Case study

FACTORS AFFECTING THE EARNING RESPONSE COEFFICIENT WITH REAL ACTIVITIES EARNING MANAGEMENT AS MODERATOR: EVIDENCE FROM INDONESIA STOCK EXCHANGE

Abstract: This study aims to explain the phenomenon of the most active companies traded shares in Indonesian stock exchange. This research is motivated to analyze the response of investors to take a decision after presenting the company's financial statements. This study uses panel data consisting of 20 companies selected by purposive sampling method, using a regression model and data processing via SPSS 24. The results of this study found that the variable leverage and capital expenditure variables significantly influence the response of investors to execute the company's stock, thereby affecting the stock return. The level of leverage and significant positive effect on the response of investors, particularly due to the use of debt to investment would increase earnings per share or at a certain amount of equity can boost earnings per share acquisition. Capital expenditure and significant negative effect on the response of investors for investor tend to speculate on short-term period, which means that companies that invest in the early stages will have difficulties liquidity and rate of return will decline, so investors will shift their investment.

***Keywords** : Financial Management, Earning Management, and Strategic Management.*

Introduction

The study aims to examine the market response phenomenon characterized by changes in stock prices in the stock market after the company's financial report published or published. Some companies will increase the price of its shares and some will decrease, depending on the factors addressed by both negative investor and positively to the decision to buy shares of the company or its release the company's stock. This research was motivated to examine more detailed factors that become the attention of investors on the financial statements that have been published thus affecting the assessment of a particular company's stock.

Several factors affect the market response on reported profit corporation known as earning response coefficient (ERC), which depends on the quality of such profits are assessed based on the components that make up the structure of costs and corporate earnings as well as elements of the financial position of the relevant issues related to quality of reported earnings , ERC as a measure of stock return is a result of market response on earnings figures reported by

companies in the capital market. It shows also that the ERC is the market reaction on reported earnings of companies, while low level of response depends on the quality of financial reporting information relating to the presentation of such profits, or reflected on the information good/bad news related to such profits. The ERC will be reflected on the magnitude of the regression coefficients abnormal stock returns and unexpected earnings.

This research was motivated to study the effect of leverage and capital expenditure of the ERC's mainly because the two variables have an important role in determining the level of profitability of the company. Leverage or capital structure shows the contribution of debt in investment means that the greater portion of the use of debt compared to equity, the company efficient in the use of investment funds, and increasingly provide opportunities increase in earnings per share that attract potential investors. While capital expenditure describes the company's prospects obtain a higher return rate, mainly due to the progression of business and improved levels of productivity or increase of operational efficiency can be achieved through capital expenditure. Based on this view, this research is to analyze the level of market response to changes in the level of leverage and capital expenditure.

This study uses the moderator variables that real earnings management activities that will be used to analyze the interaction of these factors strengthen or weaken the effect of variable leverage and capital expenditure of the ERC or the quality of earnings. Meanwhile, to limit the influence of other variables not examined, so in this study used a control variable is the level of liquidity of the company and firm size.

Previous ERC research there are many variations in the use of the independent variable, depending on the purpose and motivation of each study. Some studies ERC relevant to this research, especially in the use of independent variables, namely: (a) study by Collins and Kothari (1989) used an independent variable stock return, growth, risk and size. This empirically using a group of companies the size of small, medium, large, and the group as a whole,(b) research Murwaningsari (2008) uses the independent variable of leverage and firm size, (c) research Nofianti (2014) uses a variable capital expenditure as an independent variable, (d) research Yushita, Rahmawati, and Triatmoko (2013) use an independent variable liquidity.

Based on the above description, it is becoming important to study complements previous research and an instructive example of the role of the independent variable leverage and capital expenditure were used in this study and interaction with moderator variable earnings

management. Earnings management practices that have been used for such purposes in achieving the expected level of profitability. This study can be analyzed with the market response on earning management practices and its interaction with the independent variable in influencing the attainment of a company's reported earnings. Phenomena that occur during this time, indicating that the reported earnings turned out to vary the impact on the market response of each company, so that became an issue this study were: (a) How does the structure of capital or leverage on earnings response coefficient or ERC companies in Indonesia stock exchange? (b) How does the influence of capital expenditure towards earning response coefficient or ERC companies in Indonesia stock exchange? (c) How does the real activities earnings management towards earning response coefficient or ERC companies in Indonesia stock exchange? (d) Are the real activities strengthen the relationship between earnings management or leveraged capital structure with earnings response coefficient or ERC companies in Indonesia stock exchange?, (e) Are real earnings management activities strengthen the relationship between capital expenditure by earning response coefficient or ERC companies in Indonesia Stock Exchange?

Literature Review and Hypotheses Development

Theories relevant to this study is the agency theory, signaling theory and decision-usefulness theory as stated below.

