The Effect of Profitability and Financial Risk on Earning Management of Mobile Telecommunication Operators That Registered in Indonesia Stock Exchange Period 2015 - 2018

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ABSTRACT

The purpose of this research is to analyze the partial and simultaneous effect of profitability and financial risk on earnings management. The sampling method of this research is purposive sampling with the 3 largest Indonesian provider companies that registered on Indonesia Stock Exchange (IDX) in 2015 – 2018 as the sample. This research used secondary data from IDX with multiple linear regression as the analysis technique. The result of this research indicates that partially profitability and financial risk hurts earnings management. While simultaneously profitability and financial risk showed a positive effect on earnings management.

Keywords: Profitability, financial risk, earnings management.

Introduction

To examine and measure the performance of management, financial statements are often used as an important indicator. Management often uses data and information related to earnings or profit as the target of the opportunist engineering action. That opportunist action could consist of certain accounting policies that will affect the earnings or profit following management’s desire. This term is known as earnings management.

Profitability and financial risk becoming one of the factors that drive a manager to carry out earnings management. The profitability ratio is a ratio that is used to examine the company’s ability and performance in generating profits (Kasmir, 2014). According to Sabrin et al. (2019) explained that profitability is a description of a company’s ability in gaining profits in a certain period. Hereinafter, Al-Slehat (2019) revealed that leverage is a ratio that describing the relation between a company’s debt to capital.

Profit manipulation is normally carried out by companies that have low-profit growth. Conversely, a company with high-profit growth tends to have no motivation to manipulate its profit. Based on the two statements above, we can conclude that earnings management action can be influenced by the level of a company’s profit growth. This statement matched with the result of research that had been done by Linasmii (2017) which successfully proved that the growth of a company’s profit impacts earnings management.

Research Purpose

This research aims to:

1. Investigate the impact of profitability on earnings management of Mobile Telecommunication Operators that registered in Indonesia Stock Exchange period 2015 – 2018.
2. Investigate the impact of financial risk (leverage) to earnings management of Mobile Telecommunication Operators that registered in Indonesia Stock Exchange period 2015 – 2018.


Literature Review

Profitability

According to Kasmir (2016) profitability is the ability of a company in finding profit. This ratio can also be used as an indicator to measure the effectiveness and performance of a company. Burja (2011) explained that profitability is a ratio that connects the result of profit from sales and investment. Profitability has several types, which are:

a. Sales profitability; using the ratio between gross profit margin and net profit margin.

b. Investment profitability; using two indicators of ROI (Return on Investment) and ROA (Return on Asset). In investment profitability, ROA is used to measure the profit effectiveness with utilizing the asset of the company. ROA’s formula is:

\[
\text{ROA} = \left( \frac{\text{Earnings after Tax}}{\text{Total Asset}} \right) \times 100\%
\]

Financial risk

Financial risk or leverage is a ratio that describes the relationship between a company's debt to a company's capital. Leverage can also measure how much debt or external funds defraying the company.

\[
\text{Leverage} = \frac{\text{Total debt}}{\text{Total asset}}
\]

Earnings management

Earnings management is an action intentionally carried out by management to limit the General Adopted Accounting Principles (GAAP). This action aims to place the profit report to the desired level. This earnings management activity could reduce the quality of financial statements. This happens because there is judgment contained when a company or manager decided to do earnings management (Shuli, 2011).

In finance and financial statement, earnings management has a controversial and important role. Although this action is closely related to manipulation, earnings management is not always interpreted as a negative action that inflicts financial loss.

Some parties say that earnings management can be used as material to evaluate the return and risk of the portfolio (Mcnichols & Stubben, 2008). Earnings management can be calculated using the following formula:
Earning Management = \frac{\text{Working Capital Accrual (t)}}{\text{Profit (t)}} \times 100\%

Figure 1. Theoretical framework

Hypotheses
H1: Profitability affects earnings management.
H2: Financial risk affects earnings management.
H3: Profitability and financial risk affect earnings management.

