

Market Consequences and Real Earnings Management: Empirical Study in Indonesia

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ARTICLE INFORMATION

Article History:

Received September 21, 2021

Revised April 04, 2022

Accepted June 05, 2022

DOI:

[10.21532/apfjournal.v7i1.210](https://doi.org/10.21532/apfjournal.v7i1.210)



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ABSTRACT

This research examined the consequences of real earnings management. We analyzed real earnings management's effects on two aspects of investment: capital market and earnings informativeness. We rely on the efficient market hypothesis theorized by Fama (1969) to predict the market and accounting consequences caused by real earnings management. Our population and samples are a non-financial company listed on the Indonesian Stock Exchange during 2013-2017. We conducted event studies that examine cumulative abnormal return and earnings response coefficient two days before and after the financial statement was published. The model results showed that real earnings management has a negative impact on both stock return and the informativeness of earnings. We also found empirical evidence that the capital market could reach an indication of earnings manipulations through real earnings management. Those results give us the insight that the Indonesian capital market level of efficiencies classified into semi-strong form.

Keyword: Real Earnings Management, Abnormal Return, Earnings Response Coefficient, Market and Accounting Consequences

1. INTRODUCTION

Financial reports are the main media for obtaining information about the performance and financial condition of the company. As the primary source of financial information, financial reports must meet certain quality as determined by the standard. Financial reports must be reliable as a basis for decision-making by stakeholders (Ronen, 2015). Massive financial reports are used for investment purposes. Investors need financial infor-

mation to be used as the basis for making capital allocation decisions (Yuliana & Alim, 2017). The accounting numbers in the financial statements can be used as an evaluation to predict future returns and cash flows from invested funds (Roychowdhury, 2006). Rationally, investors will only allocate their funds to companies that provide profits. Thus, invested capital can grow and contribute to economic growth (Rudiawarni et al., 2017).

How to Cite:

Ramadan, G. R et al. (2022) 'Market Consequences and Real Earnings Management: Empirical Study in Indonesia', *Asia Pacific Fraud Journal*, 7(1), pp. 115-127. doi:<http://doi.org/10.21532/apfjournal.v7i1.210>.

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Association of Certified Fraud Examiners (ACFE)
Indonesia Chapter
Page. 115-127

One of the often-used information as the basis for making investment decisions is earnings (Rudiawarni et al., 2017). Earning is the simplest parameter in making investment decisions (Handoyo & Agustianingrum, 2019). The content of the profit figures represents the company's financial performance. Profit is essential information for investors in the capital market. One of the essential information regarding earnings is the information content. Investors need to analyze the contents of the earnings information carefully. According to management's discretion, every company's earning number depends on accounting methods and policies (Yuliana & Alim, 2017). Differences in the use of accounting methods and policies will result in other profit figures. Financial Accounting Standards provide freedom regarding the choice of accounting methods and procedures according to the entity's business characteristics. In principle, the selection of accounting methods and policies must be oriented towards providing quality information.

There is an incentive for management to utilize accounting methods and policies to process earnings figures to make them look attractive (PM Dechow et al., 1995; Roychowdhury, 2006). This behavior is known as the manager's opportunistic behavior through earnings management. Earnings management is opportunistic behavior because management motives to achieve personal interests (Jensen & Meckling, 1976; Panda & Leepsa, 2017). Managers' reasons for earnings management can vary, such as bonus orientation, avoiding shifting positions, increasing share prices, and other motives. This action is contrary to providing financial reports, namely providing quality financial statements oriented towards all stakeholders' interests.

Investors must analyze earnings information comprehensively (Yuliana & Alim, 2017). Earnings management can make earnings information *meaningless* (Li,

2019). Also, empirically, several studies have shown that earnings management can mislead investors, ultimately reducing stock prices and firm value. Therefore, the market should capture indications of the opportunistic behavior of managers through earnings management. The company can make earnings management using two techniques: accrual manipulation and actual activities (Dechow et al., 1995; Roychowdhury, 2006). This study focuses more on real earnings management than accrual earnings management. Several opinions state that real earnings management directly impacts cash flow in the short term and firm value in the long term (Roychowdhury, 2006). In addition, based on Jones (2018) discretionary accruals are irrelevant when used as a proxy for measuring earnings management.