Agency Theory

This study analyzes the earning response coefficient (ERC) associated with the quality of the profits presented by the management company as an agent and responded by shareholders or prospective shareholders as principal. Therefore, agency theory is chosen as the theoretical foundation relevant to this research. Agency theory such as Jensen and Meckling (1976), suggests that there is a contract in the agency relationship between the principal owner of the company or by the manager or agent, who commissioned for the agent to do a job running the company. The principal party gives full authority to the agent to run the company and make decisions according to expectations principal. In this experiment, the agency theory as the basis of the analysis relating to the management efforts of state-owned enterprises in improving financial health. The analysis of the financial health using several variables that affect the financial health Integration, and assesses its management policy steps in running the company and enhance the company's financial health in accordance with the wishes of the principal. The principal party set specific targets to support the improvement of services at the same time

fostering the company's profits. To that end, the agent needs to consider variables that affect the financial health of state-owned enterprises, or not happen otherwise that only focus on the aspects of service but less attention to the financial aspects so it cost the government to provide additional funding subsidy or equity participation. In practice, the agency theory often led to conflicts between the agent and the principal with the case of asymmetric information, so that the principal needs to monitor that the decision of agent is in accordance with the wishes principle. In connection with the health of financial research state-owned enterprises, it is necessary to do an analysis of the variables that affect the financial health, so that results of the company in accordance with the objectives to be achieved by the government as principal. State-owned enterprises as companies large and spacious master the economic scale, should no longer burden state finances to meet the needs of operational funding so that government funding could be used for other sectors to support economic development and welfare of the community.

Signaling Theory

This research analyzes earnings response coefficient (ERC) related to earnings quality presented by company management that gives the signal to a prospective investor in investment decision in the capital market so that signaling theory become base of relevant theory and strengthen analysis in this research. Signaling theory as Bhattacharya (1979) in Santoso (2015) states that the signal arises because firms have incentives to provide financial information to external parties. In addition, this signaling theory arises because of the problem of information asymmetry that imbalance obtained information about the company in the market. Myers and Majluf (1984) also make a model signaling which is a combination of investment decision and funding decisions. In this model, the manager is the one who most knows the assumed value of the company in the future than anyone else. While Jogiyanto (2010), reveals the theory signaling is an event considered to have the information content (information content) if the event causing market participants to react trade which leads to increased returns which further demonstrated by the presence of abnormal returns. Thus, it can be said signaling theory is a theory that is closely related to the information that is intended to evaluate the response of the market will be information content. In addition, the information content can result in different interpretations depending on the perspective of individual market participants.

Decision-Usefulness theory

This study analyzes the earning response coefficient (ERC) associated with the quality of the profits presented by the management company that can provide benefits to interested parties, especially potential investors in the capital market, so that decision-usefulness theory becomes the basis of theory relevant to research related to the utilization of financial statements for decision making in the capital market. Because the ideal conditions are difficult to achieve and affect the preparation of financial statements in accordance with theoretical concepts that were true, then Scott (2014) says that the decision usefulness approach is an approach to the financial statements are based on historic costs to be more useful for users of financial statements to make decisions. In this case the need to understand the theory of usability individual (single-person of decision theory) and investment theory (theory of investment). The theory uses a private person (single-person of decision theory) is an investor perspective should take action under conditions of uncertainty, means that this theory is not used if conditions are ideal. Investment theory (theory of investment) is a theory of learning about the commitment of a number of funds or other resources were made at this time in order to obtain a number of advantages in the future will come as Tandelilin (2001) in Yosemite (2011).

Previous research relevant to this study, particularly with respect to earnings response coefficient (ERC), the independent variable capital structure, capital expenditure, and earning management, recounted below.

Earnings Response Coefficient (ERC)

Collins and Kothari (1989) in his study of the earnings response coefficient (ERC) found that the independent variable return on security (R_{it}) and market to book value of equity (Growth) significantly affects the ERC. While the other independent variables are a market risk (Riskit) and firm size (Size) did not significantly influence on the ERC. Paramita (2012) in his research found that voluntary disclosure variables significantly influence the earnings response coefficient (ERC), while the other independent variables such as persistence and size did not significantly influence the ERC. Diantimala (2008) found that conservative accounting independent variable (AK), firm size (Size), and the default risk (DR) and a significant negative effect on earnings response coefficient (ERC). While the ERC's research using independent variable or leverage capital structure and capital expenditure, moderator variable earnings management, and control variables liquidity and firm size.

Capital Structure

The independent variable capital structure or leverage as the ratio of the amount of debt to the amount of equity that can provide contribute to the achievement of corporate profits. Therefore, the higher the amount of capital expenditure, the higher the chances of obtaining a return and higher efficiency, thus providing a signal to decision-makers who can positively to the earnings response coefficient (ERC). Murwaningsari (2008) found that the structure of the capital or leverage a significant negative effect on the earnings response coefficient (ERC). Based on this view, this research proposes the following hypothesis H1.

H1: Capital structure and significant positive effect on earnings response coefficient (ERC) companies in Indonesia stock exchange.

Capital Expenditure

Variable capital expenditure affects the ability of the company gained returns and increased operational efficiency so that these variables will increase the potential to provide a better level of profitability. Added this capital expenditure will be responded positively by investors' decision on the grounds that the company has the potential for increased returns in line with the increasing amount of capital expenditure were realized. Wijayanti and Supatmi (2008) found that the variable capital expenditure and significant negative effect on earnings response coefficient (ERC). Based on the results of previous studies and reasons for selecting the variable capital expenditure, this research proposes the following hypothesis H2.

H2: Capital expenditure and significant positive effect on earnings response coefficient (ERC) companies in Indonesia stock exchange.

Earning Management

Ridwan and Gunardi (2013) found that earnings management variable positive and significant effect on firm value. This study indicates that the practice of earnings management was able to affect the market response to earnings reported by the company. This study used a variable earnings management as moderator variable that interacts with the independent variable capital structure and capital expenditure in influencing earnings response coefficient (ERC). Based on the results of research and empirical conditions in the application of earnings management, this study proposes hypothesis H3, H4a and H4b below.

H3: Real activities earnings management is a significant positive effect on earnings response coefficient (ERC) companies in Indonesia stock exchange.

