Accrual Earnings Management and Real Earnings Management: Increase or Destroy Firm Value?

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Abstract

This study aims to investigate empirically the effect of accrual earnings management and real earnings management on firm value. The analysis technique used is multiple linear regression analysis. The research samples were manufacturing firms listed on the Indonesia Stock Exchange during the period of 2013 to 2017. The analysis tool used is Multiple Linear Regression. The test results showed that accrual earnings management measured by discretionary accruals did not affect on value of the firm. Real earnings management was found to have a negative effect on firm value.

Keywords: Accrual Earnings Management; Real Earnings Management; Firm Value

Introduction

Firm value is one of the important components for firms, especially public firms. The market can assess the firm's performance using firm value (Mahendra et al., 2012), if the firm is considered to have an attractive value, investors will be interested in investing in the firm. Therefore, the firm has a high motivation to increase the value of its firm. Firm value is one indicator to assess the success of a firm. The value of the firm is related to the firm's stock price (Fama, 1978), therefore the prosperity of shareholders can be seen from the value of the firm. High firm value shows a higher level of prosperity for its shareholders. Stock prices can be a measure of the value of the firm because it is considered to reflect the true value of the firm's assets. Firms need to keep the value of the firm attractive to attract investors. If the value of the firm falls, it shows that investor confidence in the firm also decreases and will threaten the survival of the firm.

The owner of the firm needs another party that has the competence to manage the firm so that the value of the firm can increase. Agency theory (Jensen and Meckling (1976) explains that firm owners (principals) employ other people, namely managers (agents) to do work in accordance with the interests of the owner of the firm. Manager can then be assessed for performance from the profit figures achieved in a certain period. Succeeding in exceeding the profit target, the manager will be considered to perform well and the market will respond positively to the results of the achievement Signaling Theory explains that information that is considered good news by the market will be responded positively, increasing stock prices and firm value. also explained that the reported profit of the manager would be able to increase the value of the firm, if the manager did not succeed in achieving the profit target, the manager
would be considered not performing well and would be economically sanctioned until the contract was terminated by the owner of the firm. Managers are said to be concerned with self-interests (Esenhardt, 1989) will tend to avoid sanctions by trying to reach profit targets in opportunistic ways. The opportunistic way to get the desired profit tag is called earnings management.

Earnings management is a choice of accounting policies or concrete actions that affect income so that it can achieve certain profit goals reported in financial statements (Scott, 2015; 445). Earnings management carried out using accounting policies is called accrual earnings management, while earnings management carried out through the firm's real operational activities is called real earnings management. These practices are used by managers to achieve certain profits so that it will have an impact on market valuation and ultimately the value of the firm.

According to Healy and Wahlen (1999) earnings management can occur when managers use valuation and structuring transactions to change financial statements so that some parties mislead the firm's economic performance or influence contractual agreements that depend on accounting figures. Accrual earnings management has an accrual reverse in the period after manipulation. The increase in profit at this time will result in a decrease in profits in the next period. Conversely, a decrease in current profits generated through the accrual method will result in an increase in profits in the next period. Earnings management through the accrual method does not affect the firm's cash flow. Accrual can be divided into two components, namely non-discretionary accruals and discretionary accruals. Non-discretionary accruals are accruals that are determined by the normal economic conditions of the firm (Xiong, 2006). Discretionary accruals are accruals that are not regulated in the contract and are the manager's choice policy. Therefore, discretionary accruals are assumed to be the result of manager's opportunism.

Earnings management is carried out by managers to obtain the desired profit, one of the goals is to mislead the market regarding the actual performance of the firm (Caylor et al., 2015). When the market cannot detect manager's opportunistic behavior, the market will assume the profit figures presented by managers are a result of good performance. Ridawan and Hunardi (2013), Indriani et al., (2014), and Susanto and Christiawan (2016) found that accrual earnings management carried out by managers managed to mislead the market and have a positive impact on firm value. When the market is less sophisticated and does not analyze information in advance whether an information is valid or not (Marfuah, 2006). In contrast to the previous findings of Siallagan and Machfoedz (2006), Siallagan (2009), and Abbas et al., (2017) it was found that when managers generate profits by manipulation the market will give a negative response so that it can reduce the value of the firm. In line with the statement stated by Hartono (2017: 614-615) before giving a response to information published by managers, a sophisticated market will first analyze the validity of that information. If information on published earnings is detected obtained through earnings management, the market will react negatively by reducing the value of the firm. In addition to positive and negative themes from previous literature Challen and Siregar (2012) and Dewi et al., (2016) found no relationship between accrual earnings management and firm value. This study expects that accrual earnings management will have a negative impact on firm value.

