THE IMPACT OF USING REAL ACTIVITIES MANIPULATION THROUGH CASH FLOW FROM OPERATION ON FUTURE PERFORMANCE
(Empirical study of Manufacturing Companies Listed on the Indonesian Stock Exchange)

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Abstract

This study aim to test the impact of using real activities manipulation through cash flow from operation for future performance. Real activities manipulation is measured by abnormal cash flow from operation (ABN_CFO) and this model is developed by Roychowdhury (2006). Samples in this study are manufacturing companies listed in Indonesia Stock Exchange from 2002-2012 which meets the sample criteria. There were 77 manufacturing companies listed in Indonesia Stock Exchange taken as the population and companies criteria as the sample in this study.

This study using regression analysis to test the hypothesis. The result of this research shows that the hypothesis is accepted. Based on the hypothesis test found that real activities manipulation through cash flow from operation negatively impact on future performance.

Key words : real activities manipulation, future performance

A. Research Background

A financial statement is the result of the accounting process that gives information about the company's performance. Financial statement is prepared and presented by management to the parties that concerned to the financial statements. The parties that concerned to the financial statement are internal users (agent) and external user (principle). The managers as the agent and the owner as the principle have their own interest. As an agent, a manager has responsible for optimizing the benefit of the owners (principle), but on the other hand the manager also has his or her own interest in maximizing their welfare. The manager has direct contact with the entity or company and know the significant events that happened in the company, based on this condition the manager know well the internal information of the company and also company's prospect in the future than the owner (principal).

Imbalance information between the management as information providers and the shareholder as the user is called information asymmetry. According to Scott (2006) there are two kinds of information asymmetry those are adverse selection and moral hazard. Adverse selection, unbalance of information between the manager and the user, so would have an effect to the shareholder decision and the information does not give to the stakeholder. Moral hazard, not all activities done by the managers in the companies known by the owner so the managers can do their act outside the knowledge of shareholders. Asymmetry between the management (agent) with the owner (principal) provides the opportunity for the managers to act opportunistically, which personal gain. The way that can be done by the manager is to do deviate action in the process of preparing financial statements.

The objective of the financial statement is to provide financial information demonstrate achievements of the companies to generate earnings. Earnings are important measurement for the company to evaluate management performance. Information contained in earnings has an important role in assessing the performance of the company. Earnings quality is earnings that reflect relevance, reliability, and comparability but to obtain the earnings quality, managers is often conducted earnings management in financial statements. One way to conduct earnings management is by increasing the earnings. This is done by the managers in order to mislead the shareholder and the user of the financial statements regarding the company's performance. Earnings management can be described as a management behavior in selecting particular accounting policy or through the implementation of specific activities, which aim to influence earnings to achieve a specific goal (Scott, 2009).

Earnings management can be classified into three categories which consist of accrual management, classification shifting, and real activities management. Usually a manager is more likely to use real activities manipulation rather than earnings management through accruals (Graham et al. 2005), Gunny (2005), Roychowdhury (2006), Zang (2006), (Cohen et al. 2008), as well as Cohen and Zarowon (2008) found that the managers had to sift from accrual management to the real activities management after period of Sarbanes-Oxley Act

(SOX). There are two factors that cause chosen earnings management through real activities manipulation. First, accrual manipulation more often becomes the center of observation or inspection by the auditors and the regulators. Second, only focuses attention on accrual manipulation is risky action because the company may have limited flexibility to manage accrual (Graham et al. 2005).

Real activities manipulation is earnings management done by the managers which deviate from normal business practices aimed of achieving certain earnings. Managers are motivated to do real activities manipulation to attract investors to invest their fund to the company and these things will be a positive signal for the company. The purpose of real activities manipulation is done to avoid reporting losses by using the factors that affect the reported earnings that accounts are entered into the income statement (Oktorina and Hutagaol, 2003).

Roychowdury (2003) found that the companies that tend to real activities manipulation will show lower operating cash flow. Roychowdhury (2006) states that real activities manipulation has negative impact for future company's performance. Real activities manipulation can reduce firm value because actions taken in the current period to increase earnings can have a negative effect on cash flows in future periods. For example, aggressive price discounts to increase sales volumes and meet some short-term earnings target can lead customers to expect such discounts in future periods as well. This can imply lower margins on future sales. Through the description above, this paper will test whether the real activities manipulation has negative affect on the future companies performance or not. This paper will give additional evidence to support the research of Roychowdury (2006).

