The Effect of Leverage, Earning Power, and Sales Growth on Earnings Management Moderated by Corporate Governance

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ABSTRACT

This study aims to investigate analytically impact financial factors which are leverage, earning power, and sales growth affect earning management with corporate governance as a moderating variable. This research was conducted on manufacturing companies listed on the Indonesia Stock Exchange (IDX), specifically in food and beverage sub-sector from 2017 to 2019. This study uses 20 companies as sample that was selected using the purposive sampling method. This study uses multiple regression as analysis method which processed by Eviews 10.0. This research found that leverage does not affect earnings management significantly, while earning power positively and significantly affects earnings management. On the other hand, sales growth negatively and significantly affects earnings management. The corporate governance in this study does not moderate the impact of financial factor to earning management.

Keywords: earning management, financial factors, corporate governance

1. INTRODUCTION

Based on the financial accounting standards, financial statements aim to provide information about the financial position, financial performance, and some changes in financial position of a company which is useful for report users in making economic decisions. One of the information needed is the company's income statement [1].

Earnings information is a crucial part in the financial statements because it becomes one of the indicators used to measure the company's operational performance. The profit reported by the company in the financial statements uses the accrual method in its recording, but the use of this basis can provide an opportunity for management to choose the accounting method to be used as long as it does not break the applicable financial accounting standards. The flexibility in choosing accounting methods allows company management to perform earnings management.

The tendency of external parties to pay more attention to earnings information, makes each company strive to make its profits look good every year so that it triggers companies to manage earnings. This is due to an agency conflict between management as an agent and shareholders as principals, where management wants to maximize their own interests while shareholders want to maximize their profits from the investments invested, so there is a high opportunity that agents do not always act according to the principal's best interests [2].

Earnings management can reduce investor confidence in the credibility of earnings presented in financial statements, besides earnings management can make stakeholders wrong in making economic decisions because reported earnings are only pseudo profits that do not reflect actual conditions. Therefore, in the end, earnings management is often concluded as a bad thing if management does it [3].

Several financial factors such as leverage, earning power and sales growth are thought to influence the company's earnings management [4], [5], [6], [7], [8], [9], [10]. In addition, the case of earnings management can not be separated from the weak implementation of corporate governance. Based on agency theory, earnings management can be minimized through the corporate governance mechanism [11]. The corporate governance mechanism in this study uses the proportion of independent commissioners. Independent commissioners are tasked with supervising the company's directors without any pressure from any party, they do not deal directly with the companies they supervise so that the supervision of financial statements will be more stringent and objective, which ultimately minimizes earnings management actions taken by [12] managers. [13] states that the higher the composition of the independent board of commissioners it will improve the quality of financial reports and reduce the practice of income smoothing carried out by management. Therefore, the higher the proportion of the board of commissioners, the weaker the influence of financial factors on earnings management [6], [4], [15], and [5].
The food and beverage sub-sector manufacturing companies will be used as this research subjects. The manufacturing sector is the sector that has the largest number of companies listed on the IDX. Investors are encouraged to invest in the manufacturing industry in the food and beverage sub-sector in Indonesia by seeing the development in this subsector in the hope of acquiring a high return on their investment. Companies in this subsector will compete to show the best company conditions that might encourage them to carry out earnings management to get investment.

This study aims to analyze whether earnings management partially affected by leverage, earning power, and sales growth, and whether independent commissioners moderate the effect of partial leverage, earning power, and sales growth on earnings management. The benefits expected from this research are that it can provide information to company management regarding the impact of earnings management actions performed by the company and the importance of implementing GCG, can be a source of information for investors in considering investment decisions, and can be a reference for further researchers who will examine the same variables.

2. THEORETICAL REVIEWS

Agency theory explains the contractual relationship between managers who are referred to as agents and company owners who are referred to as principals [13]. The emergence of a conflict of interest between the manager and the owner of the company is arises due to the agency relationship. This management interest gave rise to earnings management action [16].