Previous research examining the consequences of earnings management can be grouped into several clusters in the context of capital market accounting. First, research that examines earnings management consequences on abnormal returns (Dewi & Herusetya, 2016; Rudiawarni, Sulistiawan, & Feliana, 2017; Subekti, 2012; Yuliana, 2013; Yuliana & Alim, 2017; Yuliana, Anshori, & Alim, 2015). The researchers in this study use abnormal return to test market reactions. Second, several researchers such as Firmansyah & Herawaty (2016), Firmansyah (2017) and Li, (2019) examined the implications of earnings management on earnings informativeness. Earnings informativeness is measured by referring to the *Earnings Response Coefficient* (ERC) value. The third classification is research that examines earnings management models on firm performance and value (Assih et al., 2005; Darwis, 2012; Jia & Zhou, 2019; Yusnita et al., 2015).

Some of the studies above show that empirically earnings management has implications for these three things. Research by Dewi & Herusetya (2016), Yuliana & Alim (2017), and Yuliana et al. (2015) found empirical evidence that earnings management received adverse

reactions from investors. The market can respond to earnings management by indicating a decrease in the abnormal rate of return. Meanwhile, earnings management's quality of accounting information shows a positive impact on earnings information (Firmansyah & Herawaty, 2016; Firmasnyah, 2017). Conversely Li (2019) states that real earnings management can reduce earnings persistence to predict future earnings and cash flows. Next, earnings management shows a negative effect on firm value (Darwis, 2012). Meanwhile, Yusnita et al. (2015) found the opposite empirical evidence, namely the positive influence of earnings management on firm value. Jia & Zhou (2019) obtain empirical evidence of the negative impact of earnings management on firm performance.

Previous researchers test the consequence model separately between market and accounting consequences. Meanwhile, not many have examined real earnings management results about the dimensions of earnings, particularly on the two aspects of the effects. Research examining the impact of real earnings management on both parts is a critical empirical study given investors' urgency to evaluate earnings information. Investors should respond carefully to the content of earnings information (Karuna, 2019; Kothari, 2001; Yuliana, 2013; Yuliana & Alim, 2017).

The purpose of this study is to examine the consequences of earnings management on two essential aspects of investment interests, namely stock prices and earnings informativeness. The stock price tests investors' reaction or the market in capturing real earnings management indications. Meanwhile, examining the consequences of real earnings management on earnings informativeness aims to analyze the quality of earnings information delivered by management.

2. LITERATURE REVIEW AND HYPOTHESIS

Efficient Market Hypothesis Theory

This study examines the market reaction

to real earnings management and its consequences for earnings informativeness by referring to the efficient market hypothesis's theoretical framework. The researcher tries to test the extent of the efficiency level of the capital market in Indonesia. The efficient market hypothesis theory can describe the level of market efficiency by looking at changes in company stock prices on historical, public and private information (Gumanti & Utami, 2002).

The theory of the efficient market hypothesis was put forward by (Fama, 1970). The term efficient market refers to the capital market and money market. The market is said to be efficient when investors, both individuals and institutions, cannot obtain abnormal returns with existing investment strategies after adjusting for risk (Gumanti & Utami, 2002). An efficient market is formed when the stock price reflects or represents all of the information (Fama, 1970; Gumanti & Utami, 2002).

The efficient market theory is used to test how fast the market responds to existing information. The market response is seen from changes in market prices for the presence of certain information. The information referred to can be in historical or past information, public information, and inside information or private information. Each type of information can represent the level of market efficiency. In general, share prices at least reflect historical and public information. However, stock prices are also often formed based on information that still requires suspicion, namely private information such as project expansions, acquisitions, issuance of new shares, etc.

In principle, an efficient market can be analyzed by referring to several indicators. Namely, investors are price takers that cannot influence stock prices. Information is obtained freely (does not require resources/costs), data is independent of one another (not related to each other). Others and investors react and adjust their strategy and risk assessment for new information (Gumanti & Utami, 2002). The level of compliance indicators of efficient

markets that will determine the form of the efficient market. Fama (1970) classifies the efficient market into three forms that shape the weak form of the market, semi-strong form and the strong form of market.

This theory's relevance to the consequences of real earnings management on stock prices and earnings informativeness is to measure the extent to which the level of efficiency of the Indonesian capital market. The efficient market hypothesis is also relevant for measuring how investors can capture the information content that reaches them, particularly earnings information in financial reports. The implication of testing this model is the formation of a capital market that can provide capital growth.