Real earnings management is another action choice that managers can choose to obtain the desired profit target. Real earnings management is a practice that deviates from the normal operation of the firm carried out by managers to mislead some stakeholders to believe that the reporting objectives have been fulfilled in normal operations (Rowchowdhury, 2006). Real earnings management has advantages over accrual earnings management which is not easily detected by regulators or auditors and it is easier to achieve the desired profit target. The disadvantage of real earnings management is that the worse impact is due to the firm's future cash flow. Therefore, this manipulation must be really anticipated by stakeholders because it endangers the survival of the firm. Managers have different considerations in
choosing both earnings manipulation techniques, managers also tend to use both techniques to achieve the desired profit target (Zang, 2012). Earnings management can be done in three ways (Roychowdhury, 2006), namely; sales manipulation, manipulation by reducing discretionary expenses, and manipulation through the production process by overproduction.

Ferdawati (2009) found that real earnings management has a positive effect on firm value. The market has not succeeded in detecting this manipulation practice so that it misleads the market and gives a wrong assessment to the firm. On the other hand, Partami et al. (2015) actually found that real earnings management had a negative impact on firm value. This finding is in line with the statement of Rowchowdhury (2006) which states that real earnings management can reduce firm value because this form of earnings manipulation can increase profits in the current period but has a very bad impact on the firm's future cash flows. Therefore, earnings management is different from accrual earnings management which only expects reversal accruals. This worse impact will make the market more anticipate the form of manipulation through real activities so as not to mislead them and provide a negative reaction if the firm is indicated to practice real earnings management. This study expects that real earnings management has a negative impact on firm value.

This study aims to test and analyze empirically as to what the impact of accrual earnings management and real earnings management by managers on firm value. The research samples used were manufacturing firms listed on the Indonesia Stock Exchange during 2013 to 2017. In addition, researchers also included control variables that could have an impact on firm values namely firm size, leverage, Return on Assets (ROA), and audit quality.

**Methodology**

**Sample and Data**

The initial sample of this study was all manufacturing firms listed on the Indonesia Stock Exchange (IDX) during the period 2013 to 2017. The selection of manufacturing firms is related to one measure of real earnings management, namely production costs, which are only found in manufacturing firms. The sample was then selected using a purposive sampling method with criteria namely; 1) Firms that use the rupiah currency in annual financial statements, 2) The firm publishes the data needed in this study in full. 3) The firm did not experience losses during the observation period. A summary of the results of the sample selection process is presented in Table 1.

<table>
<thead>
<tr>
<th>No</th>
<th>Kriteria Sampel</th>
<th>Jumlah Perusahaan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manufacturing firms listed on the Indonesia Stock Exchange during 2013-2017</td>
<td>123</td>
</tr>
<tr>
<td>2</td>
<td>Do not use rupiah currency on annual financial statements</td>
<td>18</td>
</tr>
<tr>
<td>3</td>
<td>Incomplete published data</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>The firm suffered a loss</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Total Observation for 5 Years</td>
<td>270</td>
</tr>
</tbody>
</table>

The data used is a secondary data category. Sources of financial data are obtained from financial statements published on the official website of the Indonesia Stock Exchange (www.idx.co.id) and the firm's website. Market data used to calculate firm value is obtained from the Yahoo Finance website (http://finance.yahoo.com). Yahoo Finance is a world-class corporate news and business information web site originating from America and a business division of the Yahoo firm.
Measurement

Dependent variable is firm value. Measuring the value of a firm using the Tobin's Q Ratio follows Herawati (2008). The value of the firm using the Tobin's Q ratio is estimated using the following equation;

\[ Q = \frac{MVE + D}{BVE + D} \]

Where,
- \( Q \) = Firm value
- \( MVE \) = equity market value
- \( BVE \) = equity book value
- \( D \) = Book value of total debt.

