Earnings management is one of the agency issues that occur because of the separation between shareholders and the company management. This happens because of the conflict of interest between the manager (agent) and the owner of the company (principal) that encourages managers to intervene in financial reporting. One of the objectives of earnings management is to influence market performance which is a company performance parameter based on long-term return on investment (Oktorina and Hutagaol, 2008). Managers want to provide the best information about the prospect of earnings to investors, so investors can judge that the company does have a good performance.

Earnings management is the actions of managers in presenting earnings through the selection of sets of accounting policies and can naturally maximize their utility or market value of a company (Scott, 2015). Earnings management can be done in two ways, which is accrual and real earnings manage-
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Managers do both of them to manipulate earnings and cash flows so that it will affect company performance.

Cash flows from operating activities are the major revenue earners of a company that determines net income (Yocelyn and Christiawan, 2012). According to Yocelyn and Christiawan (2012), the level of profit and internal conditions of the company is one of the internal factors that can affect stock returns. Information on the profit and cash flow of companies that contains information will cause investors to buy and sell shares of the company as reflected in the price and return of the company’s stock.

Several previous studies have attempted to identify the relationship between earnings management and market performance. Koyuimirsa and Raharja (2011), obtained empirical evidence that accrual and real earnings management through production costs can affect market performance. Redjab, et al. (2016), also found other empirical evidence that earnings management with a tendency to increase income and income decreasing does not affect market reaction and market risk.

The existence of a research gap on the relationship of earnings management with market performance motivates researchers to investigate the effect of accrual earnings management and real earnings management through operating cash flow towards market performance. The researcher uses those both earnings management techniques because according to Zang (2006), the manager retains the manipulation techniques of accrual and manipulation of real action to achieve the desired profit target. Geraldina (2013), has also proved that there is a possibility that the use of accrual earnings management and earnings management can substitute or complement each other.

This study has several goals related to earnings management relationship towards market performance. First, to prove that accrual earnings management has a positive effect on market performance. Second, to prove that real earnings management through operating cash flow has a positive effect on market performance.

LITERATURE REVIEW

Market Performance and Earnings Management

Market performance is one of the financial performance that describes the fundamental condition of the company. Market performance is a company performance parameter based on long-term return on investment (Oktorina and Hutagaol, 2008). Managers manipulate company earnings to influence investor’s perception so that earnings management can affect market performance.

The technique of earnings management consists of the accrual and real earnings management. Accrual earnings management is performed by managers by appraisement and subjectivity in choosing accounting policies to create financial statements that may affect company performance but does not involve changing operations (Kothari, et al., 2016). Accrual earnings management use accrual concept consists of discretionary accrual and nondiscretionary accrual. Discretionary accruals is the recognition of accrual income and free expense, and it’s an option of management policy, while nondiscretionary accrual is a fair profit recognition, not influenced by management policies, subject to generally accepted accounting standards (Hidayati and Zulaikha, 2003).

Real earnings management is a technique of manipulating company activity that will impact cash flow reported in the period. Real earnings management through operating cash flow is done by sales manipulation. This strategy is done by offering price discounts and giving soft credit terms. Real earnings management through operating cash flow affects the increase in sales volume and profit, but it impacts in decreasing cash flow operating activity of the current period (Roychowdhury, 2006).

Relationships Accrual Earnings Management and Market Performance

The higher the level of earnings management accruals made, then the market performance of a company will decrease further. According to Subramanyam (2014), if markets can differentiate
the opportunistic and efficient discretionary accruals, then opportunistic discretionary accruals will negatively relate to stock returns, and otherwise, efficient discretionary accruals will be positively associated with stock returns. Joni and Jogiyanto (2009), found that high earnings management causes low stock return when considering investor’s intelligence factor.

\[ H_1 : \text{Accrual Earnings Management has a negative effect on the market performance.} \]

**Relationship Real Earnings Management through Cash Flow Operation Activities and Market Performance**

The higher the level of real earnings management through the operating cash flow, the market performance will increase. Real earnings management can affect the company’s cash flow and earnings that impact on market performance. Oktorina and Hutagaol (2008) found that the market performance of firms that manipulate real activity through operating cash flow is higher than the company’s market that does not manipulate real activity by operating cash flows. Anggraeni, et al. (2015) also supports that companies that manipulate real activity through operating cash flow have high market performance. However, unlike Zulaeha’s (2017), a study that the manipulation of real activity negatively affects market performance.

\[ H_2 : \text{Real Earnings Management through Cash Flow Operations has a positive effect on market performance.} \]

