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FA06
THE EFFECT OF REAL ACTIVITIES MANIPULATION TO ACCRUAL EARNINGS MANAGEMENT

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ABSTRACT

There are three ways to manage earnings. That is accruals, real, and shifting. The famous method to manage earnings is accruals and real. Usually, real activities manipulation is conducted on the going of period. The action will increase the loss for the firms at the end of period. To avoid the loss, managers will manage earnings through accruals (discretionary accruals). Therefore, the objective of this study is to investigate whether real activities manipulation positively influences accruals earnings management. To investigate the issue, this study collected data from Indonesian Stock Exchange. Samples of this study are the manufacturing companies. There are 195 firm year from 2003 to 2007. The results of this study support research hypothesis that real activities manipulation positively influence accruals earnings management. The higher real activities manipulation effects higher accruals earnings management at the end of period.

Keywords:
earnings management, real activities manipulation and accruals earnings management.

1. Introduction

Earnings management has become a common phenomenon occurring in various countries including Indonesia. One interesting phenomenon in Indonesia is a case about inflating Kimia Farma's profits made by the management of PT Kimia Farma Tbk in financial statement for fiscal year 2001. This markup is known in the year 2002. This condition was discovered by a public accountant Hans Tuanakotta and Mustofa in the first time. The management makes irregularities in the financial statements in the first half of 2001. The value of inflating profit is Rp32,7 billion. The profits should be Rp99,6 billion while reported earnings is Rp132,3 billion with net sales is Rp1,42 trillion.

This phenomenon indicates that manipulation of the financial statement is still possible to be conducted by managers. Following definition of Healy and Wahlen (1999) that earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers.

According to Hendriksen dan Bredan (1992), earnings are as a measurement of efficiency. The efficient operation of an enterprise affects both the current dividend stream and the use of the invested capital for providing a future dividend stream. Therefore, all equity holders are interested in the efficiency of management. The present equity holders can take the necessary steps to obtain a new management if the present management is not operating efficiently. They may also provide for incentives or bonuses to efficient managements. Prospective stockholders will attempt to evaluate the efficiency of management before investing or placing a value on the stock of the firm. A measurement of the efficiency of the firm provides a basis for decisions. Therefore, earnings will be managed by managers to inform the outside investor that the firm's performance is good.

Earnings are managed by managers because it is very important information for the internal and external users. Earnings management is not violate the existing regulations and generally accepted accounting principles. However, earnings management can be detrimental the information of financial statements. Earnings are managed by managers through accrual, real activities, and shifting of core expense. Usually, real activities manipulation is conducted on going period. Roychowdhury (2006) defines real activities manipulation as differences in the activities of normal operational. Manipulation of real activities can be most extensively through price discounts and reduce discretionary expenses to meet earnings targets.

According to Davidson *et al*. (1987), earnings management is a process of taking deliberate steps within the constraints of generally accepted accounting principles desired to bring about a level of reported earnings. Based on this definition, Sugiri (1999) concluded that management can play a role in accrual components. Earnings management in this narrow sense is the behavior of management to play with the discretionary accrual component to determine high or low the earnings. Earnings are potentially managed because financial accounting standards still provide alternatives method.

Accruals are a tool to manage earnings at the end of the period. While, real activities manipulation is a tool to manage earnings on a going period. Accruals may be chosen to avoid loss affected by real activities. Therefore, this study investigates whether influence accrual manipulation of real activities (accounting) earnings management.

The rest of this paper is organized as follow section 2 presents theoretical and hypothesis development. Section 3 discusses research methods. Section 4 reports the empirical results and Section 5 concludes the result of this research.