The dependent variable is accrual earnings management and real earnings management. Accrual earnings management is an act of managers who utilize the flexibility of accounting standards to obtain certain profit targets and can mislead several stakeholders. The proxy used as accrual earnings management is discretionary accrual. Discretionary accrual measurement uses the Modified Jones Model by (Dechow et al., 1995). The Modified Jones Model modifies Jones (1991) model by adding changes in trade accounts receivable on the model because the accounts receivable are part of discretionary accruals that can be manipulated by managers. Discretionary accruals are estimated using the following equation;

\[ \frac{TACC_{it}}{A_{i,t-1}} = \beta_1 \left( \frac{1}{A_{i,t-1}} \right) + \beta_2 \left[ \frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}} \right] + \beta_3 \left( \frac{PPE_{i,t}}{A_{i,t-1}} \right) + \varepsilon_{i,t} \]

Where,
- \( TACC_{i,t} \) = Total accruals of firm i in year t.
- \( NDACC_{i,t} \) = Total accruals of non-discretionary firms i in year t.
- \( DACC_{i,t} \) = Total discretionary accruals firms i in year t.
- \( NI_{i,t} \) = Net profit before the outpost of firm costs i in year t.
- \( CFO_{i,t} \) = Cash flow operating activities of the firm i in year t.
- \( \Delta REV_{i,t} \) = Changes in firm income i in year t.
- \( \Delta REC_{i,t} \) = Changes in firm receivables i in year t.
- \( PPE_{i,t} \) = firm fixed assets (property, plant and equipment) i in year t.
- \( A_{i,t-1} \) = Total assets of firm i in year t-1
- \( \varepsilon_{i,t} \) = Error

Real earnings management is earnings manipulation through the firm's real operational activities that can affect future cash flows to obtain desired profits in the current period. Measurement of real earnings management follows the Rowchowdhury (2006) model by dividing the size of real earnings management into three, namely; abnormal operating cash flow, abnormal production costs, and abnormal discretionary expenses. Measurements for each measure of real earnings management are as follows;

The operating cash flow is estimated using the following model;

\[ \frac{CFO_{t}}{A_{t-1}} = \alpha_0 + \alpha_1 \left( \frac{1}{A_{t-1}} \right) + \beta_1 \left( \frac{S_{t}}{A_{t-1}} \right) + \beta_2 \left( \frac{\Delta S_{t}}{A_{t-1}} \right) + \varepsilon_{t} \]
Production costs are the sum of cost of goods sold with changes in inventory period t. Production costs are estimated using the following model:

\[ \frac{PROD_t}{A_{t-1}} = \alpha_0 + \alpha_1 \left( \frac{1}{A_{t-1}} \right) + \beta_1 \left( \frac{S_t}{A_{t-1}} \right) + \beta_2 \left( \frac{\Delta S_t}{A_{t-1}} \right) + \beta_3 \left( \frac{\Delta S_{t-1}}{A_{t-1}} \right) + \epsilon_t \]

Discretionary expenses are estimated using the following model:

\[ \frac{DISEXP_t}{A_{t-1}} = \alpha_0 + \alpha_3 \left( \frac{1}{A_{t-1}} \right) + \beta \left( \frac{S_t}{A_{t-1}} \right) + \epsilon_t \]

The coefficients obtained in each model are re-entered into the model to obtain the normal amount of operating cash flow, production costs, and discretionary expenses. Then the actual value of the operating cash flow, production costs, and discretionary expenses are subtracted by the normal value to obtain the abnormal value of each measurement used as a proxy for real earnings management. Each value is summed according to the Cohen et al., (2008) model, then abnormal operating cash flows and abnormal discretionary costs are multiplied by -1 to equalize the relationship with real earnings management. The real earnings management model is estimated using the following model:

\[ REM = (ACFO^*-1) + APROD + (ADISEXP^*-1) \]

Where,
- CFO<sub>t</sub> = Cash flow from operation firm i in year t.
- PROD<sub>t</sub> = Production cost of firm i in year t.
- DISEXP<sub>t</sub> = Discretionary expenses of firm i in year t.
- ACFO = Abnormal cash flow from operation.
- APROD = Abnormal production cost.
- ADISEXP = Abnormal discretionary expenses.
- REM = A combined measure of real earnings management.
- A<sub>t-1</sub> = Total assets of firm i in year t-1.
- S<sub>t</sub> = Total sales of firm i in year t.
- \( \Delta S_t \) = Changes in sales of firm i in year t.
- \( \Delta S_{t-1} \) = Changes in firm sales i in year t-1.
- \( \epsilon_t \) = Error.