H4a: Real activities earnings management has strengthened the relationship between the structure of the capital (leverage) with earnings response coefficient (ERC) companies in Indonesia stock exchange.

H4b: Real activities earnings management has strengthened the relationship between capital expenditure with earning response coefficient (ERC) companies in Indonesia stock exchange.

Framework

Based on the theory and the results of previous studies, the conceptual framework that explains the relationship between the independent variable, the variable moderator and control variables with the dependent variable earnings response coefficient (ERC) can be described as follows. Variable capital structure or leverage (X1Lev) and capital expenditure (X2Capx) as independent variables that affect earnings response coefficient (YERC), while the real variable activities earnings management (X3RAEM) as moderator variables that strengthen or weaken the effect of independent variables X1Lev and X2 Capx against The dependent variable earnings response coefficient (YERC). Then to control the effects of other variables that are not used in this study, we used the variable liquidity (X4Liq) and firm size (X5SIZE) as control variables.

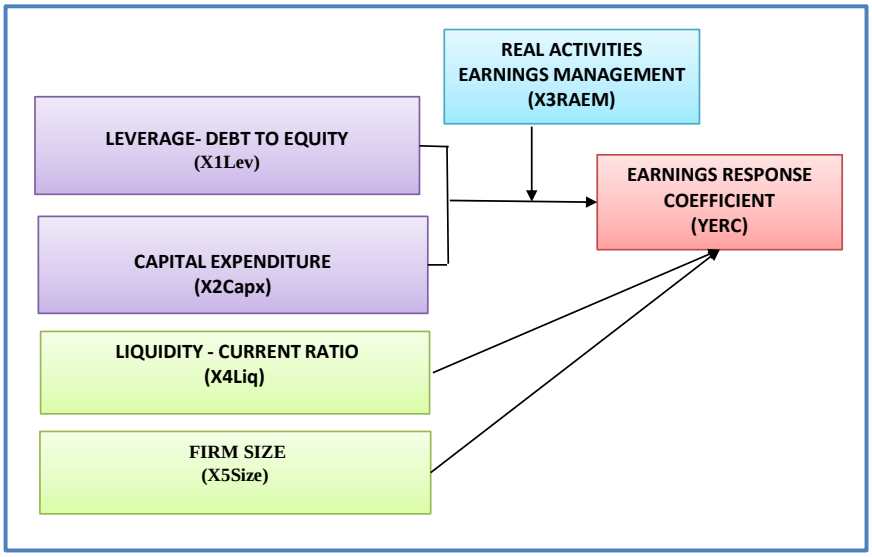

Figure 1: Factors affecting earnings response coefficient (ERC)

Methods

Sample Selection

To test the hypothesis proposed in this study, the data collection using purposive, ie determine the sample assessed in accordance with the purpose of funding the analysis of the issues to be studied are associated with the analysis of factors that affect earnings response coefficient (ERC) companies in Indonesia stock exchange. The study also identifies a sample of 20 companies most actively traded shares during periods 2007 to 2015. Data collected with 240 firm-years, which consists of 7 periods of observation and 20 companies as research objects (7 x 20 = 140 firm-years), The data used were 9 years old, but because of the calculation of the variable residual earnings management using data from the previous period changes, so that the period of observation used in the regression analysis to 7 years.

Variable and Measurement

The variables used in this study consists of the dependent variable earnings response coefficient (ERC), the independent variable capital structure and capital expenditure, the moderator variable of real earnings management activities, liquidity and firm size as control variables.

Earnings Response Coefficient (YERC)

The dependent variable earnings response coefficient (ERC) or YERC in this study, is as an indicator that illustrates the market reaction to earnings information released by the company as Scott (2014). ERC variable measurement is done in stages as in Santoso (2015), Paramita (2012), Moradi, Salehi, and Erfanian (2010), Murwaningsari (2008), Diantimala (2008), Wijayanti and Supatmi (2008) the following.

The first stage, Starting with the regression effect UE on CAR according to the data of this study as many as 140 observations. The magnitude of the earnings response coefficient (ERC) or YERC is as the regression coefficient b1 from the following equation.

$$CAR_{it} = b_0 + b_1\, UE_{it} + e_{it} \quad \text{……..(1)}$$

Counting CAR_{it} :

$$CAR_{it} = CAR_{(-5,\,+5)} = \sum_{-5}^{+5} AR_{it} \quad \text{……(2)}$$

CAR firm i in period t based on the current accounting earnings announced company that is calculated in the observation period (event window) for 11 days, five days before the earnings announcement, one day at the time of the earnings announcement, and 5 days after the earnings announcement, which is considered to be capable of detecting abnormal return as a result of the earnings announcement by the company.

$$AR_{it} = R_{it} - R_{mt} \quad \text{……..…..(3)}$$

$$R_{it} = \frac{Pi(t) - Pi(t-1)}{Pi(t-1)} \quad \text{.....(4)}$$

$$R_{mt} = \frac{IHSG(t) - IHSG(t-1)}{IHSG(t-1)} \quad \text{.....(5)}$$

Counting UE_{it}

$$UE_t = \frac{AEi(t) - AEi(t-1)}{AEi(t-1)} \quad \text{.....(6)}$$

Where : ERC_{it}: earnings response coefficient, which is obtained from the regression coefficient b1 in the equation Recourse CAR_{it} firm i in period t, CAR_{it}: cumulative abnormal return for firm i in period t, UE_{it}: unexpected earnings firm i in period t, e_{it}: error firm i in period t, sickle:abnormal return firm i in period t, R_{it}: stock return of firm i in period t, Rm_t: return market in period t, P_{it}: the closing price of shares of the company i in period t, $IHSG_t$: composite stock price index in period t, AE_{it}: earnings after taxes firm i in period t.