**METHOD**

**Types of Research and Sample Selection**

This research is quantitative research. The populations in this study are all manufacturing companies listed on the Indonesia Stock Exchange during the period 2012-2016. Based on the population, a sample of companies is selected based on several criteria, i.e. manufacturing companies that are consistently listed on the Indonesia Stock Exchange and publish their full annual financial statements from 2012 to 2016, companies classified in the real estate, property, construction, travel, transportation and financial services are not included in the sample because of their financial structure and characteristics, as well as different accrual characteristics, the daily closing price of the company’s stock is available during the estimation and observation period, and in order to obtain a strong market performance value, then selected companies whose shares actively traded during the trading period. The trademark characteristic of an actively traded stock is a stock which has a trading frequency of at least 300 times or more in each year (SE-03 / BEJ / II-1/ 1994 in Farandani and Margasari, 2016).

**HYPOTHESIS ANALYSIS AND TESTING METHOD**

**Dependent and Independent variables**

The dependent variable in this research is market performance. Market performance is measured using CAR (cumulative abnormal return). According to Jogiyanto (2010), a cumulative abnormal return is an abnormal return calculated from period to period that is cumulative from an abnormal return. CAR in this study is an accumulation of abnormal return for one year (12 months). CAR can be formulated as follows.

\[ t\text{CAR}_{i,t} = \sum_{t=1} AR_{i,t} \]

**Notes:**

\[ CAR_{i,t} : \text{Cumulative Abnormal Return securities} \]
\[ AR_{i,t} : \text{Abnormal Return for securities} \]

The independent variable in this study consists of two variables, namely accrual earnings management (AEM) and real earnings management through operating cash flow (REM). Accrual earnings management in this study is proxied by instrumental variable (IV) approached by Kang and Sivaramakrishnan (1995). The IV approach can be formulated as follows.

By means of:

\[ AB_{i,t} = \alpha_0 + \alpha_1 \left( \frac{\delta_2 \text{REV}_{i,t}}{A_{i,t-1}} \right) + \alpha_2 \left( \frac{\delta_2 \text{EXP}_{i,t}}{A_{i,t-1}} \right) + \alpha_3 \left( \frac{\delta_2 \text{GPPE}_{i,t}}{A_{i,t-1}} \right) + v_{i,t} \]

where:

- \( AB_{i,t} \) is the dependent variable representing accrual earnings management.
- \( \alpha_0, \alpha_1, \alpha_2, \alpha_3 \) are coefficients to be estimated.
- \( v_{i,t} \) is the error term.

**METHOD**
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\[ \delta_1 = \frac{\text{ART}_{i,t-1}}{\text{REV}_{i,t-1}}, \quad \delta_2 = \frac{\text{OCAL}_{i,t-1}}{\text{EXP}_{i,t-1}}, \quad \delta_3 = \frac{\text{DEP}_{i,t-1}}{\text{GPPE}_{i,t-1}} \]

Notes:
- \( AB_{i,t} = TA_{i,t} \): Accrual balance = \( CA_{i,t} - \text{CASH}_{i,t} - \text{CL}_{i,t} - \text{DEP}_{i,t} \)
- \( A_{i,t-1} \): Total assets for a firm I in year t-1.
- \( CA_{i,t} \): Current assets for a firm I in year t.
- \( \text{CASH}_{i,t} \): Cash for firm I in year t.
- \( \text{CL}_{i,t} \): Current liabilities for a firm I in year t.
- \( \text{DEP}_{i,t-1} \): Depreciation and amortization for a firm I in year t-1.
- \( \text{ART}_{i,t-1} \): Account receivable for a firm I in year t-1.
- \( \text{REV}_{i,t} \): Revenues for firm I in year t.
- \( \text{OCAL}_{i,t-1} \): Current assets - account receivable - cash - current liabilities for a firm I in year t-1.
- \( \text{EXP}_{i,t-1} \): Net sales - operating profit - depreciation expense for a firm I in year t.
- \( \text{GPPE}_{i,t-1} \): Gross fixed assets for a firm I in year t.