The effect of earnings management on firm value can be influenced by other variables so that it needs to be included as a control variable into the regression model. This study includes the size of the firm to control the characteristics of the firm. Carter et al., (2003) and Prasetyorini (2013) have shown that firm size has a positive effect on firm value. Firms that have large sizes can increase market confidence and are considered to have lower risks because large firms have better financial and human resources, as well as more sophisticated management systems. Firm size is measured using the natural logarithm of total assets. The leverage ratio is used as a control variable to control the market response to the firm's financial condition. Nekhili et al., (2017) and Aggarwal and Padhan (2017) found that leverage has a negative effect on the market value of a firm. Firms that have high level of debt are considered by the market to have a higher risk so that investment is less attractive. Leverage is estimated to use by dividing total debt by the total assets of the firm. Return on assets (ROA) is used to control the level of profitability of a firm. Previous research conducted by Marsha and Murtqi (2017) and Rosikah et al., (2018) shows that ROA can increase firm value. High profitability ratios show good corporate performance so that they are attracted by the market. ROA is measured by the formula for net income divided by the total assets of the firm. Finally, audit quality is an independent party that can be a control mechanism and reduce agency conflicts that occur between firms and stakeholders outside the firm. Many studies have shown the influence of audit quality on firm value (Afza and Nazir, 2013; Wang and Huang,
2014; and Ugwunta et al., 2018). High quality audits increase market confidence in the credibility of financial statements presented by the firm. Audit quality is measured using a dummy variable of value 1 if the firm is audited by big-4 auditors and 0 for firms audited by non-Big-4 auditors following (DeAngelo, 1991 and Khanh and Khoung, 2018).

Regression Model

Multiple linear regression approach is used to empirically examine the effect of accrual earnings management and real earnings management and control variables on firm value. Testing is done using IBM SPSS Statistics 21 software. Taking conclusions on the test results uses a 95% confidence value. Alternative hypotheses are supported if the significance value is less than 0.05 or 5%. The research regression model is built as follows;

\[ Q = \alpha_0 + \beta_1 \text{DACC} + \beta_2 \text{REM} + \beta_3 \text{SIZE} + \beta_4 \text{LEV} + \beta_5 \text{ROA} + \beta_6 \text{AUD} + \varepsilon \]

Where,
- \( Q \) = Firm value i in period t,
- \( \text{DACC} \) = Enterprise discretionary i in period t,
- \( \text{REM} \) = Management of firm real earnings i in period t,
- \( \text{SIZE} \) = Natural logarithm of total assets i in period t,
- \( \text{LEV} \) = Firm debt ratio i in period t,
- \( \text{ROA} \) = Return on Assets of firm i in period t,
- \( \text{AUD} \) = Dummy variable of audit quality firm i in period t,
- \( \varepsilon \) = Error.

Results and Discussion

Descriptive Statistics

Descriptive statistical analysis was conducted to obtain an overview of the initial characteristics of the variables studied. Analysis includes average values, minimum values, maximum values, and standard deviations. Data variables analyzed included firm value, accrual earnings management, real earnings management, firm size, leverage ratio, Return on Assets, and audit quality. Table 2 presents the results of testing descriptive statistical analysis.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q</td>
<td>270</td>
<td>1.5053</td>
<td>0.93411</td>
<td>0.29</td>
<td>4.92</td>
</tr>
<tr>
<td>DACC</td>
<td>270</td>
<td>0.0527</td>
<td>0.12919</td>
<td>-0.94</td>
<td>0.38</td>
</tr>
<tr>
<td>REM</td>
<td>270</td>
<td>0.3488</td>
<td>0.50888</td>
<td>-1.25</td>
<td>2.51</td>
</tr>
<tr>
<td>SIZE</td>
<td>270</td>
<td>28.5218</td>
<td>1.69602</td>
<td>25.62</td>
<td>33.32</td>
</tr>
<tr>
<td>LEV</td>
<td>270</td>
<td>0.4060</td>
<td>0.17846</td>
<td>0.03</td>
<td>0.86</td>
</tr>
<tr>
<td>ROA</td>
<td>270</td>
<td>0.0932</td>
<td>0.09400</td>
<td>0.00</td>
<td>0.66</td>
</tr>
<tr>
<td>AUD</td>
<td>270</td>
<td>0.4889</td>
<td>0.50080</td>
<td>0.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Where, \( Q \) is the Tobin's ratio of firm i period t, \( \text{DACC} \) = period i firm discretionary accrual t, \( \text{REM} \) = firm real earnings management i period t, \( \text{SIZE} \) = natural logarithm total assets of firm i period t, \( \text{LEV} \) = firm debt period i t, \( \text{ROA} \) = Return on assets of firm i period t, \( \text{AUD} \) = variable dummy audit quality is 1 if the firm is audited by Big-4 auditors and 0 otherwise.

