depreciation, future tax, asset revaluation and fair value adjustments of corporate information (Whelan, 2004).

Richard et al. (2001) also mentioned that the use of long-term accruals provide more information next to the SEC (Securities Exchange Commission) rather than a short-term accruals. With the characteristics of each type of accrual, the market might consider the use of short-term discretionary accruals for signaling purposes. This is probably because the market considers that the manager would not be brave enough to do the manipulation with a small chance.

### **E. Hypothesis Development**

Ahmed and Ali (2009) suggested that management participated in earnings management practices. Where earnings are classified into management practices that may be performed and not to do. Earnings management practices may be made by management in accordance with the wise to that issued by the General Accepted Accounting Procedures (GAAP), as reported earnings for the period desired in order to

obtain higher profits for the next period. While earnings management practices are not allowed the management of activities undertaken for personal gain.

Ali et al., 2010 suggests that the Modified Jones models are not effective in detecting earnings management in the company of Bangladesh. The results were not effective in measuring the level of income in Bangladesh market. Then we tried to modify the Modified Jones for detecting earnings management in Bangladesh by the company include several other components of the expenditure during the period, trade payables at the end of the year, depreciation expense, expenses and pension benefits. And the result can improve the detection of earnings management explanation.

Prasnowo (2011) stated that the incidence of earnings management due to the implementation of accrual policy. The manager selects the policy to the practice of earnings management to maximize the availability and quality of a company's market. From the research results that companies registered in the Jakarta Islamic Index in the year 2004-2010 to earnings management to maximize profits for the company as opportunistic investors remain interested in the company.

Hansen (1999), which proves that there are structural changes in the variables a company that is not solely caused by the actions of managers in manipulating financial statements, but rather related to the purpose and nature of the estimation of discretionary accruals. Therefore, these variables results in an error in the measurement of earnings management that is based on the model of Jones and modified Jones models. Kothari et al. (2002), Jones also added that the model fails in estimating the discretionary portion of total accruals and probably will cause serious problems in drawing conclusions. Therefore the development of the model needs to be done with other models offered by Whelan and McNamara (2004) which is the development of models Jones (1991) and modified Jones (1994). The difference, with the developed model discretionary accruals are broken down into components of short-term discretionary accruals and long-term discretionary accruals. Therefore, the separation is expected to further elucidate the role of each component of discretionary accruals to measure earnings management.

Based on the development of hypotheses that have been previously disclosed, the researchers took the hypothesis "There is a difference in earnings management practices at publicly traded company incorporated in Indonesia with the approach JII in long term and short term accrual model"

#### **F. Population Data and Study Sample**

This research used in this study is used to analyze explanatory earnings management practices approach to short term and long term accruals in the model that incorporated the company went public in the index JII on the Indonesia Stock Exchange (BEI). This study uses secondary data for seven years on the companies listed in the index JII on the Indonesia Stock Exchange. The data in this Research are pooled the data where the data is to be a mixture of time series and cross-sectional.

Research is a study with data pooled over a period of 7 years and the population used in this Research the company went public in Indonesia which are listed in Indonesia Stock Exchange and incorporated in the JII. The sampling criteria in this study are as follows:

1. BEI's annual report, published December 31, 2004 to 2010.
2. The financial statements have a positive equity balance and have the elements needed in the calculation of long term accrual and short term accrual.
3. Company listed in JII from semester 1 and semester 2 and present the complete financial statements.

### G. Operational Definitions of Variables

The variables in this study is management earnings (earnings management), which consists of short term accrual model and long term models accrual model. Earnings management is defined as the manager's action to increase (decrease) current reported earnings of a business entity in which managers are responsible, without resulting in an increase (decrease) in long-term economic profitability of these units (Prasnowo, 2011).

Short-term accrual models are affecting the current assets account, thus reflecting the change in current assets. While the long term is the accrual of intangible assets, future tax benefits, and assessment of a company's net income.