Signaling Theory explains that management will try to give good signals to investors through accounts in the financial statements to fulfil the shareholder expectations for stable and positive growth of earnings [17]. Management will try various ways to give a good signal to investors, one of which is by practicing earnings management [18].

2.1. The Effect of Leverage on Earnings Management

The amount of debt in financing the company can be assessed through the leverage ratio. A higher leverage ratio indicates a higher level of dependence of the company on external parties (creditors) and the bigger the cost of debt (interest costs) that has to be paid. Thus, from the view of investors and creditors, the higher the risk of the company makes investors and creditors become hesitate to invest and make loans [19].

According to signal theory, management will try to give good signals to investors through accounts in the financial statements to meet the shareholder expectations [17]. A high level of debt will be a strong signal of high risk for investors and creditors so that a high leverage ratio causes a decrease in the interest of investors and creditors to invest or provide loans to the company. This will eventually trigger management in carrying out earnings management [4]. Therefore, it can be concluded that the higher the leverage value of the company, the more motivated the company will be in carrying out earnings management. This is similar to the previous researches conducted by [4] and [6] which stated that leverage positively affects earnings management.

Based on the description above, the hypothesis could be formulated as follow:

\[ H_1: \text{Leverage positively affects earnings management.} \]

2.2. The Effect of Earning Power on Earnings Management

Earning power is often used by potential investors to assess the level of efficiency and the company's ability to generate profit [20]. Investors assume that high earning power will guarantee a return on investment and will provide a decent profit. Earning Power using Return on Assets (ROA) will explain the efficiency of the company by looking at the size of operating profit in relation to company assets [21]. The company's ability to generate profits is considered to be represented by ROA, therefore users of financial statements use the Return on Assets (ROA) proxy in viewing the company's earnings power. The higher this ratio, the higher the investor confidence in investing [22].

Conflicts of interest between management and owners arising from the agency relationship can trigger management to carry out earnings management. Management incentives are based on the company's ROA so that it will eventually trigger management to carry out earnings management to achieve the desired target [23]. Therefore, it can be concluded that the higher the ROA value of the company, the higher the possibility of management in performing earnings management. This is supported by previous research conducted by [7], [6], and [8] which states that earning power positively affects earnings management.

Based on the description above, the hypotheses that can be built are:

\[ H_2: \text{Earning Power positively affects earnings management.} \]

2.3. The Effect of Sales Growth on Earnings Management

Sales growth reflects the company's capability to compete in the market and to maintain its business continuity [24]. A decrease in sales growth will indicate a decline in the company's capability to generate profits which will then trigger a decline in investor interest.

According to [25], companies that have high sales growth, may not be motivated to take earnings management actions. Conversely, if the company has low sales growth, it will tend to carry out earnings management. Companies with low sales growth have the potential to perform earnings management [26]. Therefore, it can be concluded that the higher the company's sales growth, the lower the earnings management action, on the contrary, the lower the
company's sales growth, the higher the earnings management action. This is similar to the previous research conducted by [10] which stated that sales growth negatively affects earnings management.

Based on the description above, the hypotheses that can be built are:

H₃: Sales Growth negatively affects earnings management.

2.4. Corporate Governance Moderates the Effect of Leverage on Earnings Management

Based on agency theory, the existence of agency conflicts triggers agents to act in their own interests by carrying out earnings management. This theory also says that the corporate governance mechanism can minimize earnings management [11]. The existence of an independent commissioner is one form of implementation of the Corporate Governance [27]. The more the composition of independent commissioners, the control and supervision carried out will also increase and reduce earnings management actions [28].

High leverage due to the large amount of debt compared to equity will motivate management to carry out earnings management because the company does not want to show poor performance which makes investors and creditors do not believe in the condition of the company [19]. Supervision through the mechanism of an independent commissioner will put pressure on management to always act well and in accordance with the principles, so that the supervision of an independent commissioner will weaken the influence of the leverage factor on the company's earnings management actions. This is similar to the previous researches conducted by [14] and [15] which stated that corporate governance weakens the effect of leverage on earnings management.

Based on the description above, the hypotheses that can be built are:

H₄: Corporate governance weakens the effect of leverage on earnings management.