Material and Methods
Sample and Population
This study consists of 3 mobile telecommunication companies that registered in Indonesia Stock Exchange (BEI) period 2015 – 2018 with purposive sampling as the sampling method. The criteria that used is:
- Published their audited financial statement period 2015 – 2018.
- Having complete data to support the research needs.

Type of data
This research used secondary data. The data is collected from the annual report that is publicly published.

Data analysis
The technique of data analysis that used in this research is quantitative with multiple linear regression.
\[ Y = a + bX_1 + bX_2 + e \]

Note:
Y = Earnings management \quad a = \text{Constant}
b = \text{Regression coefficient} \quad X_1 = \text{Profitability}
X_2 = \text{Leverage}
e = \text{Standard Error}
Results and Discussion

Classic assumption test

Normality test

The regression model can be considered a good model if the value of its residual is normally distributed. This research used Kolmogorov - Smirnov normality test with SPSS software.

Tabel 1. Kolmogorov-Smirnov normality test

<table>
<thead>
<tr>
<th>Unstandardized Residual</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>12</td>
</tr>
<tr>
<td>Normal Parameters(^{a,b})</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>0,0000000</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0,09850493</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td></td>
</tr>
<tr>
<td>Absolute</td>
<td>0,280</td>
</tr>
<tr>
<td>Positive</td>
<td>0,172</td>
</tr>
<tr>
<td>Negative</td>
<td>-0,280</td>
</tr>
<tr>
<td>Test Statistic</td>
<td>0,280</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>0,010(^c)</td>
</tr>
</tbody>
</table>

\(^{a}\) Test distribution is Normal.
\(^{b}\) Calculated from data.
\(^{c}\) Lilliefors Significance Correction.

Based on the data above, the significance value obtained is 0.010 which is larger than \(\alpha\) (0,010 > 0,05). So, it can be concluded the data that used in this research are normally distributed.

Multicollinearity

The goal of the multicollinearity test in this research is to determine the collaboration between independent variables. A model can be classified as a good model if it is free from multicollinearity.

Tabel 2. Multicollinearity test

<table>
<thead>
<tr>
<th>Coefficients(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstandardized Coefficients</td>
</tr>
<tr>
<td>Model</td>
</tr>
<tr>
<td>1 (Constant)</td>
</tr>
<tr>
<td>Profitability</td>
</tr>
<tr>
<td>Financial risk</td>
</tr>
</tbody>
</table>

\(^{a}\) Dependent Variable: Profit management

A model can be stated free from multicollinearity if the value of VIF < 10. In the test result above, the obtained VIF value is < 10 which means the data that used in this research are free from multicollinearity.
Autocolleration

A regression model could be claimed as a good one if the model is free from autocorrelation symptoms. In this research, the author used Durbin Watson (DW) test. A regression model can be stated free from autocorrelation if the (d) value is between Du and (4 - dU).

Table 3. Autocolleration test

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.914a</td>
<td>.836</td>
<td>.800</td>
<td>.109</td>
<td>2.394</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Financial risk, Profitability

From the test result above, the obtained Durbin-watson (d) value is 2.394. With 5% significance, n = 12 and k = 2, the value of dL = 0.8122, dU = 1.5794. While the value of 4 – dL = 3.1878.

Heteroscedasticity

The heteroscedasticity test is used to investigate is there any residual variant similarity from all observations that carried out in this research. In this research, the author used the Glejser test which regressing the independent variable with residual absolute value or ABS_RES.

Table 4. Hereroscedasticity test

<table>
<thead>
<tr>
<th>Coefficientsa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstandardized Coefficients</td>
</tr>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1 (Constant)</td>
</tr>
<tr>
<td>Profitability</td>
</tr>
<tr>
<td>Financial risk</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Abs_RES

Based on the test above, the sig. the result is > 0.05, it shows the two variables that being tested have no heteroscedasticity symptoms.