Non-discretionary accrual (AND) is defined as the fitted value of the above equation, as follows.

\[ \text{AND}_{i,t} = \alpha_0 + \alpha_1 \left( \delta_1 \frac{\text{REV}_{i,t}}{A_{i,t-1}} \right) + \alpha_2 \left( \delta_2 \frac{\text{EXP}_{i,t}}{A_{i,t-1}} \right) + \alpha_3 \left( \delta_3 \frac{\text{GPPE}_{i,t}}{A_{i,t-1}} \right) \]

The discretionary accrual (AD) is defined as the residual of the above equation, as follows.

\[ \text{AD}_{i,t} = \frac{\text{TA}_{i,t}}{A_{i,t-1}} - \left[ \alpha_0 + \alpha_1 \left( \delta_1 \frac{\text{REV}_{i,t}}{A_{i,t-1}} \right) + \alpha_2 \left( \delta_2 \frac{\text{EXP}_{i,t}}{A_{i,t-1}} \right) + \alpha_3 \left( \delta_3 \frac{\text{GPPE}_{i,t}}{A_{i,t-1}} \right) \right] \]

The indication that the company performs accrual earnings management (AEM) according to Sumantri and Purnamawati (2013) is as follows, positive and significant AD values show engineering raising earnings, while negative and significant AD scores show engineering lowering earnings. If no AEM practice occurs, then the magnitude of AD = 0.

Real earnings management through operating cash flow (REM) is measured by Roychowdhury (2006) model. The regression model for cash flows of normal operating activities replicates from Roychowdhury (2006) research, which is as follows.

\[ \frac{\text{CFO}_{t}}{A_{t-1}} = \alpha_3 + \alpha_4 \left( \frac{1}{A_{t-1}} \right) + \beta_1 \left( \frac{S_t}{A_{t-1}} \right) + \beta_2 \left( \frac{\Delta S_t}{A_{t-1}} \right) + \epsilon_t \]

Information:
- \( \text{CFO}_{t} \): operating cash flow in year t
- \( A_{t-1} \): Total assets in year t-1
- \( S_t \): Revenues in year t
- \( \Delta S_t \): Revenues in year t minus revenues in year t-1
- \( \alpha_0, \alpha_1, \beta_1, \beta_2 \): Constants
- \( \epsilon_t \): Error term in year t

This study focuses on abnormal cash flow operations. Abnormal operating cash flows are the difference from the actual operating cash flow value scaled to the total assets of one year prior to the test, and the normal operating cash flow is calculated using the estimated coefficient of the above model equation. According to Oktorina and Hutagaol (2008), if the average cash flow of abnormal operation of all samples is below 0 and significant, then the sample is expected to manipulate real activity through operating cash flow while the sample above 0 means the samples are suspected not to do manipulation of real activity through operating cash flow.
Method of analysis and hypothesis testing

Cumulative abnormal return (CAR) data, accrual earning management (AEM) and real earning management through operating cash flow (REM) has been calculated, then tested by classical assumption test. This classical assumption test is aimed to test the data used has normally been distributed, no symptoms of multicollinearity, no autocorrelation, and there are no symptoms of heteroscedasticity.

This research uses one sample t test to detect accrual earnings management and real earnings management through operating cash flow. The requirement of one sample t-test is normally distributed sample data. Furthermore, to test the effect of accrual earnings management and real earning management through operating cash flow towards market performance using multiple regressions tests.

H1 and H2 hypothesis testing are aimed to test the effect of accrual earnings management and real earnings management through cash flow of operating activities towards market performance. Here is a model of the regression equation used in this study.

\[ \text{CAR}_{it} = \alpha + \beta_1 \text{AEM}_{it} + \beta_2 \text{REM}_{it} + \varepsilon \]

Information:
\( \alpha \) : Constants
\( \text{CAR} \) : Cumulative Abnormal Return
AEM : Accrual Earnings Management
REM : Real Earnings Management through Cash Flow Operations Activities
\( \varepsilon \) : Error

RESULT

Research Data

The population in this research is 154 manufacturing companies that go public and listed on Indonesia Stock Exchange period 2012-2015. After filtering sample, it is obtained 52 companies to be tested in this research.

Descriptive statistics

The variables in this study consisted of market performance proxied by Cumulative Abnormal Return as a dependent variable, and accrual earning management and real earnings management through operating cash flow (REM) as an independent variable. Descriptive statistics of the variables are presented in Table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR</td>
<td>247</td>
<td>-0.980</td>
<td>0.971</td>
<td>-0.025</td>
<td>0.380</td>
</tr>
<tr>
<td>AEM</td>
<td>247</td>
<td>-2.848</td>
<td>1.455</td>
<td>0.019</td>
<td>0.286</td>
</tr>
<tr>
<td>REM</td>
<td>247</td>
<td>-1.098</td>
<td>0.429</td>
<td>-0.020</td>
<td>0.156</td>
</tr>
<tr>
<td>Valid N</td>
<td>247</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on descriptive statistical results, AEM has a mean value of 0.019, the lowest AEM value of -2.848, the highest AEM value of 1.455, and the standard deviation of 0.286. REM has a mean value of -0.020, the lowest REM value of -1.098, the highest REM value of 0.429, and the standard deviation of 0.156. Based on the positive AEM mean indicates that the company is proven to increase earnings through discretionary accruals. While the REM value below 0 indicates that the company is proven to conduct real earning management by operating cash flow.