B. Research Question
Formulation of the problem discussed in this study isdoes real activities manipulation negatively affect future performance?

C. Research Objective
The purpose of this study is to document how real activities manipulation through cash flow from operation has negative impact on the future performance.

D. THEORITICAL FRAMEWORK AND HYPHOTHESIS DEVELOPMENT

1. Agency Theory
Perspective of agency theory is the basis used to understand the issue of corporate governance and earning management. Agency theory defines as relation between the principal (shareholder) and the agent (management). Jensen and Meckling (1967) defines that the agency relationship as a contract under which one or more person (the principals) engage another (the agent) to perform some service on their behalf which involve delegating some decision making authority to the agent. Furthermore, if both parties have same goals to maximize the value of the companies, it is believe that the agent will act in a manner consistent with the interest of the principals.

Scott (2006) states that the companies have many contracts for instance employment contract between company with the managers and loan contract between the company and its creditors. Here, the employment contract means that between agent and principal want to maximize their own utility with the information held. Asymmetry arises because agent as the manager has full information compare to the principal as the owner. Furthermore, a more information about company held by the agent causes the manager to do exactly the actions in accordance with their interests to maximize their welfare.

2. **Earnings Management**

Earnings management is an action taken by the manager to raise or lower the reported earnings and the action will not provide economic benefit for the company, so in long term it will harm the company. Scott (1997) defines earnings management as given provide an opportunity for the manager to choose the accounting policies, for instance GAAP. It is natural to expect that they will choose policies to maximize their own utility or the value of the firm. The statement define by Scott (1997), earnings management can be policy that some corporation can apply from accounting standards and can minimize their utility by using flexibility that stated in accounting standard. Earnings management can be classified into two criteria those are opportunistic earnings management and efficient earnings management. Opportunistic earnings management, the situation occurs if the management wants to maximize their utility for opportunistic purposes. Efficient earnings management, the situation occur if the management want to prevent unconditional factor in business environment especially maintain the rate of income for parties that associated in contract.

3. **Earnings Management Through Real Activities Management**

Real activities manipulation is the practice that is separate from the normal operating practices that is motivated by the manager in order to mislead the shareholder in a certain belief the purpose of the financial statements have been met in the normal operation.Real activities manipulation method such as a price discount, overproduction, and reduction of discretionary expenditure allow optimal action in particular economic condition. The manager has an incentive to do real activities manipulation along the year to achieve certain target. The manager is doing real activities manipulation to avoid losses in the year of financial statement. In specific, there are some evidence support that discount price with increasing price temporally in the production to report lower cost of goods sold and also reduction of discretionary expenditures to increase margins reported. In detecting earnings management through real activities manipulation done by the company, Roychowdhury (2006) uses model focus on three manipulation method:

1. Sales Manipulation

Sale manipulation is the way to increase sales on a temporary basis in a given period by offering discounted prices to excess product or provide a more lenient credit terms. These strategies can increase sales volume and current period earnings, with the assumption of positive margin. Giving price discounts and more lenient credit terms will reduce the current period cash flow.

2. Overproduction

The manager of the company can produce more that is required by the assumption that the higher level of production can lead lower fixed cost per unit. This strategy can reduce cost of goods sold and increase operating income.

3. Discretionary Expense

The company can reduce discretionary expenditures such as research and development expenses, advertising, and selling, general and administrative expense, especially in a period in which the expenditure is indirectly cause revenues and profits. This strategy can improve profitability and cash flow period, but it risky for the company that is lowering the future cash flow.

4. The Impact of Real Activities Manipulation for Future Performance

The real activities manipulation is performed to avoid reporting losses by using the factors that affect the reported earnings (Oktorina and Hutagaol, 2008). The companies have certain goals to be achieved in an effort to meet the interests of its members. Success in achieving the company's goals is an achievement of management. Performance assessment usually used by internal and external parties in decision making. According to Rochowdhury (2003), increasing earnings through real activities manipulation use three techniques those are sales manipulation, overproduction, and discretionary expense. The financial report as a benchmark to measure whether the company has a good performance or not. Continuous earnings growth increasing from year to year gives a positive signal about the future prospects of the company because profit is a measure of the performance of the company   The investor usually want to invest their fund to the company if the companies have a good prospect not only in the present but also in the future.