The second phase, Average CAR_{it} equation (1) above, then calculate the ERC or b1 of each observation (n = 140) with the following formula.

$$b_1 = \frac{CARit - b0}{UEit} \quad \text{.....(7)}$$

The third phase, b1 value of each observation, then used as the dependent variable, the amount or number YERC the regression calculation as a model of analysis of this research.

Capital Structure (X1Lev)

Capital structure or leverage shows a comparison between the amount owed by the number of equity reported by the company, which means that the greater the degree of leverage is, the more the amount of debt used by companies in the finance operations and investments compared to the use of capital owners. In terms of the shareholders will give a dividend per share which is greater using a larger debt, for investments using debt will generate a larger return without increasing the amount of equity, so it will provide earnings per share is greater. If this happens, then the market will respond to the company that has a higher level of leverage, especially when the rate of investment return is higher than the debt cost of capital employed. Measurement was conducted as variable leverage on Murwaningsari (2008) and Nofianti (2014) formulated the following.

$$\text{Leverage} = \frac{\text{Total debt}}{\text{to total equity}} \quad \text{..... .. (8)}$$

Capital Expenditure (X2Capx)

Capital expenditure shows the number of capital expenditures or fixed assets performed by the company for expansion. The higher the amount of capital expenditure means that the greater the chance the company gain a larger return or improve operational efficiency, thereby increasing the potential for obtaining profitability. If this is the case, then this indicator will be queried responded positively by investors in the capital market, thereby affecting the company's stock price. Capital expenditure is formulated as in research Nofianti (2014) below.

$$\text{Capital expenditure} = \frac{\text{Fixed asset (t)} - \text{Fixed asset (t}-1)}{\text{Fixed asset (t}-1)} \quad \text{............ ..(9)}$$

Real Activities Earnings Management (X3RAEM)

The control variables based real earnings management activities are based on earnings management practices that have benefited from the routine activities that can be used to affect the financial statements, resulting in healthy financial statements. Real practice earnings management activities carried out in the pattern of increasing the number of sales, increase productivity and reduce the burden of discretionary expense. Earnings management practices, as well as researchRidwan and Gunardi (2013), was used to measure the impact on the value of companies that have an impact on increasing the company's stock price in the stock market. This variable was measured by using an approach Roychowdhury (2006) that real earnings management activities are calculated based on the number of residual functions of the operating cash flow (ACFO), residual costs of production (APROD) and residual discretionary fee expense (ADEXP) with the following formulation as $X3RAEM_{it}$.

$$X3RAEM_{it} = AREAL = ACFO + APROD + ADEXP \text{ ....(10)}$$

Where: AREA = abnormal or residual operating cash flow, abnormal production costs and abnormal discretionary expense burden; ACFO = residual operating cash flow; APROD = residual costs of production; ADEXP = residual of discretionary expense load function (DEXP). To calculate the residual or abnormal function of CFO, PROD and DEXP, use the following regression equation.

$$CFO_t / A_{t-1} = \alpha_0 + \alpha_1(1/A_{t-1}) + \beta_1 (S_t / A_{t-1}) + \beta_2(\Delta S_t / A_{t-1}) + e_t \text{ ....(11)}$$

$$PROD_t / A_{t-1} = \alpha_0 + \alpha_1(1/A_{t-1}) + \beta_1 (S_t / A_{t-1}) + \beta_2(\Delta S_t / A_{t-1}) + \beta_3(\Delta S_{t-1} / A_{t-1}) + e_t \text{ ....(12)}$$

$$DEXP_t / A_{t-1} = \alpha_0 + \alpha_1(1/A_{t-1}) + \beta (S_{t-1} / A_{t-1}) + e_t \text{ ....(13)}$$

Where: A = total assets; S = total sales; e = error

Liquidity (X4Liq)

Variable liquidity indicates the company's ability to meet its financial obligations at maturity, so the higher the level of liquidity, the more reliable by the lender, so the company has an opportunity to obtain additional debt increase its business scale and gain a larger return. This will be responded positively by investors so the stock price in the stock market will rise. Conversely when the relatively low level of liquidity in the capital market then indvestor will respond negatively to the company. Measurement of liquidity variables have also been used in researchYushita, Rahmawati, and Triatmoko (2013) below.

$$\text{Liquidity} = \frac{\text{Current asset}}{\text{Current liabilities}} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (14)$$

Firm Size (X5Size)

Firm size variable indicates the level capacity of the companies, signaling that companies that have a larger business scale will provide a greater opportunity to obtain a higher return than the same company with the size of the smaller company. Therefore, the variable is used as a control variable to detect the possible influence of other variables that are not investigated against the earnings response coefficient (ERC). Measurement of this variable is based on the logarithm of the total value of assets owned by the company at the end of the accounting period. Measurement of this variable has also been used in research Nofianti (2014) and Murwaningsari (2008) with the following calculation.

Firm size = Log (total assets) ..... (15)

Research Models

To test the hypothesis, this study used regression analysis model as in model 1 to model 4 below. Model 1 as the linear model was used to test the hypothesis with the hypothesis H1 to H3. Model 2 as non-linear models based logarithm (log) used in the analysis sensitivity to test the consistency of the calculation in model 1 and test the accuracy of the model in explaining the phenomena studied. Model 3 is linear models to test the ability of the moderator variable strengthen or weaken the relationship between the dependent and independent variables earning response coefficient (ERC). Model 4 is a model-based non-linear logarithm (log) used in the sensitivity analysis to test the consistency of the results of the calculation model 3, and assessing the accuracy of the regression model used in explaining the phenomena studied.