Real Earnings Management

Earnings management uses manager judgment in financial reporting and managing transactions to change information in financial statements. This action intends to change users' perceptions of financial information related to company performance and meet the criteria in specific contracts (Roychowdhury, 2006). The primary orientation is to produce profit figures according to particular targets. Roychowdhury (2006) states that management intervention in the financial reporting process is in estimates and accounting methods and includes decisions related to operating activities. For example, such as accelerating sales by increasing discounts, changing delivery schedules, delaying discretionary costs such as research and development, and capital expenditures.

Based on Yuliana & Alim (2017) and Roychowdhury (2006), earnings management through actual activities can be in the form of increased sales, increasing production, and reducing discretionary costs. When these practices are carried out extensively to the extent that they exceed the regular business practices of a particular industry, there are indications that management is engaging in MLR. MLR practice has the potential to

erode company value. Encouraging MLR practices in the current period will reduce future cash flows (Roychowdhury, 2006). The measurement of MLR in this study uses a model developed by Roychowdhury (2006) and used by several previous studies such as Dewi & Herusetya (2016); Subekti (2012); and Yuliana & Alim (2017).

Hypothesis Development

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Based on the theory of the efficient market hypothesis Fama (1970), changes

in stock prices for specific information can represent investors' reactions. The reaction of investors has a tendency to adjust strategies and risks based on new information coming into the market. Financial reports that contain financial information are one of the information on which to base investment decisions. Profit information is the information most widely used to assess investments-earnings information as a tool to predict future earnings and cash flows.

Investors have more preference for companies that report making a profit. Companies that generate profits can provide better prospects than companies that report losses. This assessment is reflected in the company's changing share price due to the publication of the two pieces of information (Dewi & Herusetya, 2016; Subekti, 2012; Yuliana, 2013; Yuliana & Alim, 2017). However, in the earnings figures reported by companies, there can be adverse selection and moral hazard elements. Managers tend to report earnings even at a low level (around 0) (Subekti, 2012). Investors are more interested in companies that report earnings at a low level. This condition encourages management to process profit figures to make them look attractive by manipulating actual activities.

Earnings management, primarily through actual activities, can erode future performance (Graham et al., 2005; Roychowdhury, 2006). Earnings information that contains indications of manipulation can be biased and misleading. If investors use this information as the basis for investment decisions, the invested capital will not experience growth. By referring to the efficient market theory framework, the market will tend to evaluate incoming information. If the market can capture indications of manipulation of actual activities in the profit figures, the market will know the impact of these indications. Based on this premise, there is an assumption that the market will negatively respond to real earnings management. Then, the

prediction that real earnings management will reduce earnings informativeness.

Several previous studies have proven empirically that the market responds to earnings management events. Subekti (2012) confirms that MLR is done to avoid producing negative Earning Per Share (EPS). Yuliana & Alim (2017) MLR through discretionary costs erodes the quality of earnings and gets a negative response from investors. Dewi & Herusetya (2016) prove that MLR has a negative effect on the Earnings Response Coefficient (ERC) which indicates a decline in earnings quality (Dewi & Herusetya, 2016; Li, 2019). Based on this explanation, the hypotheses are as follows:

- H1: There is a negative reaction from the market on real earnings management
- H2: Real earnings management has negative consequences for informativeness profit

3. METHODS

This study uses a quantitative approach. The concept of this research uses event - studies based on the research of Kothari (2001) and Karuna (2019). The event - studies concept of Kothari (2001) examines the market reaction to specific information. Market reactions are analyzed by examining the cumulative abnormal return rate of the company's stock price before and after receiving specific information. In this study, the researcher tries to test the market reaction and earnings information on earnings figure manipulation using real earnings management techniques.

This research's population is non-financial companies listed on the Indonesia Stock Exchange (IDX) during the 2013-2017 period. The researcher determined the research sample using the purposive sampling technique. The criteria are the company that publishes complete financial statements during the period under study uses the rupiah currency and generates profits. The results of mapping and sample identification obtained 127 companies.