2. Hypothesis Development

2. 1. Positive Accounting Theory and Earnings Management

Positive accounting theory is based on agency theory used to explain and predict accounting choices by managers. Opportunities for the contracting parties can influence accounting choices because accounting numbers is a control mechanism in the agency relationship. Watts and Zimmerman (1986) implied agency theory to explain and predict the behavior of management relating to the selection of accounting procedures. Watts and Zimmerman (1986) explained three hypotheses as bonus plan, debt covenant, and political cost.

a. Bonus plan hypothesis. Cateris paribus, managers of firms with the bonus plans are more likely to choose accounting procedures that shift reported earnings from future periods to current period.

The parameters of bonus plans are set such that bonuses are awarded in most years. If a bonus can be awarded, the maximum amount is a positive linier function of reported earnings. This led that manager's compensation under a bonus plan increase as reported earnings increase.

b. Debt/equity hypothesis. Cateris paribus, the larger a firm's debt/equity ratio, the most likely the firm's manager is to select accounting procedures that shift reported earnings from future periods to the current period.

The debt/equity hypothesis can be derived from the hypothesis based on the debt covenants that the closer a firm is to a particular restrictive accounting based covenant the more likely the manager is to use procedures that increase current earnings.

c. Size hypothesis. Ceteris paribus, the larger the firm, the more likely the manager is to choose accounting procedures that defer reported earnings from current to future periods.

Accounting researcher has used firm size to proxy for a firm's political sensitivity and thus the incentive of managers to choose earnings reducing accounting procedures. The hypothesis is based on the assumption that large firms are more politically sensitive and have relatively larger wealth transfers imposed on them than smaller firms.

2. 2. Earnings Management by Discretionary Accruals

Accruals earnings management is tool to manage earnings through the choice of accounting methods adopted by the generally accepted accounting principles. Motivation of managers to manage earnings (Healy and Wahlen, 1999; and Scott, 2006) provided empirically by several researchers. Motivation bonuses provided empirically by Healy (1985), Gaver *et al*. (1995), Holthausen *et al*. (1995), and Guidry *et al*. (1999). Other contractual motivation is provided by Sweeney (1994), DeFond and Jiambalvo (1994). Political motivation is provided by Jones (1991), Cahan (1992), Na'im and Hartono (1996), Key (1997), and Navissi (1999). Dopuch and Pincus (1988) provided the tax motivations. CEO turnover is provided empirically by DeFond and Park (1997). Capital market motivations is provided empirical by Perry and Williams (1994), Teoh et al. (1998a), Teoh et al. (1998b), Rangan (1998), and Erickson and Wang (1999). In these studies, the accruals method is selected by managers to manage earnings.

2. 3. Earnings Management by Real Activities Manipulation

Real activities manipulation is a tool to manage earnings through the choice to change the time or the structure of an operating, investing and/or financial transaction to affect output accounting system. Managers also have opportunity to manage earnings by manipulation of real activities. Manipulation of real activities affects the cash flow and accruals such as decrease the amount of research and development costs (Baber *et al*., 1991; Dechow and Sloan, 1991; Bartov, 1993; Bushee, 1998; Bens *et al*., 2002, 2003). Healy and Wahlen (1999), Fudenberg and Tirole (1995), and Dechow and Skinner (2000) focused on accelerating sales, delivering schedule, delaying research and development activities, and restricting on spending as earnings management methods. They are available for managers to manipulate the activities of real.

Roychowdhury (2006) defines real activities manipulation as differences in normal activities. Manipulation of real activities can be most extensively through price discounts and reduce discretionary expenses to meet earnings targets. The survey results of Bruns and Merchant (1990) and Graham *et al*. (2005) indicates that financial executives are more interested in manipulating earnings through real activities than accruals to meet earnings targets. This is happened; first, the manipulation of accruals tends to attract an auditor or a regulator to supervise than a real decision. Second, accrual manipulation causes a risk than the manipulation of real activities.

Manipulation of real activities can reduce the value of the company, because this activities have a negative effect on cash flow on the next period. Aggressive price discounts increase sales volumes caused the customers expect a discount in future periods. This led to sales margins would come to be lower. Volume increased causing excessive production (overproduction). The result is that there is excess supply that must be sold in subsequent periods. This causes the greater inventory holding cost.