Cumulative Abnormal Return (CAR) of all samples has mean (mean) of -0.025, the lowest CAR value is -0.980, the highest CAR value is 0.971, and the standard deviation of 0.380. Based on the average CAR value marked negative means that the average sample company gets a negative reaction from investors during the period 2012-2016.
Accrual and Real Earnings Management Through Cash Flow Operating Activity

HYPOTHESIS TESTING RESULTS

The indication of accrual earnings management and real earnings management through cash flow of operating activities

The researcher examines whether or not the company indication of accrual earnings management (AEM) during the period of research before conducting hypothesis testing 1. Here is the result of hypothesis testing 1.

Table 2 Test Result One Sample t Test: AEM Value (1)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEM</td>
<td>247</td>
<td>0.019</td>
<td>0.286</td>
<td>0.018</td>
</tr>
</tbody>
</table>

Source: Processed Data, 2018

Table 3 Test Result One Sample t Test: AEM Value (2)

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>5% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEM</td>
<td>1.053</td>
<td>246</td>
<td>0.294</td>
<td>0.019</td>
<td>0.018 - 0.020</td>
</tr>
</tbody>
</table>

Source: Processed Data, 2018

Based on the above test results it can be seen the mean value (mean) of AEM or the value of accrual discretionary (AD) or that is equal to 0.019 with a significance of 0.294. A positive AEM value indicates the company performs earnings management by raising earnings, but greater significance value than sig = 0.05 indicates that the accrual earning management action is not significant.

The researcher also tested whether or not the company indicates of real earnings management through operating cash flow (REM) during the period of research before conducting hypothesis testing 2. The results of hypothesis 2 testing are as follows.

Table 4 Test Results One Sample t-Test (two-tailed): REM value (1)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>REM</td>
<td>247</td>
<td>-0.020</td>
<td>0.156</td>
<td>0.010</td>
</tr>
</tbody>
</table>

Source: Processed Data, 2018

Table 5 Testing Results One Sample t-Test (two-tailed): REM value (2)

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>5% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>REM</td>
<td>-2.054</td>
<td>246</td>
<td>0.041</td>
<td>-0.020</td>
<td>-0.021 - -0.020</td>
</tr>
</tbody>
</table>

Source: Processed Data, 2018
Based on the above test results, it can be seen the average value (mean) of REM is equal to -0.020 with a significance of 0.041. The negative REM value with significance below sig = 0.05 indicates that the company performs real earnings management through operating cash flow.

Relationship of Accrual Earnings Management and Real Earnings Management through Cash Flows Operations Activities Against Market Performance

The simultaneous significance test (F test) in this research is conducted to see the effect of simultaneously accrual earnings management (AEM) and real earnings management through operating cash flow (REM) to cumulative abnormal return (CAR). Here are the results of simultaneous significance testing (Test F).

Based on the above table, the significance value of Test F is 0.620 (above 0.05). The value of this significance indicates that the accrual earnings management and real earnings management through cash flow operating activities together do not affect market performance.

Partial significance test (t-test) is also conducted in this research to know the influence of each independent variable that is accrual earnings management (AEM) and real earnings management through cash flow of operation activity (REM) individually to market performance. Here are the results of partial significance testing (Test t).

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>0.139</td>
<td>2</td>
<td>0.069</td>
<td>0.479</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>35.348</td>
<td>244</td>
<td>0.145</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>35.487</td>
<td>246</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: CAR
b. Predictors: (Constant), REM, AEM

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
</tbody>
</table>
| 1      | (Constant)                  | -0.022                    | 0.024 | -0.889 | 0.375
|        | AEM                         | -0.023                    | 0.089 | -0.264 | 0.792
|        | REM                         | 0.134                     | 0.162 | 0.055  | 0.827 | 0.409

a. Dependent Variable: CAR
Source: Processed Data, 2018

Based on the above table, accrual earnings management (AEM) has a regression coefficient value of -0.023 with a significance value of 0.792. The negative regression coefficient value means that the accrual earnings management has a negative effect on the market performance, but the significance value is greater than 0.05, so the effect is not significant. Therefore, it can be concluded that the accrual earnings management does not negatively affect the market performance.