This study examines two variables, namely market reaction and earnings

informativeness. Both of these variables are dependent variables in this research model. Meanwhile, the independent variable tested in this research model is real earnings management. In this study, researchers measure market reaction by Cumulative Abnormal Return (CAR). The market reaction concept in this study refers to investors' perceptions of the earnings information it receives. This perception is represented in the form of the stock price due to the investor's assessment that captures good news or bad news on earnings information. Several previous studies used this measurement, namely research by Li (2019), Karuna (2019), Dewi & Herusetya (2016), and Yuliana & Alim (2017).

Meanwhile, the concept of earnings informativeness refers to the ability of profit figures to be used as an indicator of future cash flow predictions for the benefit of capital allocation Kothari, (2001) and Dechow, Ge, & Schrand (2010). Earnings informativeness in this study is measured using the Earnings Response Coefficient (ERC). Technically, ERC is taken from the regression *slope* of the prediction model between CAR and Unexpected Earnings (UE) (P. Dechow et al., 2010; Li, 2019; Rudiawarni et al., 2017).

Furthermore, the concept of real earnings management studied refers to Roychowdhury's research (2006). Roychowdhury (2006) states that real earnings management is a practice of manipulating real activities abnormally by managers to show the achievement of the targets set; however, on the other hand, it contains elements of misleading some stakeholders who rely on this information. Real earnings management indications are abnormal sales, production activities, and discretionary cost delays (Roychowdhury, 2006). The measurement of real earnings management in this study also refers to the model developed by Roychowdhury (2006). The model developed by Roychowdhury (2006) is a model that is considered robust (strong/consistent), especially in studies that test real earnings

management (Suprianto & Setiawan, 2017). Technically, the following is the mathematical calculation formulation for all variables in this study.

Dependent Variable

- Cumulative Abnormal Return
Calculating the abnormal return
 $AR_{it} = R_{it} - R_{m_{it}}$
Where:
 AR_{it} = abnormal return of firm i on day t
 R_{it} = real return of firm i on day t
 $R_{m_{it}}$ = market return of firm i on day t
- Calculating real returns
 $R_{it} = (P_{it} - P_{it-1}) / (P_{it-1})$
Where:
 R_{it} = real return of firm i on day t
 P_{it} = closing stock price of a company i on day t
 P_{it-1} = closing stock price of a company i on day t before t
- Calculating market returns,
 $R_{m_{it}} = (IHSG_t - IHSG_{t-1}) / (IHSG_{t-1})$
Where:
 $R_{m_{it}}$ = actual return of firm i on day t
 $IHSG_t$ = closing stock price of a company i on day t
 $IHSG_{t-1}$ = closing stock price of a company i on the day t before t

In this case, CAR_{it} is the CAR of a company i in year t and AR_{it} is the abnormal return of company i on day t . CAR is calculated five days before the financial statements are published and five days after the financial statements are published (Li, 2019).

$$CAR_i(-5 + 5) = \sum_{t=-5}^{t=+5} AR_{it}$$

Earnings Response Coefficient

ERC is measured using the slope of the regression coefficient of Cumulative Abnormal Return (CAR) and Unexpected Earnings (UE). The steps for calculating the ERC variable are:

- Calculating Unexpected Earnings
Unexpected Earnings are a proxy for accounting earnings that show its internal performance during a specific

period. The formula to calculate unexpected earnings are:

$$UE_{it} = (EPS_{it} - EPS_{it-1}) / (P_{it-1})$$

Where:

UE_{it} = unexpected earnings of firm i in year t

EPS_{it} = earnings per share of company i in year t

EPS_{it-1} = earnings per share of company i in the year before t

P_{it-1} = share price of company i in the year before t

- b. Estimating the slope of the CAR regression model (dependent) with UE (X)

The researchers calculate The Earnings Response Coefficient (ERC) from the slope α in the CAR relationship with the EU. Here is the equation for calculating ERC:

$$CAR_{it} = \alpha_0 + \alpha_1 UE_{it} + \varepsilon$$

Where:

CAR_{it} = cumulative abnormal return of firm i for ± 5 days

from the publication of financial reports

UE_{it} = unexpected earnings

ε = error

Independent Variable

The model for calculating MLR is as follows:

- a. Normal Sales

$$NS_t / A_{t-1} = a_0 + a_1 (1 / A_{t-1}) + \beta_1 (S_t / A_{t-1}) + \beta_2 (\Delta S_t / A_{t-1}) + \varepsilon_t$$