5. Hypothesis Development

Earnings management is one factor that can undermine the credibility of the financial statement. There are several ways that made by management in conducting earnings management, through accrual earnings management and real activities manipulation. Potentially real earnings management is motivated by the pressure or boost managers to generate short-term profits and low management focus on Long-term plans. Motivation to generate short-term profits will lead the management to act opportunistically, so management will focus excessively on the values or activities

that affect earnings. Real earnings management undertaken by the manager to show sort term performance of the company that is good, but it potentially will decrease the value of the company itself.

Real activities manipulation can reduce firm value because actions taken in thecurrent period to increase earnings can have a negative effect on cash flows in future periods. For example, aggressive price discounts to increase sales volumes and meet some short-term earnings target can lead customers to expect such discounts in future periods as well and this can imply lower margins on future sales (Rochowdhury, 2006). The purpose of real activities manipulation to avoid reporting earnings losses by using factors that impact to the earnings which is reported to the accounts are entered to the income statements.

Real activities manipulation through cash flow form operation result in increased profit, profit is a measure of financial performance. Continuous earnings growth from year to year will give positive signal about company's prospect, higher earnings generated by company indicated the better the performance of the company. Therefore, if managers do real earnings management current year the company's earnings will increase and improve company's performance, but in the next year the performance of the company will decrease.

H1: Real activities manipulation negatively affect future performance

E. Research Methodology

1. Population and Sample

The population in this research is the companies listed in Indonesia Stock Exchange is taken from 2003-2012 were selected by several criteria. The writer in obtaining the sample use purposive sampling method. Samples were selected based on the following criteria:

1. Manufacturing companies listed in the Indonesia Stock Exchange and publish their financial statements consistently.
2. Manufacturing companies that used Indonesia currency (Rp) on their financial statements.
3. Manufacturing company has complete financial statements.

Based on the criteria in the sample selection, the sample selection of companies used in the study during 2003-2013 are 770.

2. Data Collection Method

The data in this research is secondary data of manufacturing companies listed in Indonesia Stock Exchange in year 2003-2012. Source of data come from:

1. Gallery Bursa Universitas Kristen Duta Wacana
2. www.idx.co.id for completing data

3. Research Variable

There are three variables in this research consist of independent variable, dependent variable and, control variable. In this research real activities manipulation as independent variable, and future performance as dependent variable, and firm size and growth opportunities as control variable.

Independent variable is one that influences the dependent variable in either positive or negative way. Independent variable in this research is real activities manipulation. The proxy for real activities manipulation is taken form (Roychowdhury, 2006) is abnormal CFO.

$$CFO_t/A_{t-1} = \alpha_0 + \alpha_1(1/A_{t-1}) + \beta_1(S_t/A_{t-1}) + \beta_2(\Delta S_t/A_{t-1}) + \epsilon_t$$

Where,
CFO_t: Cash flow from operation i of year t
A_{t-1}: Total assets firm i of year t-1
S_t : Total sales of firm i of year t-1
ΔSt: Sales in year t minus sales in the year t-1
a0 : constants.
et : error term year t

This research will be used is abnormal cash flow from operation. (ABN_CFO) derived from the difference between the values of actual cash flow from operation activities scaled by total assets one year before testing minus normal cash flow from operation. The company with abnormal CFO less than 0 means that the company tend to do real activities manipulation through cash flow from operation, while the company with abnormal CFO above 0 means that the company tend to not do real activities manipulation through real activities manipulation.

The dependent variable in this research is future performance. Future performance has relationship with real activities manipulation. Future performance can be used as a benchmark for the company. Measuring future performance of the company using return on assets (ROA_{t+1}). Return on assets (ROA_{t+1}) is calculated by:

$$ROA_{i,t+1} =$$

Control variable is used to complement or control the causal relationship of variable with independent variable. The control variable complete and results in a better empirical models. Control variable is not a major variable that will be examined and tested but try to find another variable that have influence. The control variable is used to control the influence of the independent variable on the dependent variable and reduce the level of error or confounding variables. Control variable in this study is Size and Market to Book.