Real earnings management through operating cash flow (REM) has a regression coefficient value of 0.134 with a significance value of 0.409. The positive regression coefficient value indicates that...
Accrual and Real Earnings Management Through Cash Flow Operating Activity

real earnings management through operating cash flow has a positive effect on market performance, but the significance value is greater than 0.05, so the effect is not significant. Therefore, it can be concluded that real earnings management through operating activities has no positive effect on market performance.

DISCUSSION

The results show that managers prefer real earning management techniques through operating cash flow rather than accrual earnings management in earnings management. This is consistent with Graham’s, et al. (2005) findings that managers are more likely to choose to manipulate earnings through real activities than accrual earnings management.

Managers move from accrual earnings management to real earnings management due to several things, namely (Cohen and Zarowin, 2010): (1) accrual-based earnings management tends to attract the attention of auditors and regulators, (2) using an accrual-based earnings management strategy alone not enough to achieve profit targets so it must be equipped with a real earning management strategy. Managers using real earnings management techniques are enabled to avoid the detection of accrual-based earnings management by auditors and regulators.

Ratmono’s (2010) study provides empirical evidence that qualified auditors can detect accrual earnings management by clients, but they are unable to detect real earnings management by clients. The empirical evidence attested by Graham, et al. (2005); Cohen and Zarowin (2010); and Ratmono (2010), reinforcing the reasons or causes of the company indicated real earnings management, but not indicated to make accrual earning management.

This has implications for the company’s cash flow statement as an indicator of the company’s tendency to real earnings management. Management using real earning management techniques through operating activities (sales manipulation) to achieve the desired profit target, the cash flow statement shows that the company’s cash flow is decreasing or its value is below the number 0. It is seen from its financial statements that have operating cash flow which is different from normal operating cash flow. Stakeholders, such as investors and auditors, may pay attention to the company’s cash flow statement to detect real earnings management.

The result of hypothesis testing shows that there is no negative effect between accrual earnings management and market performance, and there is no positive effect between real earnings management through operating activities and market performance. The results of this study are consistent with the study of Redjab, et al. (2016), which found that there is no significant relationship between earnings management practices and cumulative abnormal returns in manufacturing companies listed on the BEI. The results of Sumantri and Purnamawati (2013) have also proved that earnings management at IPO, one year after IPO and two years after IPO simultaneously or partially no significant effect on stock return.

This research takes the period of research on the company’s market performance in long-term that is for five years (period 2012-2016). The effect of real earning management through operating cash flow is not significant to market performance, allegedly caused by in the long term there is more relevant information available for investors to make decisions, so that information from the financial statements become less relevant. According to Foster (1986) in (Sumantri and Purnawati, 2013), other factors with the greater influence on market reaction are forecasting of firm officials, dividend announcements, funding announcements, government-related announcements, investment announcements, employment announcements, and an announcement of the merger.

The indication that the company performs earnings management by operating cash flow proves that there is a condition of information asymmetry. Managers perform earnings management that affects the cash flow information and corporate profits reported in the period concerned. Conditions when managers are more informed about the fundamental condition of the company than others describe the condition of adverse selection within the company. While the conditions when managers make earnings management without the knowledge of the
principal describes the moral hazard conditions that occur within the company.

The result of the research shows that the unproductive relationship of earnings management with market performance implies the theory of earnings management motivation. This is assumed because the earnings management motivation is not oriented to investor reaction with stock price correction, but on other factors, as explained by Scott (2015), bonus purpose, political motivation, taxation motivation, CEO change, and Initial Public Offering (IPO) Company.

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSION
This study was conducted to examine the effect of accrual earnings management relationship and real earnings management through cash flow of operating activities on market performance with a sample consisting of 52 manufacturing companies listed on the Indonesia Stock Exchange in the period 2012-2016. The results show that accrual earnings management has no negative effect on market performance. In addition, the results of the study also show that real earnings management through operating cash flow has no positive effect on market performance.

Earnings management conducted by managers proved to not affect market performance because in the long term there is more information relevant to investors to make decisions other than information from financial statements. The company is proven to earn real earnings management through the cash flow of the company’s operations to increase profits, but its positive influence on market performance is not significant. This is because the earning management motivation is not oriented in providing information to investors, so investors react to provide stock price correction, but on other factors, such as tax savings, increased corporate performance to change CEO, and others.

RECOMMENDATION
Regarding of these limitations, the suggestion for further research is to explore real earnings management techniques consisting of sales manipulation, discretionary load reduction, and excessive production in research objects, so there is the possibility that real earnings management has a significant relationship to market performance. Then, further investigators may consider other factors such as transaction costs, investor experience, earnings announcements, and analytical engagements that might be able to influence market performance on earnings management.

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