NS_t = Cash flows from operating activities in period t

A_{t-1} = Assets year $t-1$

S_t = Sales in year t

ΔS_t = Change in sales from year t to year $t-1$

- b. Normal Production

$$NP_t / A_{t-1} = a_0 + a_1 (1 / A_{t-1}) + \beta_1 (S_t / A_{t-1}) + \beta_2 (\Delta S_t / A_{t-1}) + \beta_3 (\Delta S_{t-1} / A_{t-1}) + \varepsilon_t$$

NP_t = Cost of goods sold + Δ Inventory in year t

A_{t-1} = Assets in year $t-1$

S_t = Sales in year t

ΔS_{t-1} = Change in sales from year $t-1$ to year $t-2$

- c. Normal Discretionary Expense

$$NDE_t / A_{t-1} = a_0 + a_1 (1 / A_{t-1}) + \beta_1 (S_{t-1} / A_{t-1}) + \varepsilon_t$$

NDE_t = Discretionary costs (research & development costs + costs

promotions + sales, general & administrative expenses) in year t

A_{t-1} = Assets in year $t-1$

S_{t-1} = Sales in year $t-1$

Testing the consequences of real earnings management on market and accounting aspects uses simple regression techniques. The following is the mathematical formula of the proposed research model :

Model I

$$CAR = \alpha + \beta_1 REM + \beta_2 ABN-CFO + \beta_3 ABN-PROD + \beta_4 DISEXP + \varepsilon$$

Model II

$$ERC = \alpha + \beta_1 REM + \beta_2 ABN-CFO + \beta_3 ABN-PROD + \beta_4 DISEXP + \varepsilon$$

4. RESULTS AND DISCUSSION

Description of Research Data

Based on identifying members of the population, 469 non-financial companies were listed on the Indonesia Stock Exchange (IDX) during the 2013-2017 period. The results of the sample mapping obtained 127 companies that met the specified criteria. The researchers can collect data based on the number of companies studied as many as 635 units during the period studied. Some data are indicated at the statistical testing stage as *outlier* data based on *casewise diagnostics* and *explore* statistical tests. This data is excluded from the observation model because it can bias the hypothesis testing results and interfere with concluding. The *outlier* data issued uses the panel data concept, namely the company multiplied by the study period. The number of identified *outliers* was 240. The researchers can test the 395 total final data. The following is a summary description of the research data:

Hypothesis Testing

The first model test results show that real earnings management does not affect cumulative abnormal returns. This

indication is based on the p-value of the real earnings management variable of 0.917. This figure shows a distribution more significant than the specified level of significance, namely 1%, 5%, and 10%. Another indication obtained from testing the first model is the t-statistic value that gets a negative value. This result suggests that real earnings management has negative implications for cumulative abnormal returns. These results indicate that the market tends to respond negatively to earnings figures which show real earnings management.

Furthermore, the results of the second model test, namely the consequences of real earnings management on earnings informativeness, show a significant effect. The researchers can see this indication by referring to the p-value smaller than the specified level of significance. Also, the t-statistic value shows a negative direction, which means that earnings management has implications for a decrease in the

Earnings Response Coefficient value(ERC). The results of the second model test show that empirically real earnings management can reduce earnings informativeness.

The researcher also examines the consequence model of real earnings management based on each form of real activity manipulation, according to Roychowdhury (2006). The result of the consequence model test of three types of real activity manipulation shows an indication of a significant impact of abnormal sales activities / operating cash flow(ABN-CFO) on cumulative abnormal returns. This indication is based on the acquisition of a p-value from ABN-CFO, which is smaller than the significance level. Abnormal sales activity empirically shows negative implications for cumulative abnormal returns. Based on these statistical tests, the researchers concluded an adverse reaction from the market on indications of manipulation in sales activities.