2.5. Corporate Governance Moderates the Effect of Earning Power on Earnings Management

Earning Power shows the capability of management to generate profits from company assets, thus management will carry out earnings management to show shareholders good company performance [29]. The effect of showing earning power that will encourage companies to carry out earnings management will be weakened by the presence of independent commissioners. An independent commissioner will perform a supervisory function on the company's performance, so that management cannot easily carry out earnings management. This is in line with the previous researches conducted by [30] and [21] which states that corporate governance weakens the effect of earning power on earnings management.

Based on the description above, the hypotheses that can be built are:

H₅: Corporate governance weakens the effect of earning power on earnings management.

2.6. Corporate Governance Moderates the Effect of Sales Growth on Earnings Management

Sales Growth reflects the marketing performance of a company and the company's competitiveness in the market. The increasing sales growth will make investors more confident and confident to invest their funds in companies [15]. This is what encourages companies to do earnings management.

Corporate governance is a method used to maintain accountability from management. Independent commissioners which is a form of corporate governance mechanism will supervise the functions and performance of management, thus with the increasing number of independent commissioners, the supervision becomes stronger and more effective. Independent commissioners as a governance mechanism will weaken the influence of sales growth on earnings management actions. This is in line with the previous researches conducted by [6] and [5] which stated that corporate governance weakens the influence of sales growth on earnings management.

Based on the description above, the hypotheses that can be built are:

H₆: Corporate governance weakens the influence of sales growth on earnings management.

Referring to the hypothesis above, the research model that can be formed is as follow:

Figure 1 Research Model

3. METHODOLOGY

This study is a quantitative study using secondary data, with food and beverage sub-sector manufacturing company listed on the IDX during the 2017-2019 period as its research subjects. The purposive sampling technique is used to select the sample. There are three criteria of sample used: (1) manufacturing companies from food and beverage sub-sector that are consistently listed on the IDX in 2016-2019 period, (2) food and beverage sub-sector manufacturing...
companies that publish audited financial reports that have year-end December 31 book, and (3) Food and beverage sub-sector companies that report the number of independent commissioners and the total number of commissioners. The number of companies that meet the criteria is 20 companies. The processed data is 60. The proxies for each variable are as follows:

Table 1 Summary of Variable Measurement

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pengukuran</th>
<th>Number Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manajemen Laba</td>
<td>Discretionary accruals (DAACC)</td>
<td>Agusia, 2013</td>
</tr>
<tr>
<td></td>
<td>Step 1: TC(\textit{Alt} - 1) - (\textit{CFOi}i)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Step 2: TC(\textit{Alt} - 1) - (\textit{EVA}\textit{Alt} - 1) - (\textit{PE}\textit{Alt} - 1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Step 3: D(\textit{CA} - \textit{Alt} - 1) + (\textit{EVA}\textit{Alt} - \textit{PE}\textit{Alt} - 1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Step 4: D(\textit{CA} - \textit{Alt} - 1) - (\textit{NDA}\textit{Alt} - 1)</td>
<td></td>
</tr>
<tr>
<td>Leverage</td>
<td>Leverage = Total Debt / Total Equity</td>
<td>Kaunis, 2016</td>
</tr>
<tr>
<td>Sales Growth</td>
<td>Sales Growth = (Sales / Total Assets)</td>
<td>Husse 2013-12</td>
</tr>
<tr>
<td>Corporate Governance</td>
<td>Jumlah Anggota Komisaris independent / Jumlah total Anggota Komisaris</td>
<td>Bairy, 2019</td>
</tr>
</tbody>
</table>

Source: Processed data

The data analysis technique used multiple regression analysis. The data that has been obtained is processed using the statistical program Eviews 10.0. The data processing technique consists of several stages, namely descriptive statistics, testing in determining the best model from panel data, classical assumption test consisting of multicollinearity test and heteroscedasticity test, multiple determination coefficient test, F statistic test, t test and MRA (Moderated Regression Analysis) test).

