Analysis of Factors Affecting on Earnings Management with Corporate Governance as Moderate Variable

Teguh Santoso \(^a\) and Agoestina Mappadang \(^b\)*

\(^a\) Magister Akuntansi, Universitas Budi Luhur, DKI Jakarta 12260, Indonesia.
\(^b\) Fakultas Ekonomi dan Bisnis, Universitas Budi Luhur, DKI Jakarta 12260, Indonesia.

Authors’ contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

ABSTRACT

This study aims to find out whether the variables of profitability, leverage, company size, and corporate tax have a significant effect on profit management moderated by corporate governance variables on Manufacturing Companies Listed on the Indonesia Stock Exchange. From the results of hypothesis testing, it can be concluded that leverage has a positive and negative effect on earnings management, profitability has no and negative effect on earnings management, firm size has an insignificant and negative effect on earnings management, corporate tax has a significant and positive effect on earnings management, corporate governance weakens the interaction effect of leverage and profitability of earnings management in the sense of earnings management is decreasing. Corporate governance cannot moderate firm size and corporate tax on earnings management.

Keywords: Earnings management; profitability; leverage; company size; corporate governance.

1. INTRODUCTION

Earnings management is a phenomenon that is difficult to avoid and has the potential to be carried out by management to gain profits. Earnings management is an action taken by management by manipulating and manipulating information with the aim of obtaining profits from...
the actions taken [1-5]. Earnings management has two forms, namely the effort to make income smoothing and efforts to increase or decrease profits in a period.

There are many earnings management cases that have occurred in Indonesia, one of which is the case of the earnings management of PT Tiga Pilar Sejahtera Food Tbk (AISA) allegedly inflating its financial statements of IDR 4 trillion in 2017 and only revealed in March 2019. This study analyzes the effect of several financial ratios such as leverage, profitability, and size on earnings management which is moderated by corporate governance. The innovation of this research is corporate tax as measured by CTTOR which is thought to have an effect on earnings management.

Many studies have been conducted to analyze what influences earnings management with different research results. Several studies show that leverage, profitability, firm size, and corporate tax affect earnings management according to research (Giovani, 2017; Setiwati and Lieany; 2016; [6,7]). Different results are shown by research [8,9,10] where leverage, profitability, and firm size have no effect on earnings management.

From the results of previous studies, there are differences between several previous studies, the researchers are interested in conducting further research on the factors that influence earnings management by adding the corporate governance variable as a moderating variable.

This research is expected to be able to contribute to the company in order to be able to increase knowledge and insight about the factors that influence earnings management. From this research, it is hoped that it can be used as input and consideration for decision-makers and can use information about the influence of earnings management as a consideration in predicting firm value. The general purpose of this study is to provide an overview of earnings management and the factors that influence it so that companies can minimize the potential for earnings management to occur. This study specifically aims to look at the condition of the manufacturing industry listed on the Indonesia Stock Exchange in terms of earnings management indicators so that it can be taken into consideration for decision-makers in predicting firm value.

2. THEORETICAL REVIEW

Earnings management is the maximization of market value as a result of the selection of accounting policies made by managers based on existing accounting standards (Scott, 2000 in Purnomo and Pratiwi [11]) From this definition, Scott divides two ways of understanding earnings management that should be applied in the company. First, profit maximization deals with compensation contracts, debt contacts, and political costs (Opportunistic Earnings Management). Second, earnings management protects the company from unforeseen events for the benefit of interested parties in the company.

Discretionary accruals (DA) are used to measure earnings management by differentiating total accruals (TA) and nondiscretionary accruals (NDA). Modified jones model used to calculate discretionary accruals (DA), Modified jones model used to calculate DA because it is considered better for measuring earnings management and this is in accordance with research conducted by Dechow et al. [12]. Leverage is the company's ability to manage and fulfill all of its obligations which are used to pay debts [13].

Every company has a goal that is to get big profits. The profits will be used for the welfare of the owners, employees and to improve product quality. Therefore, company management is required to achieve predetermined targets. Profitability is the company's ability to earn profits related to sales, total assets, and own capital. Thus, this profitability analysis is very important for long-term investors to see the profits that will be received in the form of dividends [13]. Company size can be interpreted as a comparison of the size of an object based on the total value of sales, the total value of assets, the number of workers, and so on. Company size appears as an explanatory variable based on the total value of the company's asset because assets usually have a large value and to avoid bias in scale, assets need to be compressed [14].

In carrying out its activities, the company strives to achieve its main goal in the form of profit/income or non-profit. The state determines the value of the contribution or liability of the company for any income earned to support government funding in the form of taxes. Tax is a mechanism for transferring resources from the private sector to the government sector, based
on provisions that have been determined in advance and must be implemented so that the government can implement and run the government (Ray et al. in Zain [15]). The issue of corporate governance emerged in Indonesia after a period of crisis since 1998. The improvement process in Indonesia can be said to belong due to the weakness in the implementation of corporate governance carried out by companies in Indonesia.