The size of the company can be seen from the amount of assets held by the company. The greater the company's total assets, the greater the size of the company. Siregar and Utama (2005) stated that the greater size of company, usually the available information for the investor in decision-making related to investment in the company's stock greater. The ability of company to generate profits will be even greater and the quality earnings to be very important for the company (Sihite, 2012 in Setiawan, 2013). If the value of size becomes higher, it means that ability of the company to manage assets will greater and more capital cultivated by outsiders to the enterprise. Size is measured by using total assets, as follows:

$$SIZE_{i,t} = ln\ (Total\ Asset)_{i,t}$$

Market to Book (MTB) as a comparison or ratio between market value with the book value. The companies with higher market to book value, it means that the companies not do earnings management. Otherwise, the companies with lower market to book value, it means that the companies do earnings management. This is due to the high value of stock market showed a good performance of the company (Setiawan, 2013). Market to book (MTB) is calculated by:

$$MTB_{i,t} =$$

Multiple linear regression analysis technique is used to obtain a comprehensive picture of the relationship between the variables and the other variables. Equation regression models in this study are as follows:

$$ROA_{t+1} = \alpha + \beta_1 ABN\_CFO_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 MTB_{i,t} + \varepsilon_t$$

Where,

ROA_{t+1}: Income before extraordinary items divided by total assets
ABN_CFO_t : Abnormal Cash flow from operation firm i in period t
$SIZE_t$: The natural logarithm of total assets
MTB_t: The market value of equity divided by the book value of equity

F. Data Analysis and Discussion

Based on the descriptive statistical result obtained the minimum value of ROA t+1 is -5.68 and the maximum value of 1.07. ROA t+1 obtained an average (mean) of 0.0538 with a standard deviation of 0.25985. Mean value ROA t+1 of 0.0538 shows that in the next year the companies can generate earnings of 5.38% from the assets held.The minimum value of abnormal CFO of -1.30 and the maximum value of 0.75, the mean value of 0.0000 with standard deviation of abnormal CFO of 0.14196. The value of CFO 0.0000 indicates that the companies are selected as sample tend to not do real activities manipulation .The analysis result found that minimum number of size is 22.61 while the maximum is 27.3754 and the standard deviation of size is 1.55290. The market to book ratio, the minimum value is 22.28 and the maximum value is 286.60. The average (mean) of the market to book ratio is 2.2854 with standard deviation is 11.18544. Mean value of

market to book ratio is 2.2854 indicates that market value of shares higher than the book value of share.

The normality test in this research used One-Sample Kolmogorov Smirnov-Z. sample in this research 77 manufacturing companies in a year, so the total company in ten years are to be used to test the hypothesis are 770. The data is said to be normally distributed if the probability value (p) One-Sample Kolmogorov Smirnov-Z test > 0.05. here, found that the data is not normally distributed. The requirement for a good regression is the data should normally distribute. For making the data normally distributed than we do trimming. Trimming is done by eliminating out liner data. Preliminary data is as many as 770 of data. The amount of data trimming is 30 data. And the final data in this research is 740 data. that the probability of confounding variables or residual is 0.056. The probability value is more than 0.05 indicates that the confounding variable or residual are normally distributed.

In calculating the multicollinearity test found the value of tolerance and VIF value of Abnormal CFO, SIZE, and MTB. A regression model is said to be free multicollinearity if the value of VIF (Variance Inflation Factor) less than 10, and tolerance more than 0.1. Abnormal CFO the tolerance of 0.960 and VIF of 1.042. the value of tolerance of SIZE 0.965 and VIF 1.037. The tolerance value of MTB of 0.934 and VIF 1.071. Based on the multicollinearity test can be seen that the value of VIF (VarianceInfluence Factor) value of variable ABN_CFO, SIZE, and MTB is less than 10, and tolerance value of variable ABN_CFO, SIZE, MTB is more than 0.1. VIF (Variance Influance Factor) value less than 10 and tolerance more than 0.1, so we can conclude that there was no multicollinearity.

Heteroscedasticity Test is used to test whether the regressionmodel residual variance inequality occurred from one observation to other observation. A good regression model, heteroscedasticity should not be happened. Heteroscedasticity test in this study using a test Gletsjer.Heteroscedasticity test result which have shown than the probability value of variable ABN_CFO of 0.078 , SIZE of 0.897, and MTB of 0.502 is more than 0.05, means that there is no heteroscedasticity.

Autocorrelation test is used to identify any linear correlation between observation errors at one period to another. Any correlation between error will biased the regression result. This autocorrelation test is done by using Durbin-Waston (DW) test.Principles of autocorrelation test is that a regression model is said to be free if Durbin Watson (DW) value is between du until 4-dU. Du value of research is 1.799 and 4-du is 2.201. From autocorrelation test, Durbin Watson value is 1.904. The value of Durbin Watson (DW) located between up to 4-du shows that there is no autocorrelation.