Model for H1, H2, and H3

Hypothesis H1, H2, and H3 can be tested using a linear model as model 1 as follow.

$$\text{Model 1 : } YERC_{it} = \beta_0 + \beta_1 X1Lev_{it} + \beta_2 X2Capx_{it} + \beta_3 X3RAEM_{it} + \beta_4 X4Liq_{it} + \beta_5 X5Size_{it} + .e_{it} \quad \text{.....(16)}$$

To test the consistency of the results of the calculation model 1 and prove the correctness of the model used in this study, we used non-linear models (log) as a model 2 below.

$$\text{Model 2 : Log } YERC_{it} = \beta_0 + \beta_1 \text{ Log } X1Lev_{it} + \beta_2 \text{ Log } X2Capx_{it} + \beta_3 \text{ Log } X3RAEM_{it} + \beta_4 \text{ Log } X4Liq_{it} + \beta_5 \text{ Log } X5Size_{it} + e_{it} \quad \text{.....(17)}$$

Model for H4a and H4b

H4a and H4b hypothesis can be tested by using a linear model as model 3 below.

$$\text{Model 3 : } YERC_{it} = \beta_0 + \beta_1 X1Lev_{it} + \beta_2 X2Capx_{it} + \beta_3 X3RAEM_{it} + \beta_4 X4Liq_{it} + \beta_5 X5Size_{it} + \beta_6 (X1X3)_{it} + \beta_7 (X2X3)_{it} + e_{it} \quad \text{.....(18)}$$

A sensitivity analysis to test the consistency of the results of the calculation model 3 we used non-linear models (log) as model 4 below.

$$\text{Model 4 : Log } YERC_{it} = \beta_0 + \beta_1 \text{ Log } X1Lev_{it} + \beta_2 \text{ Log } X2Capx_{it} + \beta_3 \text{ Log } X3RAEM_{it} + \beta_4 \text{ Log } X4Liq_{it} + B_5 \text{ Log } X5Size_{it} + \beta_6 \text{ Log } (X1X3)_{it} + \beta_7 \text{ Log } (X2X3)_{it} + e_{it} \quad \text{.....(19)}$$

Where : $YERC_{it}$: earnings response coefficient, $X1Lev_{it}$: leverage, $X2Capex_{it}$: capital expenditure, $X3RAEM_{it}$: estate activities earnings management, $X4Liq_{it}$: liquidity (current ratio), $X5Size_{it}$: firm size, $(X1X3)_{it}$: interaction X1Lev and X3RAEM, $(X2X3)_{it}$: interaction X2Capx and X3RAEM, β1 ... β7: regression coefficient, e_{it}: error.

Result and Discussion

Descriptive Statistics and Correlation Matrix

Analysis of descriptive statistics are intended to explain the data variation minimum and maximum, mean and standard deviation are delivered in testing hypotheses in this study. While the correlation analysis is intended to explain the degree of linkage between one variable with another variable to complement and reinforce the results of the regression analysis in explaining the problems and test the hypothesis proposed in this study.

Descriptive Statistics

According to the table, the following descriptive statistics table can be explained a few things about the composition of the research data. The dependent variable earnings response coefficient or YERC have a minimum level of variation between the maximum -0.899 to -0.035 Average 0367 with meaningful that such data concentration the magnitude closer to the

maximum. The standard deviation of 0.157 which indicates that the data variable or YERC earning response coefficient varies in the range of 0.157 from the average value.

Table 1. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
YERC	140	-.899	.367	-.035	.157
X1Lev	140	.135	2.116	.583	.308
X2Capx	140	-2.503	.920	.102	.288
X3RAEM	140	-.820	4.504	.006	.450
X4Liq	140	.389	10.710	2.790	1.891
X5Size	140	6.265	11.373	9.701	1.175
Valid N (listwise)	140				

te: $YERC_{it}$: earnings response coefficient, $X1Lev_{it}$: leverage, $X2Capex_{it}$: capital expenditure, $X3RAEM_{it}$: real earnings management activities, $X4Liq_{it}$: liquidity (current ratio), $X5Size_{it}$: firm size.

The independent variable capital structure or X1Lev varies between a minimum value of 0135 up to a maximum value of 2,166 with an average of 0.583 which indicates the minimum value and has a degree of deviation or standard deviation of 0308 from the average value. The independent variable capital expenditure or X2Capx, data variation ranging from a minimum value to the maximum until the Count -2503 0920 with an average value of 0102 which indicates that the distribution of this variable data at the maximum, to the extent of the deviation or standard deviation of 0288 is greater or smaller than average value.

Moderator variable of real earnings management activities or X3RAEM varies from a minimum number -0820 up to the maximum number 4,504 with an average value of 0.006 which illustrates that the variable data is distributed in the range of minimum value, the extent of the deviation or standard deviation is greater or smaller than the average value in the range of 0.450. While the variable control liquidity or X4Liq shows the average value of 2.790, which is between a minimum value and a maximum value of 10,710 0389 with a standard deviation of 1.891 is greater or smaller than the mean value. Other control variables firm size or average X5Size of 9701 distributed balanced approach the minimum value of 6265 and a maximum value of 9701 to the level of deviation or standard deviation is larger or smaller than the mean value in the range of 1,175.