The company is regulated and refers to the systems, processes and principles of corporate governance (Kausalty et al., 2013 in Fauziyah [16]). Corporate governance is used by companies to improve the success and accountability of companies in order to realize the wishes of shareholders based on laws and regulations and ethical values [17]. Corporate governance is used by companies to improve the success and accountability of companies in order to realize the wishes of shareholders based on laws and regulations and ethical values [17]. One way to prevent earnings management by company management is to implement a corporate governance mechanism in the company's control and management system. The existence and implementation of corporate governance are expected to make a positive contribution to the value of the company in a period and can provide an overview of the welfare of the company's shareholders.

Institutional Ownership is the ownership of company shares owned by financial institutions such as insurance companies, banks, pension funds, and investment banking. With institutional ownership, it is expected to make a positive contribution in reducing the risk of deviant actions carried out by management. Institutional investors are considered capable of running an effective supervisory mechanism in every decision taken by the company. Institutional ownership has a very important role to reduce the emergence of agency problems due to differences in interests. Institutional investors are considered capable of running an effective supervisory mechanism and this results in institutional investors being involved in making strategic decisions for the company [18].

Profitability is a measure of the company's ability to generate profits over a certain period. Profitability ratios are used to measure the effectiveness of management in generating profits for the company [19]. With the existence of an independent commissioner, it is expected to reduce the emergence of agency problems due to differences in interests. Company size can be interpreted as a comparison of the size of an object. The size of a company is identified by the size of its wealth and high sales. This is to attract investors to invest so that it increases the demands on managers to report good company finances in accordance with the wishes of investors. Therefore, the size of the company affects the demands of investors on management. This causes managers to take action to manipulate earnings to suit the wishes of investors.

Institutional ownership is an institution outside the company that owns company shares in the hope of reducing the potential for deviant actions taken by the company's management. With the existence of independent commissioners, it is expected to reduce agency problems due to differences in interests. Earnings management is done by manipulating the accrual component in the financial statements, because the accrual component in the financial statements is a component that is easy to manipulate in accordance with the wishes of the person who records transactions and prepares financial statements [20].

Paying taxes means the same as reducing the company's economic capacity, therefore company management tries to pay taxes as little as possible [21]. With institutional ownership is expected to reduce the incidence of earnings management caused by tax planning. With the existence of an independent commissioner, it is expected to reduce the emergence of agency problems due to differences in interests. This section describes the relevant theories from previous research related to the topics discussed. Theoretical studies explain the main theories used in this research. In the study of theory, the author can explain the literature that is in accordance with the research and how to make the information able to be clearly informed to the reader.

3. METHOD

3.1 Research Design

The design used in this research is observation. The research data used in this study is secondary data that will be used as a theoretical basis and support for this research. It was obtained by conducting a literature study using literature related to the problems in this research.
3.2 Data Types and Sources

The type of data used in this research is secondary data. Secondary data that will be used as support in this study was obtained by collecting data on financial statements for the 2015-2019 period published in the Indonesia stock exchange.

3.3 Population and Data Sample

In this study, the population and sample are manufacturing companies listed on the Indonesia Stock Exchange with the criteria that the company has been registered on the Indonesia Stock Exchange prior to 2018 and did not conduct delisting during 2015-2019 and publish financial statements using Rupiah currency and have been audited during 2015-2019. In this research, the technique used for sampling is using the purposive sampling method where the sample is selected based on certain criteria.

3.4 Data Analysis Method

Panel data regression in this study was used as a data analysis method using institutional ownership as a moderating variable.

Data analysis techniques used in this study are as follows:

1. Goodness of fit test
2. F-statistic test
3. T-statistic test
4. Regression Moderating test

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistical Results

From the descriptive statistics Table 1, it can be seen the data used in the study. In this study, earnings management is proxied by discretionary accruals (DA). In this study earnings management showed results of -10.325, this indicates that discretionary accruals (DA) are less than zero, the company will take earnings management actions, namely by lowering the value of earnings. The total value of accruals which is negative is caused by net income which is smaller than operating cash flow.

The leverage ratio is measured using the Debt to equity ratio (DER) which measures the amount of debt to equity. Leverage shows the company's assets that are financed by debt. The results of this study indicate a DER of 0.445.

With a small leverage ratio, it can be interpreted that the debt owed by the company is also small so that it benefits investors who will invest capital in the company.

The profitability ratio is measured by using Return on assets (ROA) through the method of measuring the ability of profits generated by the company from the use of all its resources or assets. The results of this study indicate a ROA of 20.9%. The higher the ROA ratio owned by the company, it indicates the better the company's performance in generating net income.