Based on the results of multiple regression analysis, the regression equations of this research are:

$$ROA_{t+1} = -0.242 + 0.313 ABN\_CFO + 0.011\ SIZE + 0.003\ MTB$$

Based on the regression equation which has been derived from multiple regression tests, can be interpreted as follows:

1. The value of constant is -0.242, it means if no independent variable such as ABN_CFO, SIZE, and MTB so (ROA $_{t+1}$) it would be -0.242.
2. The value of ABN_CFO coefficient regression is 0.313. It means, when ABN_CFO up one-unit ROA$_{t+1}$will increase 0.313.
3. The coefficient value of size is 0.011. It means, when the size up one-unit, the future performance (ROA$_{t+1}$) will increase 0.011.
4. The coefficient value of growth opportunities (MTB) is 0.003. It means, when growth opportunities (MTB) up one-unit, future performance (ROA$_{t+1}$) will increase by 0.003.

Based on the regression analysis that has been done, ABN_CFO has significant level of 0.000 which is smaller than 0.05 and positive β_1 of 0.313. When ABN_CFO increase it means, the company do not do real activities manipulation then the future performance (ROA $_{t+1}$) of the company increase. Furthermore, ABN_CFO decrease it means, the company do real activities manipulation then future performance (ROA $_{t+1}$) of the company decrease. Probability value < 0.01 indicates that the real activities manipulation effect on future performance. The value of $\beta_1 > 0$ shows that when the value of abnormal CFO decreased it means that the future performance will decrease. The decrease in the value of abnormal CFO indicates that the company tends to do real activities manipulation. The company with abnormal CFO less than 0 means that the company tend to do real activities manipulation through cash flow from operation, while the company with abnormal CFO above 0 means that the company tend to not do real activities manipulation through real activities manipulation. The researcher may infer that real activities manipulation negatively effect on future performance is accepted.

Based on the results of multiple regression analysis (without controlling variables firm size and growth opportunities) obtained adjusted R square value of 0.240. Adjusted R square with control variable of 0.299 or 29.9%, it means 29.9% the changes of Return on Assets (ROA $_{t+1}$) is explained by three independent variable which is ABN_CFO, SIZE, and MTB and the rest is 70.1% is explained by other variable that is not included in this research. Significant value of F-value is 0.000. This value will be compared with the significant value (1%). The significant value of F value (0.000) smaller than the significant value used in this research (1%) so it can concluded that ABN_CFO, SIZE, and MTB with the same effect on Return on Asset (ROA $_{t+1}$).

Oktorina and Hutagaol (2008) found that the company with real activities manipulation through cash flow from operation has higher market performance than firm that allegedly not do real activities manipulation through cash flow from operation.

The result of this study consistent with Roychowdhury (2006) Real activities manipulation can reduce firm value because actions taken in the current period to increase earnings can have a negative effect on cash flows in future periods. For example, aggressive price discounts to increase sales volumes and meet some short-term earnings target can lead customers to expect such discounts in future periods as well and this can imply lower margins on future sales.

G. Conclusion and Suggestion

This study is to give empirical evidence about the impact of real activities manipulation for future performance in Indonesian listed manufacturing companies from year 2003-2012. This study uses secondary data and after selecting the data with certain criteria found that there are 770 manufacturing companies listed in Indonesia Stock Exchange from year 2002-2012 to be researched. The classical assumption is used in this study such normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. Based on the data analysis has been done and found the result that real activities negatively affect on future performance. This is supported by the research of Rochowdhury (2006) stated that This is due to management actions taken to improve the current year earnings will have a negative affect on performance of the company in the next period. The company that do real activities manipulation shows that the value of abnormal CFO above 0. The lower value of abnormal CFO, higher the company does real activities manipulation. The company with real activities manipulation in the current year will show a good performance, but in the next year the performance of the company will go down.

This research has limitation, the limitation from this research are the research sample only done for the manufacturing companies that listed in Indonesian Stock Exchange (IDX) years 2002-2012.This research only observes real activities manipulation variable, firm size and growth opportunities as the factor that affect future performance.

The suggestion for the next researcher the next researcher should add research sample and period of observation the next researcher should add variable that has an impact through future performance.

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