Correlation Matrix

Person product moment correlation analysis or PPM was first proposed by Pearson (1904)stating that the correlation is demonstrating a degree of the linear relationship between two or more variables. Correlation analysis was used to analyze the phenomenon of the relationship between the variables are interrelated with one another as expressed at the correlation matrix table. It is relevant to study the earnings response coefficient or YERC in linkage analysis with the variables that influence as an independent variable capital structure or X1Lev and capital structure or X2Capx, moderator variables estate activities earnings management or X3RAEM, variable control liquidity or X4Liq and firm size or X5Size.

The dependent variable earnings response coefficient or YERC negative correlation with variable or X1Lev capital structure and liquidity or X4Liq, while other variables such as capital expenditure or X2Capx, real activity or R3RAEM earnings management, and firm size or X4Size. Correlation variables YERC with the value relative small or between 0005 until 0137 which means that the association is relatively small or below 50%, thus indicating a linear relationship between the independent variables and the dependent variable is less strong, and the impact on the determinant coefficient relatively small which means that the ability regression model used is very limited in explaining the phenomena studied.

Table 2. Correlations Matrix

Variable	YERC	X1Lev	X2Capx	X3RAEM	X4Liq	X5Size
YERC	1					
X1Lev	-.044	1				
X2Capx	.137	-.258**	1			
X3RAEM	.050	-.021	.003	1		
X4Liq	-.064	-.162	.041	-.057	1	
X5Size	.005	-.204*	.004	-.115	-.147	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Note : $YERC_{it}$ is earnings response coefficient, $X1Lev_{it}$: leverage, $X2Capex_{it}$: capital expenditure, $X3RAEM_{it}$: real earnings management activities, $X4Liq_{it}$: liquidity (current ratio), X5Sizeit: firm size.

The correlation between the independent variable and the other independent variables or X1Lev and X2Capx relatively small or -0258, thus indicated that the regression model used does not happen multicollinearity or meet classical assumptions. The same thing happened on the correlation between the independent variables with moderator variables and control variables are

relatively small in the range of between 0.003 up to 0.204 or less than 0.50 so it can be stated that among these variables did not correlate significantly, and indicated to meet the assumption of multicollinearity in the analysis regression. The analysis specifically towards the classical assumption will be discussed in the regression analysis through the test multicollinearity, heteroscedasticity test, and autocorrelation test.

The Result of Hypothesis H1

The regression analysis as non-linear model 2 in Table 3 indicates that a variable capital structure or X1Lev positively and significantly with a regression coefficient of 0.782 and 0.091 sig. But by using the linear model 1 or this variable is not a significant influence on earnings response coefficient or YERC. Or adjusted determinant coefficient R2 model 2 = 0.027 greater than the model 1 = -0010, which means that model 2 is better than model 1 in explaining the phenomenon in this study. The regression coefficient for 0782 indicates that each increase of one unit X1Lev will lead to increased earnings response coefficient indicator or YERC of 0782. This occurs due to the increase in the debt using the company's operations will positively affect the market response that can trigger an increase in the stock price of companies in the capital market. The investor believes that companies that obtain debt in larger quantities indicated that the lender or the bank has conducted an analysis of the feasibility of such funding and is believed to provide additional future profitability comes after the investment are to operate effectively. The use of debt for expansion also means that the company has the potential to increase the scale and tend to be more efficient to increase the company's operating profit.

The Result of Hypothesis H2

The regression analysis of nonlinear model 2 is more appropriately used in the analysis of capital expenditure or X2Capx variable, mainly due to the results of calculation of non-linear model 2 coefficient of determination or adjusted R2 = 0.027 greater than 1 linear model with adjusted R2 = -0010. Capital expenditure or X2Capx and significant negative effect on earnings response coefficient or regression coefficient YERC with sig -0269 and 0088 which means that each increase of one unit of this variable will cause a decrease in the market response to the company's shares in the capital market by 0269. This happens because investors tend to speculate and take advantage of short-term fluctuations in selecting stocks of companies for investment, so that companies investing tends to decrease financial performance at an early stage or short-term, but in the long term potential to obtain profitability more viable future come,

The Result of Hypothesis H3

Variable real earnings management activities or X3RAEM as 2 nonlinear models and no significant positive effect on earnings response coefficient or YERC coefficient sig 0058 and 0567, so it is stated that the changes in these variables did not significantly affect the dependent variable changes YERC. This happens because the earnings management practices by the company to increase profits through operational activities were not of interest to decision makers in the capital market. Operational activities to affect earnings can be detected by investors through exposure to the financial statements and annual reports, thereby increasing profits for earnings management practices will not be responded by the market significantly. Investors can analyze financial statements in more detail and take advantage of all the information more accessible so that earnings management practices are no longer effective to increase market responsiveness.

The Result of Hypothesis H4

X1X3 variables or interactions between independent variables X1Lev with X3RAEM moderator variables not significant effect on earnings response coefficient or YERC as model 3 with a coefficient of -0.207 and 0.382 sig, so it is stated that the moderator variable X3RAEM does not strengthen the relationship between X1Lev with YERC. In this analysis is more appropriate to use a linear model 3 mainly due to adjusted R2 = -0018 greater than 4 nonlinear models with adjusted R2 = 0.015. This occurs because the real practice of earnings management activities or X3RAEM not able to affect the value of the capital structure to strengthen its influence on the market response on the Stock Exchange.