Based on Table 2 shows that the average value of the sample firms is 1.5053 with a standard deviation of 0.93411. The ratio of \( Q \) which is above 1 shows a good firms value, while the ratio of \( Q \) which is below 1 or close to zero shows that the value of the firms is less attractive. The average \( Q \) ratio
of the sample firms is above which means that the average sample firms is a place for investment activities. The average discretionary accrual is 0.0527 with a standard deviation of 0.12919. The average discretionary accrual is positive showing that the average sample firms conducts accrual earnings management by increasing profits to obtain the desired profit. The average real earnings management is 0.3488 with a standard deviation value of 0.50888. This shows that sample firms also carry out real earnings management to achieve the desired profit target.

Control variables of firm size show an average of 28.5218 with a standard deviation of 1.69602. The leverage ratio has an average value of 0.4060 with a standard deviation of 0.17846. The average Return on Asset is 0.0932 and the standard deviation is 0.09400. The audit is a dummy variable that is worth 1 if the firms is audited by the Big-4 auditors and 0 otherwise. Frequency analysis has been carried out on audit quality variables (not attached) indicating that out of a total of 270 observations 138 (51.1%) observations were audited by non-big-4 auditors and the remaining 132 (48.9%) were audited by Big-4 auditors.

Before conducting regression analysis, we conducted a correlation analysis between independent variables. The results of the correlation matrix analysis shown in Table 3 show that there is no perfect correlation between each independent variable. All correlations are below 0.95. The VIF value also does not exceed 10 and the tolerance value is above 0.10. This shows that the variable data used in this study did not suffer from multicollinearity problems.

<table>
<thead>
<tr>
<th>Table 3 Correlations Martix</th>
</tr>
</thead>
<tbody>
<tr>
<td>DACC</td>
</tr>
<tr>
<td>1.000</td>
</tr>
<tr>
<td>-0.268</td>
</tr>
<tr>
<td>-0.109</td>
</tr>
<tr>
<td>0.044</td>
</tr>
<tr>
<td>-0.168</td>
</tr>
<tr>
<td>0.120</td>
</tr>
</tbody>
</table>

Where, Q is the Tobin's ratio of firm i period t, DACC = period i firm discretionary accrual t, REM = firm real earnings management i period t, SIZE = natural logarithm total assets of firm i period t, LEV = firm debt period i t, ROA = Return on assets of firm i period t, AUD = variable dummy audit quality is 1 if the firm is audited by Big-4 auditors and 0 otherwise.

Regression Result

Regression analysis in this study uses a Multiple Linear Regression analysis approach. The data used in this study is a type of panel data, it is necessary to do an autocorrelation analysis to see whether between period t residuals have a correlation with period-1 residuals. Durbin-Watson testing is used to test autocorrelation. The model does not suffer from autocorrelation problems if the value of DU <DW <(4-DU). The results of the Durbin-Watson test show a DW value of 1.968 with a DU value of 1.838 which means that the regression model does not suffer from autocorrelation problems. The Kolmogorov-Smirnov test shows that the value of Monte Carlo Significance is above 0.05, meaning that the data used in this study are normally distributed.

The results of testing the coefficient of determination (adjusted R2) produces a value of 0.306 indicating that the independent variable accrual earnings management and real earnings management as well as firm size control variables, leverage, ROA, and audit quality can explain the dependent variable that is the firm value of 30.6% and its explained by other factors outside the model.
Table 4 presents the results of the linear regression analysis of the research model that was built. Discretionary accrual variable which is a measure of accrual earnings management obtains a positive coefficient of 0.355 with a significance level that is above 0.05 which is equal to 0.360. These results indicate that accrual earnings management carried out by managers to influence earnings figures does not have any impact on firm value. These results are not in line with the findings of Gunardi (2013), Indriani et al., (2014), and Susanto and Christiawan (2016) who found that accrual earnings management had a positive effect on firm value and findings by Siallagan and Machfoedz (2006), Siallagan (2009), and Abbas et al., (2017) who found that accrual earnings management had a negative impact on firm value. However, this result is in line with the findings of Challen and Siregar (2012) and Dewi et al., (2016) who found that accrual earnings management did not affect the value of the firm. The market may assume that earnings management is less dangerous or managers cannot detect this practice so that the market does not give any response either positively or negatively to accrual earnings management carried out by managers. These results are not in line with the expectations of researchers who stated that accrual earnings management will have a negative impact on firm value.