### H. Research Methods

The test steps are as follows:

$$ACC_{i,t} = EARN_{i,t} - CFO_{i,t} \dots\dots\dots(1)$$

Where:

- ACC<sub>i, t</sub> = Total accrual of company i in year t
- EARN<sub>i, t</sub> = Profit before extraordinary items the company i in year t
- CFO<sub>i, t</sub> = Cash from operations firm i in year t

Short-term accruals according to Dechow (1994) and Whelan and McNamara, (2004) described as follows:

$$STACCI_t = \Delta AR_{i,t} + \Delta INV_{i,t} + \Delta OCA_{i,t} - \Delta AP_{i,t} - \Delta TXP_{i,t} - \Delta OCLI_{i,t} \dots\dots(2)$$

Where:

- STACCI<sub>t</sub> = Short Term Accruals of firm i in year t
- $\Delta AR_{i,t}$  = Accounts Receivable in year t minus Accounts Receivable in year t-1 firm i
- $\Delta INV_{i,t}$  = inventory in year t minus Inventory in year t-1 firm i
- $\Delta OCA_{i,t}$  = Other Current Assets minus Other Current Assets other years i
- $\Delta AP_{i,t}$  = Accounts Payable in year t minus Accounts Payable the year t-1 firm i
- $\Delta TXP_{i,t}$  = Taxes Payable in year t minus Taxes Payable in year t-1 firm i
- $\Delta OCLI_{i,t}$  = Other Current Liabilities in year t minus Other Current Liabilities in year t-1 firm i.

In accordance with the definition of total accruals, which is a combination of short-term and long-term accruals, then look for long-term accruals by subtracting total accruals with short-term accruals.

$$LTACCI_t = ACC_{i,t} - STACCI_t \dots\dots\dots(3)$$

Where:

- LTACCI<sub>t</sub> = Long-term accruals firm i in year t
- ACC<sub>i, t</sub> = Total Accruals firm i in year t
- STACCI<sub>t</sub> = Short-term accruals firm i in year t

The formula used in the short term discretionary accruals are as follows:

$$\text{STDAM}_{i,t} = \frac{\text{STACCI}_{i,t}}{\text{TA}_{i,t-1}} - \left\{ \beta_1 \left( \frac{1}{\text{Log TA}_{i,t-1}} \right) + \beta_2 \left( \frac{\Delta \text{REVI}_{i,t} - \Delta \text{RECI}_{i,t}}{\text{TA}_{i,t-1}} \right) + \beta_3 \left( \frac{\text{INCI}_{i,t}}{\text{TA}_{i,t-1}} \right) \right\} \quad (4)$$

Where:

- STDAM<sub>i,t</sub> = Short term discretionary accrual
- STACCI<sub>i,t</sub> = Short-Term Accruals firm i in year t
- TA<sub>i,t-1</sub> = Total assets of firm i in year t-1
- Log TA<sub>i,t-1</sub> = logarithm of total assets of firm i in year t-1
- ReviΔ<sub>t</sub> = corporate income i in year t minus the year t-1
- RECIΔ<sub>t</sub> = Accounts receivable firm i in year t minus the year t-1
- Inches<sub>t</sub> = Net income for the company i

After the calculation of short-term discretionary accruals and discretionary long term calculation accrual, where the formula long term discretionary accruals as follows:

$$\text{LTDAM}_{i,t} = \frac{\text{LTACCI}_{i,t}}{\text{TA}_{i,t-1}} - \left\{ \beta_1 \left( \frac{1}{\text{Log TA}_{i,t-1}} \right) + \beta_2 \left( \frac{\text{PPE}_{i,t}}{\text{TA}_{i,t-1}} \right) + \beta_3 \left( \frac{\text{INT}_{i,t}}{\text{TA}_{i,t-1}} \right) + \beta_4 \left( \frac{\text{INCI}_{i,t}}{\text{TA}_{i,t-1}} \right) \right\} \quad (5)$$

Where:

- LTDAM<sub>i,t</sub> = Long term discretionary accrual
- LTACCI<sub>i,t</sub> = Long term accrual firm i in year t
- TA<sub>i,t-1</sub> = Total assets of firm i in year t
- Log TA<sub>i,t-1</sub> = logarithm of total assets of firm i in year t-1
- IETC<sub>t</sub> = Assets and equipment firm i in year t
- Core<sub>t</sub> = firm i Intangible assets in year t
- Inches<sub>t</sub> = Net income for the company i in year t

Prior to the different test first tested the normality of the data. In this study the normality test data using Kolmogov-Smirnov test. Data has a normal distribution if it has a significance level greater than 0.05. If the normality test, the data are normally distributed then the methods used in conducting different test is Paired sample t-test, but if the data are not normally distributed the data used is the Wilcoxon Signed Ranks Test.