The same thing happened at X2X3 variables or interactions between independent variables X2Capx with X3RAEM moderator variables, ie no significant effect on earnings response coefficient or YERC as model 3 with a coefficient of -0.135 and 0.600 sig, so it is stated that the moderator variable X3RAEM does not strengthen the relationship between X2Capx with YERC. This occurs because of the real practice of earnings management activities or X3RAEM not able to amplify the effect of capital expenditure on the response of investors in the capital market. Decision makers in the capital market are able to use all the information related to the company which will have its share, so the practice of earnings management is no longer effective to affect the market response, and are not able to influence the value of investments are reported as capital expenditure or X2Capx.

Discussion

Results of the investigation, as Table 3 shows that the H1 hypothesis test results are in accordance with the hypothesis, but a hypothesis H2 is not as expected or on the calculation model 2 does not support the hypothesis. H1 hypothesis is proven that changes in capital structure or X1Lev variable positive and significant impact on the earnings response coefficient or YERC, so companies need to prioritize the use of debt in financial policy if the share price rises expected capital markets. Conversely when the company reduces the use of debt due consideration of the cost of capital debt is greater than the return on the investment that will be developed, will cause a decline in the market response to the company's shares in the capital market. Financial management policy in the use of debt should consider the interests of the capital markets and the positive response to the level of profitability due consideration of the cost of capital debt. If the company will set up new emissions or sell new shares, then the company should prioritize the use of debt to finance investment. In the event that the company has no plans of new emissions, then the consideration of the cost of capital and investment returns should guide the use of equity or debt financing in order to increase earnings per share (EPS). When the cost of capital is greater than the return of the investment, the use of equity capital will improve the EPS compared to the use of debt. Conversely, if the cost of capital is lower than the return of investment, the use of debt will increase EPS.

H2 hypothesis is not proven that the model 2 result variable or X2Capx capital structure and significant negative effect on earnings response coefficient or YERC. The hypothesis proposed institute on previous research results and a practical or rational outlook, which increases the amount of investment or capital expenditure, the reported income will increase. This study proves that the negative effects of variable X2Capx against YERC mainly caused by investors' view that considered that companies investing tends financial performance reported profit declines, especially before the investment is effectively operating. Besides, companies that invest potentially experiencing liquidity problems and the amount of debt and interest expense increased so that in the short term affect the reported profitability of the company. Investors in the stock market dominated by investors who speculated short-term profits by exploiting fluctuations in the stock price and the company reported earnings, resulting in increased investment or capital expenditure YERC negative impact on growth.

Moderator variable of real earnings management activities or X3RAEM not significant influence on earnings response coefficient or YERC and the interaction between the variables with independent variables X1Lev X3RAEM and X2Capx showed no significant, which means that the moderator variable X3RAEM is not able to strengthen the influence of the independent variable on the dependent variable YERC. This shows that the hypothesis proposed in this research did not prove appropriate calculation results in model 3.

Tabel 3. Factors Affecting The Earning Response Coefficient With Real Activities Earning Management As Moderator

Model 1 : $YERC_{it} = \beta_0 + \beta_1 X1Lev_{it} + \beta_2 X2Capx_{it} + \beta_3 X3RAEM_{it} + \beta_4 X4Liq_{it} + \beta_5 X5Size_{it} + e_{it}$

Model 2 : $Log\ YERC_{it} = \beta_0 + \beta_1\ Log\ X1Lev_{it} + \beta_2\ Log\ X2Capx_{it} + \beta_3\ Log\ X3RAEM_{it} + \beta_4\ Log\ X4Liq_{it} + \beta_5\ Log\ X5Size_{it} + e_{it}$

Model 3 : $YERC_{it} = \beta_0 + \beta_1 X1Lev_{it} + \beta_2 X2Capx_{it} + \beta_3 X3RAEM_{it} + \beta_4 X4Liq_{it} + \beta_5 X5Size_{it} + \beta_6 (X1X3)_{it} + \beta_7 (X2X3)_{it} + e_{it}$

Model 4 : $Log\ YERC_{it} = \beta_0 + \beta_1\ Log\ X1Lev_{it} + \beta_2\ Log\ X2Capx_{it} + \beta_3\ Log\ X3RAEM_{it} + \beta_4\ Log\ X4Liq_{it} + B_5\ Log\ X5Size_{it} + \beta_6\ Log\ (X1X3)_{it} + \beta_7\ Log\ (X2X3)_{it} + e_{it}$

	Predict.	Model-1: Linear		Model-2 : Non Linear (Log)		Model-3: Linear		Model-4 : Non Linear (Log)	
		Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.
(Constant)		-0.014	0.919	0.609	0.529	-0.015	.913	0.692	.483
X1Lev	+	-0.011	0.819	0.782	0.091 *	-0.002	.961	0.948	.146
X2Capx	+	0.073	0.130	-0.269	0.088 *	0.066	.176	-0.253	.116
X3RAEM	+	0.015	0.609	0.058	0.567	0.146	.373	0.396	.672
X4Liq	+	-0.006	0.422	0.528	0.175	-0.006	.409	0.556	.162
X5Size	+	-0.001	0.955	-0.085	0.386	-0.001	.934	-0.091	.362
X1X3	+					-0.207	.382	-0.352	.675
X2X3	+					0.135	.600	0.059	.581
Adj-R2		-.010		0.027		-.018		0.015	
F-Statistic		.718		1.770		.652		1.304	
Prob F-Statistic		.611		.123		.712		.253	
Durbin-Watson		2.099		2.077		2.100		2.085	
Total Observation		140		140		140		140	

*** Significant of 1 percent, ** Significant of 5 percent, * Significant of 10 percent

Note: Note: $YERC_{it}$: earnings response coefficient, $X1Lev_{it}$: leverage, $X2Capex_{it}$: capital expenditure, $X3RAEM_{it}$: estate activities earnings management, $X4Liq_{it}$: liquidity (current ratio), $X5Size_{it}$: firm size, $(X1X3)_{it}$: interaction X1Lev and X3RAEM, $(X2X3)_{it}$: interaction X2Capx and X3RAEM.