Table 4 Result regression analysis

<table>
<thead>
<tr>
<th></th>
<th>Tobins’Q</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coef.</td>
<td>Sig.</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-5.629**</td>
<td>0.000</td>
</tr>
<tr>
<td>DACC</td>
<td>0.355</td>
<td>0.360</td>
</tr>
<tr>
<td>REM</td>
<td>-0.241*</td>
<td>0.025</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.250**</td>
<td>0.000</td>
</tr>
<tr>
<td>LEV</td>
<td>-0.198*</td>
<td>0.473</td>
</tr>
<tr>
<td>ROA</td>
<td>2.230**</td>
<td>0.000</td>
</tr>
<tr>
<td>AUD</td>
<td>-0.119*</td>
<td>0.320</td>
</tr>
<tr>
<td>F-Value</td>
<td>20.791**</td>
<td>0.000</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.306</td>
<td></td>
</tr>
<tr>
<td>Monte Carlo Sig.</td>
<td>1.071</td>
<td>0.188</td>
</tr>
<tr>
<td>DW-Test</td>
<td>1.968</td>
<td></td>
</tr>
</tbody>
</table>

Where, Q is the Tobin's ratio of firm i period t, DACC = period i firm discretionary accrual t, REM = firm real earnings management i period t, SIZE = natural logarithm total assets of firm i period t, LEV = firm debt period i t, ROA = Return on assets of firm i period t, AUD = variable dummy audit quality is 1 if the firm is audited by Big-4 auditors and 0 otherwise.

*Represent significance at 5%, **Represent significant at 1%.

Real earnings management shows a negative coefficient value of -0.241 with a significance value of 0.025 which is below 0.05. These results indicate that real earnings management carried out by managers both through sales manipulation, excessive production, and reduction in discretionary expenses have a negative impact on firm value. This result is in line with the previous research by Partami et al., (2015) which found that real earnings management has a negative effect on firm value. This earnings management is considered to be very dangerous by the market because it will cause a negative impact on the firm's future cash flow, so the firm detected to practice real earnings management will be responded negatively by the market. This result is in accordance with the expectations of the researcher that real earnings management will be responded negatively by the market, thereby reducing the value of the firm. The leverage control variable was found to have no effect on firm value. In contrast to the findings by Nekhili et al., (2017) and Aggarwal and Padhan (2017). The market may assume that the amount of debt held by the firm is not meaningful information so it does not affect the value of the firm. Audit quality was also found to have no effect on the value of the firm. This finding is different from Afza and Nazir (2013), Wang and Huang, (2014), and Ugwunta et al., (2018) who find audit quality can have a positive impact on firm value. There are still many cases that ensnare the independent auditor causing the market
to assume that the independent auditor cannot be used as a signal. Firm size was found to have a positive effect on firm value in line with Carter et al., (2003) and Prasetyorini (2013). The market considers larger firms are considered to have lower risks because the technology owned by large firms tends to be more sophisticated and better resources. Finally, profitability as measured by ROA has a positive effect on firm value in line with Marsha and Murtqi (2017) and Rosikah et al., (2018). Firms that have high profitability are considered to have better future prospects than firms with smaller profitability ratios. This also proves that profit is a signal that can be responded positively by the market so that it can increase the value of the firm.

**Conclusion**

This paper investigates the effect of accrual earnings management and real earnings management on firm value. Earnings management is an opportunistic action carried out by managers to achieve certain desired profit figures. The research sample used in this study is that manufacturing firms listed on the Indonesia Stock Exchange from 2013 to 2017 were then selected using the purposive sampling method. Empirically this study found that accrual earnings management did not affect the value of the firm. Real earnings management has a negative impact on firm value. Control variables namely leverage and audit quality have no effect on firm value. Firm size and ROA were found to have a positive impact on firm value.

This study provides several important contributions, including; First, provide additional empirical evidence in the accrual earnings management literature, real earnings management, and firm value. Second, this study provides evidence that earnings management does not provide positive benefits for firm value, so it is expected that managers do not need to take this action because it will only have a negative impact on the firm's future and not obtain meaningful benefits. Third, this study successfully shows that managers use both earnings management techniques namely accrual earnings management and real earnings management simultaneously to obtain profit targets.

This study has several limitations, including: First, this study only uses a sample of firms that obtain profit figures so that further research can provide earnings management in firms that experience losses and their impact on firm value. Second, this research is only limited to the Indonesian context, further research can expand the literature on different countries and have a different culture with Indonesia. Finally, this study found no influence of accrual earnings management on firm value, further research may be able to use different measures of accrual earnings management such as the measurements suggested by Kothari et al. (2005) so that results can be obtained differently from the findings of this study.

**References**


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