4. RESULTS

Table 2 Descriptive Statistical Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>0.056052</td>
<td>0.025779</td>
<td>0.669910</td>
<td>-0.187106</td>
<td>0.133294</td>
</tr>
<tr>
<td>X1</td>
<td>0.854536</td>
<td>0.726789</td>
<td>3.338925</td>
<td>-2.127341</td>
<td>0.864513</td>
</tr>
<tr>
<td>X2</td>
<td>0.087321</td>
<td>0.060726</td>
<td>0.607168</td>
<td>-0.097058</td>
<td>0.131402</td>
</tr>
<tr>
<td>X3</td>
<td>0.062882</td>
<td>0.049310</td>
<td>1.038143</td>
<td>-0.678240</td>
<td>0.228509</td>
</tr>
</tbody>
</table>

The results of descriptive statistical tests that have been carried out with the Eviews 10.0 software show the earnings management is the dependent variable in this study, measured using a discretionary accrual modified Jones proxy. It has a minimum value of -0.187106 obtained by Indofood CBP Sukses Makmur Tbk in 2017 while the maximum value is 0.669910 obtained by Tiga Pilar Sejahtera Food Tbk in 2019. From Tiga Pilar Sejahtera Food Tbk in 2019 the value obtained is 0.669910, the average for the earnings management variable is 0.056052 which is the average of the 60 data samples used in this study. The standard deviation value is 0.133294 which is a variation of the data from the earnings management variable.

The leverage variable is the independent variable in this study which is measured using the Debt-to-Equity Ratio (DER) proxy. It has a minimum value of -2.127341 obtained by Tiga Pilar Sejahtera Food Tbk in 2019 while the maximum value is 3.338925 obtained by Prasidha Aneka Niaga Tbk in 2013, 2019. The average value for the leverage variable is 0.854536 and the standard deviation value is 0.864513.

The earning power variable is the independent variable in this study as measured by the Return on Assets (ROA) proxy. It has a minimum value of -0.097058 obtained by Tiga Pilar Sejahtera Food Tbk in 2017 while a maximum value of 0.607168 obtained by Tiga Pilar Sejahtera Food Tbk in 2017, 2019. The average value of the earning power variable is 0.087321 while the standard deviation value is 0.131402.

The sales growth variable is an independent variable in this study which is measured using a sales comparison proxy compared to the previous period. It has a minimum value of -0.678240 obtained by Tiga Pilar Sejahtera Food Tbk in 2018 while the maximum value is 1.038143 obtained by Prima Cakrawala Abadi Tbk in 2018, 2017. The average value for the sales growth variable is 0.062882 and the standard deviation value is 0.228509.

4.1. Panel Data Model Estimation

In the first equation, the Chow test results in a probability cross-section F number of 0.0000 which means less than 0.05 so that H0 is rejected and the Fixed Effect Model is chosen to be the right model for the study. Following the results of the Hausman test, the results of a random cross-section probability number of 0.0010 which means less than 0.05 so that H0 is rejected and the Fixed Effect Model is the most appropriate panel data model in this study.

4.2. Multicollinearity Test

According to the results of the multicollinearity test between the variables of leverage, earning power, and sales growth, the correlation value is below 0.8. Therefore, data related to this research sample is free from multicollinearity problems. The results of the multicollinearity test are not relevant in the search for moderator variables so that research using the MRA test does not need to worry about the test results [37]. Therefore, for the second equation, it is not necessary to do a multicollinearity test.

4.3. Heteroscedasticity Test

According to the results of the heteroscedasticity test, the variables of leverage, earning power, and sales growth in the first equation have a probability value above 0.05. Therefore, data related to this research sample is free from heteroscedasticity problems. The variables of leverage, earning power, sales growth, corporate governance,
interaction of leverage with corporate governance earning power, and sales growth in equation two have probability values above 0.05. Therefore, data related to this research sample is free from heteroscedasticity problems.

4.4. F Statistical Test

According to the results of the F statistical test data processing, the results obtained Prob (F-statistic) of 0.001724 which is worth less than 0.05, the results of the F statistical test can conclude that the independent variables jointly affect earnings management, the regression model in this study it’s worth using.