This condition occurs mainly due to earnings management practices are no longer effective to influence the stock market response to the company in the capital market. Besides, enough information is available on the other so that investors can capitalize on all the

information to assess the company's performance including earnings management practices undertaken by the company. This is what causes the X3RAEM variables are not able to strengthen the relationship between independent variables and earnings response coefficient or YERC. Earnings management practices are also not able to affect the capital structure and capital expenditure, resulting in increased profits for earnings management practices will be detected by decision makers in the capital market.

Conclusions

Based on the results to analysts and the hypothesis testing, the findings of this research can be summarized as follows: (a) Capital structure and significant positive effect on earnings response coefficient, which means that the policy of funding through the debt will boost the company's stock price in the stock market. Conversely, if funding is prioritized to use their own capital or new emissions, can reduce the earnings response coefficient in the capital market. (b) Capital expenditure and significant negative effect on the earnings response coefficient, which means that the company's investment policy will reduce the response of investors to the company's shares in the capital market. The implication, the policy will impact short-term investments against loss of earnings response coefficient, but in the long run would be otherwise, especially after the investment is operating effectively. (c) moderator variables real earnings management activities are not a significant influence on the earnings response coefficient. It also occurs in the interaction between the independent variables moderator, was not able to strengthen the influence of independent variables on earnings response coefficient. This happens because the earnings management practices can be detected by the decision maker, and unable to influence the composition of the capital structure and capital expenditure. The increase in profit due to earnings management practices can be detected by the investors in the capital market, because information can be obtained online market either directly to the information reported by the company, or indirectly through the information associated with the company observed.

References

Collins, DW, Kothari, SP 1989. An Analysis Of intertemporal And Cross-Sectional Determinants Of Earnings Response Coefficients. Journal Of Accounting And Economics, North-Holland, 11 (1989), 143-181.

Diantimala, Y. 2008. Effects of Conservative Accounting, Company Size, and Default Risk Response Against Gain Coefficient (Erc). Assessing & Accounting Research Journal, 1 (1), 102-122.

559 Jensen, MC, Meckling, WH 1976. The Theory Of The Firm: Man Age Rial Behavior Or, Agency
560 Costs And Ownership Structure. Journal of Financial Economics, 3 (4), 305-360
561 Moradi, M., Salehi, M., Erfanian, Z. 2010. A Study of the Effect of Financial Leverage on
562 Earnings Response Coefficient throughout the Income Approach: Iranian Evidence.
563 International Review of Accounting Banking and Finance, 2 (2), 103-115.
564 Murwaningsari, E. 2008. Simultaneous Testing: Some Factors Affecting Earnings Response
565 Coefficient (Erc). National Symposium on Accounting (Sna) Ke Xi Pontianak, 23 to 24
566 July 2008, 1-26.
567 Nofianti, N. 2014. Effect of Capital Structure, Company Size, And Dividend Policy Against
568 Earnings Response Coefficient. *journal Ekonomi*, 13 (2), 118-147.
569 Paramita, RWD 2012. Firm Size Effect of Earnings Response Against Coefficient (Erc) By
570 Voluntary disclosure As an intervening variable (Study at Manufacturing Companies
571 Listed In Indonesia stock exchange). *journal Wiga*n, 2 (1), 64-78.
572 Pearson, 1904. KFRS Report On Certain Enteric Fever inoculation Statistics. Applied
573 Mathematics, University College, London, 1242-1247.
574 Ridwan M. Gunardi, A. 2013. Role of Corporate Governance as a moderating mechanism
575 Earning Management Practices on Firm Value. Journals*Trikonomika*, 12 (1), 49-60.
576 Roychowdhury, S. 2006. Earnings management through real activities manipulation, Journal of
577 Accounting and Economics, 42 (2006), 335-370.
578 Santoso, G. 2015. Determinants of Response Gain Coefficient. *Parsimonia Science Program*
579 *Accounting Ma Chung University, Malang*, 2 (2), 69-85.
580 Scott. WR 2014. Financial Accounting Theory. Prentice Hall of Canada Ltd, 7th Edition. ISBN
581 0132984660, 9780132984669.
582 Tenaya, AI 2011. Decision Usefulness: Trade-Off Between Reliability and Relevance. Journals
583 scientific management, Department of Accounting, Faculty of Economics, University of
584 Udayana, 1-20.
585 Wijayanti, NR, Supatmi. 2008. Effects of Dividend Payout Ratio and Capital Expenditures
586 Against Earnings Response Coefficients (Erc) With Free Cash Flow As moderating
587 variables. Journal of Business and Economics (JBE), 15 (1), 1-14.
588 Wong, TJ 1993. Perceived Quality Auditor And The Earnings Response Coefficient. The
589 Accounting Review, 68 (2), 346-366.
590 Yushita, AN, Rahmawati., Triatmoko, H., 2013. Influence Mechanism of Corporate Governance,
591 The quality of the External Auditor, And Liquidity on the Quality of Earnings. journal
592 Economia, 9 (2), 141-155.
593