Table 1. Description of Research Data

Information	Amount
I. Non-Financial Companies listed on the IDX 2013-2017	469
II. Regularly publish complete financial reports	310
III. Report financial statements in the rupiah currency	238
IV. Generate profit during the period studied	127
Total companies that meet the criteria	127
Total companies * research period (2013-2017)	635
Outlier data (panel: company-year)	240
The number of samples that can be processed	395

Source: Data from www.sahamok.com processed

Table 2. REM-CAR Model I Test Results

Variables	t-stats.	p value	Note
BRAKE	-0.104	0.917	Ha Rejected

The predictor is significant when the p value is lower than 0.01; 0.05; and 0.1

Dependent variable: CAR

Source : Processed Data

Table 3. REM-ERC Model II Test Results

Variables	t-stats.	p value	Note
BRAKE	-2,984	0.003	Ha Accepted

The predictor is significant when the p-value is lower than 0.01; 0.05; and 0.1

Source : Processed Data

Table 4. Test Results of the CFO-ABN Model; PROD; DISEXP-CAR

Variables	t-stats.	p value	Note
ABN-CFO	-2,464	0.014	Ha Accepted
ABN-PROD	-0,209	0.835	Ha Rejected
ABN-DISEXP	1,157	0.248	Ha Rejected

The predictor is significant when the p-value is lower than 0.01; 0.05; and 0.1

Dependent variable: CAR.

Source : Processed Data

Table 5. REM-ERC Model Test Results

Variables	t-stats.	p value	Note
ABN-CFO	-1,157	0.248	Ha Rejected
ABN-PROD	2,426	0.016	Ha Accepted
ABN-DISEXP	-5,496	0,000	Ha Accepted

The predictor is significant when the p-value is lower than 0.01; 0.05; and 0.1

Dependent variable: CAR.

Source : Processed Data

Meanwhile, two other forms of real activity manipulation do not significantly impact cumulative abnormal returns. Abnormalities in production activities and discretionary costs get a p-value above the specified significance levels, namely 0.835 and 0.248. Manipulation on production activities has a negative effect, while manipulating discretionary cost activities shows a positive impact. The results of the consequence test of each real activity are in the table 4.

Researchers also tested the consequence model of each form of real activity manipulation on earnings informativeness. This model's test results indicate that abnormal production activities and discretionary costs have a significant impact on the Earnings Response Coefficient (ERC). The researchers can the p-value of abnormal production (ABN-PROD) and abnormal discretionary expenses (ABN-DISEXP), which are smaller than the significance level of 0.016 and 0.000. The implications of the two forms of real activity manipulation show positive and negative consequences on earnings informativeness. Manipulation of production activities has positive implications; meanwhile, manipulation of discretionary cost activities has a negative impact on earnings informativeness. For the manipulation of

sales activities, there is no significant effect on earnings informativeness. This result refers to the p-value of ABN-CFO, which has a distribution above the specified level of significance. Furthermore, abnormal sales activity shows negative implications for earnings informativeness. The results of testing this model are in table 5.

DISCUSSION

Market Reactions to Real Profit Management

The first model's hypothesis test results indicate that the entire real activity manipulation with cumulative abnormal returns shows a negative but insignificant effect. Meanwhile, of the three types of real activity manipulation, only sales activity manipulation significantly impacts cumulative abnormal returns. Indications of manipulation of real activities with abnormal sales activity parameters received a negative response from the market. These results confirm the premise that investors can perceive a tendency to manipulate selling activities. The results of this research show indication that are consistent with several previous studies, namely the negative effect of real earnings management on cumulative abnormal returns (Dewi & Herusetya, 2016; Karuna, 2019; Kothari, 2001; Li, 2019; Subekti,

2012; Yuliana & Alim, 2017). A negative association indicates the market's ability to capture the substance of the information contained in the financial statements. This association means that the market does not necessarily rely on earnings information; more than that, investors show their analysis of the information from the financial reports that reach them. From the efficient market hypothesis theory perspective, this study's results reinforce the semi-strong market efficient form. The empirical evidence shows that abnormal returns are negative when responding to earnings information resulting from manipulation of real activities. It is consistent with several previous research results (Yuliana & Alim, 2017; and Rudiawarni et al., 2017).

The purpose of real activities manipulation is to avoid reporting losses or to generate positive profits consistently. Management tends to keep trying to create a positive profit even at a minimal level. The management avoids falling share prices, getting a bonus, or perhaps avoiding other adverse consequences (Jensen & Meckling, 1976; Panda & Leepsa, 2017). Manipulative behavior from management can represent the presence of *adverse selection* and moral hazard. Based on the theory of efficient markets, investors need to capture the information content of earnings and adjust it to share prices. The results of this study, the capital market in Indonesia can be said to capture biased profit figures due to manipulation of real activities.