Company size is used to represent the company's ability, large-scale companies will find it easier to obtain capital compared to small-scale companies. The results of this study describe the size of the company with a total asset of Rp. 65,897,872,580.13.

The results of this study indicate that the average CTTOR value is 2.20%, this shows that the average amount of income tax payable in a year is relatively small compared to sales made by manufacturing companies listed on the Indonesia Stock Exchange. The greater the CTTOR, the greater the proportion of sales proceeds used to pay income tax.

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Profit Management</td>
<td>-10.32559</td>
<td>44.15636</td>
</tr>
<tr>
<td>2</td>
<td>Leverage</td>
<td>0.445494</td>
<td>11.48072</td>
</tr>
<tr>
<td>3</td>
<td>Profitability</td>
<td>0.209974</td>
<td>2.901557</td>
</tr>
<tr>
<td>4</td>
<td>Company Size</td>
<td>12.07513</td>
<td>0.804167</td>
</tr>
<tr>
<td>5</td>
<td>Corporate Tax</td>
<td>0.022059</td>
<td>0.024348</td>
</tr>
</tbody>
</table>

Table 1. Results of multiple linear regression analysis

Source: Research Results (processed data)
4.2 Classic Assumption Test Results

Based on the assumption test of normality, autocorrelation, and heteroscedasticity, the result is > 0.05 so that it fulfills the assumption test so that the panel regression can be continued.

4.3 Hypothesis Testing Results

4.3.1 Multiple linear regression analysis

After the assumption test meets the requirements so that the panel regression can be continued, the regression model is feasible to be used as a measuring tool to detect the relationship between the proposed variables with the results of the regression analysis as follows.

Table 2. Results of multiple linear regression analysis

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C</td>
<td>208.7986</td>
<td>68.00109</td>
</tr>
<tr>
<td>2</td>
<td>DER</td>
<td>0.487718</td>
<td>0.798474</td>
</tr>
<tr>
<td>3</td>
<td>ROA</td>
<td>-24.72519</td>
<td>12.45450</td>
</tr>
<tr>
<td>4</td>
<td>SIZE</td>
<td>-17.93791</td>
<td>6.004242</td>
</tr>
<tr>
<td>5</td>
<td>TAX</td>
<td>49.52818</td>
<td>48.9738</td>
</tr>
<tr>
<td>6</td>
<td>FGCG</td>
<td>7.938891</td>
<td>34.12421</td>
</tr>
<tr>
<td>7</td>
<td>MDER</td>
<td>-0.507910</td>
<td>0.902407</td>
</tr>
<tr>
<td>8</td>
<td>MROA</td>
<td>-40.03166</td>
<td>19.47144</td>
</tr>
<tr>
<td>9</td>
<td>MSIZE</td>
<td>0.937241</td>
<td>2.986538</td>
</tr>
<tr>
<td>10</td>
<td>MTAX</td>
<td>70.75422</td>
<td>57.11605</td>
</tr>
</tbody>
</table>

Source: Research Results (processed data)

Based on the results of multiple linear regression analysis, the following results were obtained:

1. DER is positive with prob t stat 0.041 < 0.05, hypothesis 1 is accepted, this indicates an increase in leverage, earnings management will increase by 0.487
2. ROA is negative with prob t stat 0.0478 < 0.05, hypothesis 2 is accepted but the effect is negative, this shows that with increasing profitability, earnings management will decrease by 24.725
3. SIZE is negative with prob t stat 0.003 < 0.05, hypothesis 3 is accepted but the effect is negative, this shows that with the increase in company size, earnings management will decrease by -17.937
4. TAX is positive with probability t stat 0.012<0.05, hypothesis 4 is accepted, this indicates that with the increase in corporate taxes, earnings management will increase by 49.528
5. MDER is negative with prob t stat 0.0579 <0.10, hypothesis 4 is accepted, this indicates that corporate governance will weaken leverage on earnings management by -0.507, MDER function is Pure Moderation because only the effect of MDER (institutional ownership interaction) with leverage which is significant to earnings management.
6. MROA is negative with prob t stat 0.0405 < 0.05, hypothesis 5 is accepted, this indicates that corporate governance will weaken profitability towards earnings management by -40.031, the MROA function (interaction of institutional ownership and profitability) is Pure Moderation because of the only significant effect of MROA on earnings management.
7. MSIZE is negative with prob t stat 0.7538>0.05, hypothesis 6 is rejected, this indicates Potential Moderation (Homologiser Moderator). This means that this variable has the potential to be a moderating variable and there is no interaction between the corporate governance variable and the firm size variable on earnings management.
8. MTAX is negative with prob t stat 0.2162> 0.05, hypothesis 7 is rejected, this indicates Potential Moderation (Homologiser Moderator). This means that this variable has the potential to be a moderating variable and there is no interaction between the corporate governance variable and the corporate tax variable on earnings management.
9. The F statistic test shows that the value of sig F < 0.05, so that leverage, profitability, size, corporate tax and corporate governance moderation together have a significant effect on earnings management.
10. The coefficient of determination test shows the test results of 0.118. This shows that the strength of the earnings management model can be explained by the independent variable of 11.85%, while the rest can be explained by other variables not included in the model in this study.