Real activities manipulation and accruals earnings management have different characteristics. Accruals earnings management has not consequence on the cash flows directly. While, real activities manipulation has consequence on high cost of cash flow. However, it does not restrict managers to use continually real activities manipulation to manage earnings. According to Roychowdury (2006), managers do not like the use only accrual earnings management to manage earnings. Auditors easy know the accruals. Therefore, the accruals are more risk if managers use only accruals to manage earnings. Earnings must be managed to meet level of desired earnings. This condition encourages managers to manage earnings thought real and accrual. They are) are complementary to manage earnings.

Generally, managers determine the level of accruals earnings management after determining the level of real activities manipulation (Matsuura, 2008). Real activities manipulation is conducted during the period. While, accruals earnings management is conducted at the end of the period. The characteristic encourages managers to manage earnings through real activities manipulation and accruals earnings management complementary to achieve threshold earnings. Real and accruals are also conducted to make stabile earnings. For example, PT X has a negative income (income actually smaller than expected earnings). Managers will increase earnings to meet expected earnings. The strategy is conducted to increase sales by providing limited discount. The discount is one of the real activities manipulation techniques. Discounts will encourage consumers to buy firm's products. Total sales will increase.

However, PT X can not continue to give discounts. After achievement to expected level of earnings, the discounted does not continue. The discounts will cause PT X's loss. In addition, the granting of discounts time to time in one year can also reduce consumer's image. The consumers will consider the bad quality of the products. When the discount is stopped, the firm's profit will decline. Manager PT X would try to profit levels have been achieved can be maintained. Therefore, at the end of the year the managers will use the using other methods to increase profit. That is accruals earnings management. Managers reduce reserve for bad debt to maintain level earnings consistently. In the end, sum of earnings is the same as sum of expected earnings.

Based on the example, managers use real and accruals complementary. Managers use real and then managers use accrual to manage earnings. Real and accruals are used sequentially. Real activities manipulation encourages managers to conduct accruals earnings management. This study expects that real activities manipulation positively influence accrual earnings management. Therefore, this study hypothesizes as follow.

H_1: Real activities manipulation positively influences accruals earnings management.

3. Research Method

3. 1. Data

The 49 samples are collected by purposive sampling. There are criterions as follows.

1. The manufacturing companies are listed at Indonesian Stock Exchange from January 1, 2003 to December 31, 2007. They have to publish financial reporting from 2003 until 2007.
2. The companies have data completely on financial statement.
3. The companies have 12 months accounting period.

Type of data in this study is secondary data. Data are collected from database the Indonesia Stock Exchange (IDX) from 2003-2007 and Indonesian Capital Market Directory (ICMD).

3. 2. Definition and Measurement Variables

Real activities manipulation is indicated by discretional cash flow operating activities. An example of operating cash flow is interest and tax payment receipts. Discretional cash flow operating activities are carried out to catch the real activities of managers to manage earnings. The researchers calculated that real is discretional cash flow from operating activities as a residual model Roychowdhury (2006). The formula is as follows.

$$CFO_{it} = a_0 + a_1 SALE_{it} + a_2 \Delta\, SALE_{it} + \varepsilon_{it}$$

Where:

CFO: Cash flows from operating activities, divided by total assets beginning of period
SALE: sales that year, divided by total assets beginning of period
Δ SALE: changes in annual sales, divided by total assets beginning of period

ε: regression residual (proxy real activities manipulation)

Accruals earnings management is indicated by discretional accruals. Discretional accruals is calculated using Jones' model (1991). This model is widely used in these studies because the estimation of discretional accounting accruals are also entering the amount of nondiscretional accruals. This study measures the discretional accruals (proxy accruals earnings management) as a residual model of Jones. The formula is as follow.

$$TACC_{it} = b_0 + b_1 PPE_{it} + b_2 \Delta SALE_{it} + \zeta_{it}$$

Where:

TACC: total accruals, it is different between cash flows from operating activities with net profit after tax, divided by total assets at the beginning of period
PPE: *gross property, plant, equipment* at the beginning period and divide total asset on the beginning period.
Δ SALE: changes in annual sales, divided by total assets beginning of period
ζ: regression residual (proxy for accruals earnings management)

This research uses three control variables in this study, namely, leverage, size and, and firm's growth. Control variables are used to control the causal relationship model in order to get a more complete empirical model (Jogiyanto, 2010). The argument of this study use three control variables is related to positive accounting theory. The theory suggests three motivations to manage earnings. That is debt covenant hypothesis (leverage), political cost hypothesis (size), and bonus plan hypothesis (firm's growth).

1. Debt to equity ratio is the ratio of debt to equity at the end of the year.
2. Firm's size is the natural logarithm of total assets at end of period.
3. Firm's growth is the change in sales.

Generally, real activities manipulation is occurred before accruals earnings management. Therefore, this study determines unexpected income before accruals earnings management PreAEMUI (Matsuura, 2008). PreAEMUI is unexpected income before accruals earnings management.

$$Pre\ AEMUI_{it} = UI_{it} - AEM_{it}$$

Next, to test the hypothesis, an empirical model is as follows:

$$\boldsymbol{AEM_{it} = \delta_0 + \delta_1 PreAEMUI_{it} + \delta_2 RAM_{it} + \delta_3 LEV_{it} + \delta_4 SZ_{it} + \delta_5 GROWTH_{it} + \psi_{it}}$$

Where,

AEM: Accruals earnings management.
PreAEMUI: unexpected income before accruals earnings management.
RAM: Real activities manipulation.
LEV: Leverage.
SZ: Size.
GROWTH: Firm's growth.

4. Results

Table 1. Descriptive Statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
AEM	196	-.31	.33	.0000	.08670
PreAEMUI	196	-5.58	3.86	.0886	.93174
PreEMUI	196	-5.50	3.81	.0886	.91531
REM	196	-.38	.33	.0000	.10607
DE	196	.05	10.93	1.0765	1.08627
SIZE	196	24.05	31.78	27.5615	1.54517
GROWTH	196	-1.00	1.47	.1693	.23451
Valid N (listwise)	196				

The results is real activities manipulation positively influence accruals earnings management. Therefore, H1 is supported.

Table 2. the Results of Analysis

Model 1: $AEMit = \delta 0 + \delta 1\ PreAEMUIit + \delta 2 RAMit + \delta 3\ LEVit + \delta 4\ SZit + \delta 5 GROWTHit + \psi it$

Variabel	Koefisien	t-statistik	Nilai-p
Constant	-.079	-.719	.473
PreAEMUI	-.015	-2.239	**.026****
RAM	.223	3.950	**.000*****
LEV	-.009	-1.547	.124
SZ	.003	.759	.449
GROWTH	.037	1.417	.158
Adjusted R^2	.102		
F-statistik	5.424		
Probabilitas F-statistik	.0000		
N	195		

***, **, *= statistic significan at alpha 1%, 5%, and 10%.

The results support Matsuura (2008). Real activities manipulation occurs when managers change the time or the structure of operating, investing, and financial transactions to affect output accounting system. The real is chosen to manage earnings throughout the running period. If managers conduct real to manage earnings at the end of the period, it is very risky. Because has consequences on cash flow. Meanwhile, accruals earnings management is chosen to manage earnings through selecting of accounting methods accepted GAAP. Changes in accounting method generally are conducted at the end of the period. Therefore, the manager determines the level of accrual earnings management after real activities manipulation.

5. Conclusion

Based on the results real activities manipulation positively influences accruals earnings management. It suggests that the increasing of real activities manipulation affect the increasing accruals earnings management. Limitation of this research is that real activities manipulation is only measured by cash flow from operating activities. Subsequent researcher can use other proxies of real activities manipulation.

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