4.5. R-Square Test

According to the results of the data processing of the determination coefficient test, the Adjusted R-Square result is 0.637941, which means that the earnings management variable can be explained by the independent variable by 63.79% while the rest can be explained by other variables apart from the research.

4.6. t-Statistical Test

The t-statistics test was used to see the significance of the effect of the independent variable on the dependent variable partially. The following are the results of multiple regression analysis:

![Table 3 Regression Analysis Test Results](image)

The equation of the results of the research regression: Earnings Management = -0.038706 +0.017104 Leverage +1.041105 Earning Power -0.171250 Sales Growth
Hypothesis 1: The results show that leverage does not significantly affect earnings management with the value of Prob. 0.6412.
Hypothesis 2: The results show that earning power positively affects earnings management with the value of Prob. 0.0000.
Hypothesis 3: The results show that sales growth negatively affects earnings management with a value of Prob. 0.0248.
Hypotheses 4, 5, and 6 were tested by using moderated regression analysis. The following are the results of the calculation of the moderation regression analysis in table 4 with corporate governance as the moderating variable:

![Table 4 Moderation Regression Analysis Test Results](image)

The equation of the results of the regression moderation research: Earnings Management = -0.029069 +0.038059 Leverage -0.645071 Earning Power +0.168300 Sales Growth +0.209556 Corporate Governance -0.086919 Leverage *Corporate Governance + 1.229198 Earning Power*Corporate Governance -0.387226 Sales Growth*Corporate Governance
Hypothesis 4: The results show that corporate governance has no moderating effect between leverage and earnings management with the value of Prob. 0.7397.
Hypothesis 5: The results show that corporate governance has no moderating effect between earning power and earnings management with the value of Prob. 0.4529.
Hypothesis 6: The results show that corporate governance has no moderating effect between sales growth and earnings management with a value of Prob. 0.6439.

5. DISCUSSIONS

Leverage does not affect earnings management. This result is similar to the studies conducted by [31] and [32]. This is because when a company uses debt financing, the company is supervised by the lender so that management's actions are limited to [13]. Another reason is that the company has several methods or other ways to pay off debt to reduce debt levels such as debt restructuring so that leverage or debt levels do not become a motivation for management to perform earnings management [33].

Earning Power positively affects earnings management, as this result is similar to the research of [6], [7], and [8]. This shows that management incentives based on the company’s ROA will trigger management to perform earnings management to achieve the desired target.

Sales Growth negatively affects earnings management. This result is similar to the research by [10]. This shows that companies that have high sales growth may not be motivated to take earnings management actions. Conversely, if the company has low sales growth, it will tend to carry out earnings management.

Corporate governance cannot moderate the effect of leverage, earning power and sales growth on earnings management. This result is the same with the research by [34], [28], and [35]. It can be explained that the existence of independent commissioners is only to comply with the Financial Services Authority Regulation No. 57/POJK.04/2017 which requires go public companies to have a minimum of 30% (thirty percent) independent commissioners from the total number of members of the
company’s board of commissioners so that independent commissioners do not carry out a good supervisory function and their independence status is not effective in overseeing policies and performance of company directors.

6. CONCLUSION

Based on the results of hypothesis testing, it can be concluded that earning power and sales growth have an effect on earnings management. On the other hand, leverage does not affect earnings management. Corporate governance is not capable to moderate the effect of leverage, earning power and sales growth on earnings management. According to the results of the research that has been conducted, there are several limitations, including the earning power variable which is only measured by using the Return on Assets (ROA) proxy, the moderating variable in the form of corporate governance which is only measured by the proportion of independent commissioners, and the earnings management variable which is only measured by management, accrual earnings and examined with a negative connotation as well as research testing that was analyzed only by Moderated Regression Analysis (MRA). It is recommended that further research be carried out using other measurements for earning power such as Return on Investment (ROI), using the expertise or education level of independent commissioners as a proxy for corporate governance, researching earnings management with other measurements such as real earnings management and researching earnings management with connotations, positive, and analyze using GMM (General Methods of Moment).

REFERENCES