5. DISCUSSION

5.1 Leverage Affects Earnings Management

This study shows that leverage is positively related to earnings management, this indicates that the more debt, the higher the potential for earnings management so that leverage has an influence on earnings management.
Companies that have high leverage ratios tend and have the potential to practice earnings management because the company is threatened not to be able to fulfill its obligations on time. This research is in line with Giovani, 2017, [22,23,24,25].

### 5.2 Profitability has no Effect on Earnings Management

This study, it shows that profitability has no effect on earnings management, this shows that the increased profitability, the potential for earnings management will be lower or decreased. The existence of an influence between profitability on earnings management is when the company gains low profitability and will open up opportunities for earnings management practices by manipulating income with the aim of retaining existing investors and or attracting new investors. This explains that companies tend to carry out earnings management by means of profit manipulation in the form of profit minimization and profit maximization. This research is in line with Purnama (2017).

### 5.3 Company Size has no Effect on Earnings Management

Company size is stated as a determining factor of financial structure for different reasons: First, the size of the company affects the acquisition of funds in the capital market. Second, the size of the company is influential in determining the bargain in the financial contract. Third, company size affects larger companies in obtaining more profits. Research conducted by Fandriani [26] shows the results that the size of the company has no effect on earnings management. This research is in line with Putri and Machdar [10] which shows the results that the size of a company has no effect on earnings management. This shows that the size of the company is not necessarily an indicator in determining earnings management.

### 5.4 Corporate Tax Affects Earnings Management

This study shows that corporate tax has a positive effect on earnings management. This is because if there is an increase in corporate tax, it will encourage management to make decisions on earnings management. Tax planning in this case plays a role in earnings management actions and can be explained by using positive accounting theory and agency theory.

### 5.5 Corporate Governance Moderates the Effect of Leverage on Earnings Management

This study shows that the existence of corporate governance can weaken the influence of leverage on earnings management so that earnings management decreases. Research conducted by Naftalia and Marsono [27] shows that corporate governance can moderate the relationship between leverage and earnings management.

Naftalia and Marsono [27] states that high institutional ownership can reduce the risk of earnings management. So that the existence of corporate governance is expected to be a control and minimize the occurrence of earnings management and will weaken the relationship between leverage and earnings management. This research is in line with Mukti (2018).

### 5.6 Corporate Governance Moderates the Effect of Profitability on Earnings Management

This study shows that the existence of corporate governance can weaken the influence of profitability on earnings management. A profitability that is too low will certainly have a certain impact on the manager's performance appraisal. Managers will tend to regulate the number of bonuses that will be obtained by doing earnings management. This research is in line with Mukti (2018).

### 5.7 Corporate Governance does not Moderate the Effect of Firm Size on Earnings Management

This study shows that corporate governance cannot moderate the relationship between firm size and earnings management. The corporate governance variable is considered unable to carry out an effective supervisory mechanism and is involved in making strategic company decisions so that large companies and small companies will still carry out earnings management.

### 5.8 Corporate Governance does not Moderate the Effect of Corporate Tax on Earnings Management

This research shows that corporate governance cannot moderate the relationship between
corporate tax and earnings management. The existence of institutional investors as proxies of corporate governance is considered incapable of carrying out an effective supervisory mechanism and being involved in making strategic decisions of the company. High corporate governance is not able to limit the potential for earnings management by corporate management for corporate tax purposes because the corporate governance function cannot run optimally.

6. CONCLUSIONS AND IMPLICATIONS

Based on data analysis and interpretation, the conclusion of this study is leverage, profitability, firm size, and corporate tax have a positive effect on earnings management. Corporate Governance moderates the effect of profitability and leverage on earnings management. Corporate governance does not moderate the effect of firm size and corporate tax on earnings management.

The implication of this research is for investors to understand the concept of signaling theory more deeply that earnings management and corporate governance mechanisms can be used as signals for companies that investors can respond to in the capital market.

The limitation of this research is that the independent variables used are limited to firm size, leverage, profitability, and corporate tax variables. Based on the limitations of the study, it is recommended for further research to add other independent variables that are expected to have an effect on earnings management, or replace the moderating variable so that we can find out what factors can strengthen or weaken earnings management practices.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

10. Andrea Putri, Nera Marinda Machdar. The effect of free cash flow information asymmetry and firm size on earnings management; 2017. ISSN 2356-4385.

© 2022 Santoso and Mappadang; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here: https://www.sdiarticle5.com/review-history/83328