The orientation of the profit rate at a low level will only have an impact on short-term performance. On the other hand, investors who are also risk-averse view that profit does not necessarily indicate a good thing. A more rigorous analysis is needed to obtain the substance from earnings information. For investors, profits that do not have implications for long-term *value* are not profitable. Meanwhile, investors' negative response may indicate a delay in decisions based on profits that only have short-term benefits.

The Consequences of Real Profit Management on Earnings Informativeness

Based on the second hypothesis test results, empirically, the researchers can say that real earnings management has a significant effect on earnings informativeness. The total Real Earnings Management (MLR) model shows a negative association with earnings informativeness. These results indicate that manipulation through real activities has a negative impact on the quality of accounting information represented by earnings quality. The negative association shows the tendency that the more the indication of manipulation through real activities manipulation, the lower the Earnings Response Coefficient (ERC) level. These results are in line with Rowcoudhurry's (2006) finding that financial statement manipulation can erode accounting information quality. Distorted profit figures will lead to biased information. This condition can reduce the usefulness of the financial statements themselves. In particular, the predictive power of future return on cash flows (Li, 2019).

Researchers also analyzed the impact of each real activity manipulation on earnings quality. Manipulation on sales activities shows a negative but insignificant effect. Abnormalities in production activities show a positive influence on earnings quality. These results are consistent with (Firmansyah & Herawaty, 2016; Firmasnyah (2017). Meanwhile, manipulation of discretionary costs shows a negative association with earnings quality.

The researchers can explain the causal relationship between real activities manipulation and earnings quality by the efficient market hypothesis's theoretical perspective (Fama, 1969; 1970; 1976; 1991). This theory explains that stock prices reflect all available information, both historical, public, and private (individual). The efficient market hypothesis divides into three market efficiency levels: markets

with weak forms and semi-strong and strong forms (Gumanti & Utami, 2002).

The results of this study confirm that the negative consequences of financial statement fraud. The researchers can explain that the manipulation of financial statements can be represented by a regression slope between Cumulative Abnormal Return (CAR) and Unexpected Earnings (UE). The slope of the regression is the earnings quality parameter. The quality of earnings will decline further when there is manipulation. Based on the premise of the theory of the efficient market hypothesis above, the research results confirm the semi-strong form concept. This is because financial reports, which are historical information and public information, can reflect indications of such manipulation, with a decreasing slope (ERC) indicator. The results of this research are consistent with several previous research results, namely study by Li (2019), Roychowdhury (2006), Dewi & Herusetya (2015), Karuna (2019), and Surbekti (2012).

5. CONCLUSION

This study finds empirical evidence regarding the market and accounting consequences of real earnings management. The market responds negatively to earnings information, which is indicated by manipulating real activities. However, the reaction is not empirically significant. Another indication that was found was the negative consequence of real earnings management on earnings informativeness. These results support the theory that profit figures resulting from real activities manipulation can erode accounting information quality.

The researcher also finds other empirical evidence when examining the consequences of each of the real activities manipulations. The manipulation of selling activities with abnormalities in operating cash flows has an adverse reaction from the market. Meanwhile, two other forms of manipulation of real activities did not

significantly respond from the market. The accounting consequences of two of the three forms of real activity manipulation, namely abnormal production activities and discretionary costs, show a significant effect on earnings informativeness. Abnormalities in production activities positively impact earnings informativeness, while abnormalities in discretionary expenses show negative consequences.

Theoretically, this study obtains results that can confirm the efficient market hypothesis theory. Based on this study's results, the researchers can conclude that the Indonesian capital market is at a semi-strong efficiency level. There is an adverse reaction from the market on earnings information that contains real earnings management elements, especially in sales activities with abnormal operating cash flows. These results indicate that the market can capture indications of real earnings management. Meanwhile, the premise is that real activity manipulation can erode earnings information. Profit figures become meaningless or meaningless. This condition means that the profit rate cannot be relied on for capital allocation decisions.

This study opens opportunities for further researchers on the topic of consequences of earnings management. In further research, real earnings management's future consequences can be tested for empirical evidence using the Future Earnings Response Coefficient (FERC) parameter. Furthermore, subsequent studies can also examine structural models that associate real earnings management's impact on firm value through financial performance.

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