### I. Data Analysis

Data collected during the period 2004-2010 amounted to 153 companies, and data that meet the criteria for sampling only 130 companies. Then from the samples tested each year descriptive and descriptive testing during the period 2004-2010. The following descriptive table during the period 2004-2010

Table 1  
Descriptive analysis in year 2004-2010

	N	Minimum	Maximum	Sum	Mean	Std. Dev
<b>STDAM</b>	130	-1,22783	0,19475	-76,44019	-0,5880015	0,17395523
<b>LTDAM</b>	130	-7,48293	16,35658	24,28654	0,1868196	2,47078588

Based on the descriptive test, the results obtained an average value of short-term discretionary accruals -0.5880015 whereas for long term discretionary accruals has an average value of 0.1868196. From this explanation we can know that the short-term discretionary accruals to reduce earnings because it has a negative average value is -0.5880015 while the long term trend of increasing discretionary accruals through earnings management through increased earnings because it has a positive average value is 0,1868196.

After testing the descriptive, and then tested for normality with the Kolmogorov-Smirnov test. From the test results are obtained that STDAM and LTDAM not normally distributed because it has no more significance value of 0.05. Normality test table can be seen in the table below:

Table 2  
Normality Test Kolmogorov-Smirnov

	N	Value KS	Sign
STDAM	130	1,444	0,031
LTDAM	130	1,568	0,015

Because the data not normally distributed then to test the hypothesis using a different test, namely non-parametric Wilcoxon Signed Ranks Test. These tests Wilcoxon Signed Ranks:

Tabel 3  
*Wilcoxon Signed Ranks Test*

	Value Z	Sign
<b>LTDAM-STDAM</b>	-4,219	0,000

The test results are obtained and the results that STDAM LTDAM have a statistically significant difference. STDAM and LTDAM difference is if we combine it with a descriptive analysis can be analyzed that the Short-term discretionary accruals has an average value that is negative that means -0.5880015 companies to manage earnings tend to use a pattern of lower profits. Pattern of lower profits could be done with the inventory method for assessing the supplies. Inventory is one element in the calculation (HPP). If the company makes production in small amounts it will cause the fixed costs per unit increased, so as to raise the value of HPP and this contributes to lower operating earnings. In addition to using the inventory method can also use a backup method for the loss of accounts receivable and prepaid expenses which can be used for the pattern of lower profits, which if high reserve accounts receivable losses and high costs are paid upfront, it will cause penurukan profit, so it can be used by management to do with the earnings management pattern of lower profits.

While the statistical value of long term discretionary model has a positive average value is 0.1868196. So that means if the long term discretionary model has a positive value then there is a tendency to earningsmanagement company with a pattern of increasing earnings. One management strategy to raise profits is to choose the method of calculation of depreciation of fixed assets and determine the economic life of fixed assets. Where the depreciation method selected will produce a low value. Given the low value of the depreciation that would lead to higher profits. So that this can be used by management in the pattern of increasing earnings. Several methods of depreciation of fixed assets that can be used the method of the number of years, a straight line, declining balance and activity events.

The study was supported by research Whelan (2004) and Zayena and Jilani (2010). Whelan (2004) developed a model of Jones by the method of total discretionary accruals, short-term discretionary accruals, discretionary accruals and long term in relation to earnings management. These models investigate the differential impact of earnings management via long term and short term discretionary accrual model. From the test results obtained discretionary long term results that the model has a greater impact to the value relevance of earnings management and the book value of the short term discretionary model.

### **J. Conclusions**

Based on the analysis that has been said, researchers can conclude that the short term be able to use discretionary accruals to reduce earnings patterns in the practice of earnings management and long term discretionary accruals are considered able to increase earnings patterns in the practice of earnings management. Management strategies used to reduce income patterns were assessed by the methods of the accounts of current assets that could result in lower profits. While the methods that are considered able to increase earnings patterns in long term discretionary accrual is conducting an assessment of the accounts of the fixed assets that can generate higher earnings

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