Multiple linear regression test

A multiple linear regression test is used to determine the impact of variable X1 (Profitability) and variable X2 (Financial Risk) to variable Y (Earnings Management). Here is the result of the test using SPSS software:

Table 5. Multiple linear regression test

<table>
<thead>
<tr>
<th>Coefficientsa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstandardized Coefficients</td>
</tr>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1 (Constant)</td>
</tr>
<tr>
<td>Profitability</td>
</tr>
<tr>
<td>Financial risk</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Profit Management
To be continued

### ANOVA

<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>Regression</td>
<td>545</td>
<td>2</td>
<td>272</td>
<td>22.967</td>
<td>0.00b</td>
</tr>
<tr>
<td>Residual</td>
<td>107</td>
<td>9</td>
<td>0.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>651</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Profit management  
b. Predictors: (Constant), Financial risk, Profitability

From the multiple linear regression test above, the equation formula is:

\[ Y = -0.756 + 0.040 + 0.518 \]

**Hypothesis testing regression partial (t-Test)**

Regression partial or t-test is used to know how far the individual variable independent affecting the variation of the independent variable. Based on the table above, it can be seen that:

1. **Profitability**  
   Based on the result of the multiple linear regression test, the sig. value of Profitability (X₁) is 0.10 > 0.05 with \( t_{\text{test}} < t_{\text{table}} \), So, it can be concluded that \( H_0 \) is accepted and \( H_a \) is rejected. This means profitability (X₁) doesn’t give any impact to earnings management.

2. **Financial Risk**  
   On financial risk, the sig. value is 0.877 > 0.05 with \( t_{\text{test}} < t_{\text{table}} \). So based on this, it can be concluded that \( H_0 \) is accepted and \( H_a \) is rejected. This means financial risk or leverage (X₂) doesn’t affect earnings management.

**Simultaneous test (F-Test)**

Based on the result of F data test at 5th table, the sig. value is 0.000b < 0.05 with \( F_{\text{test}} < F_{\text{table}} \). So it can be concluded that profitability (X₁) and financial risk (X₂) simultaneously affect earnings management (Y).

**Discussion**

**The impact of profitability to earnings management**

The analysis result of the impact of profitability to earnings management showed sig. value 0.10 > 0.05 with \( t_{\text{test}} < t_{\text{table}} \). So, it can be concluded that \( H_0 \) is accepted and \( H_a \) is rejected. This means profitability (X₁) doesn’t give any impact on earnings management.

It could happen because the investors tended to ignore ROA value which caused the company to loss their motivation to do the earnings management. This result matched with the result of previous research that had been done by Hamid et al. (2012).

**The impact of financial risk on earnings management**

The partial test result on financial risk showed that the sig. value is 0.877 > 0.05 with \( t_{\text{test}} < t_{\text{table}} \). So based on this, it can be concluded that \( H_0 \) is accepted and \( H_a \) is rejected. This means financial risk or leverage (X₂) doesn’t affect earnings management.
It could happen because the company faced some difficulties in obtaining credit, so the management didn't have any motivation to carry out the earnings management. This result matched with the result of previous research that had been carried out by Herni & Susanto (2008).

**The impact of profitability and financial risk on earning management**

Based on the result of the F data test at the 5<sup>th</sup> table, the sig. value is 0,000<sub>b</sub> < 0,05 with F<sub>table</sub> < 4,10. So, it can be concluded that profitability (X<sub>1</sub>) and financial risk (X<sub>2</sub>) simultaneously affect earnings management (Y).

Earning management action could be occurred because of several factors. Even though the result of individual independent variables showed negative results, but simultaneously these two variables have or give impact on earnings management.

It could happen because the management has the motivation to maintain the effectiveness value and the consistency of their company’s financial statements. This result matched with Yasa et al.'s (2020) research that clarified profitability and financial risk positively affects earnings management.

**Conclusion**

After finished the whole research, the obtained conclusions are:

1. Profitability does not give any significant effect on earnings management of Mobile Telecommunication Operators that registered in the Indonesia Stock Exchange period 2015 – 2018.
2. Financial risk does not give any significant effect on the earnings management of Mobile Telecommunication Operators that registered in the Indonesia Stock Exchange period 2015 – 2018.

**Acknowledgment**

We would like to thank all those who have helped to complete this article.

**References**


