THE ANALYSIS OF THE EFFECT OF PROFITABILITY AND OTHER FACTORS ON EARNINGS MANAGEMENT

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Abstract: The objective of this research is to obtain empirical evidence of independent variables related to earnings management in non-financial companies. The independent variables used in this research are managerial ownership, institutional ownership, firm size, leverage, return on assets, sales growth, board size, and audit committee. This research used companies listed in non-financial sectors in Indonesia Stock Exchange from 2019 until 2021. There are 321 sample datas selected by using purposive sampling method. The model used in this research is multiple regression analysis. The result of this research shows that return on assets has an effect on earnings management. On the other hand, other independent variables, such as, managerial ownership, institutional ownership, firm size, leverage, sales growth, board size, and audit committee have no effect on earnings management.

Keywords: earnings management, return on assets, leverage, sales growth

INTRODUCTION

In this modern era, the business world continues to grow very rapidly and compete with one another. Therefore, every company needs to adapt to each other in order to survive in the midst of intense competition. In order to survive, companies are required to be able to provide reliable financial reports so that they can provide information as a basis for making decisions for users of financial reports (Felicya and Sutrisno 2020).

One of the important information needed by users in financial reports is information about...
company profits. Investors and other stakeholders use profit information as a measure of company management performance and an increase in investor prosperity (Agustia 2013). In other words, the value of profit in the financial statements is a crucial input in the process of making investment decisions (Deeb and Ramadan 2020). Users of financial statements tend to look at company income to evaluate company performance, make investment decisions, and evaluate manager performance (Susanto et al. 2019). It is because of the importance of the role of earnings information that this causes management to be compelled to take earnings management actions.

Earnings management is an act of corporate management intervention in the process of presenting financial statements by selecting appropriate accounting policies, with the aim of increasing profits, leveling profits, or reducing profits (Mayasari et al. 2019). The flexibility offered by Financial Accounting Standards (SAK) is used by company management to manage earnings. This allows management to distribute, increase or decrease profit figures in a certain year so high or so low compared to the previous year (Gayatri and Wirasedana 2021).

One of the cases of earnings management in Indonesia is the act of profit manipulation carried out by PT Garuda Indonesia Tbk. in 2019 (Hartomo 2019). Commissioner of PT Garuda Indonesia Tbk. found irregularities in the 2018 financial statements prepared by management. They considered that the financial statements issued in that year were not in accordance with the Financial Accounting Standards. This irregularity arose because the financial statements of PT Garuda Indonesia Tbk. in 2018 showed a net profit of USD 809.85 thousand or equivalent to IDR 11.33 billion. Even though in 2017 PT Garuda Indonesia suffered a loss of USD 216.5 million. There are significant differences, giving rise to suspicion (Hartomo 2019).

This research is a development of Khoshegbal et al. (2017) and aims to obtain empirical evidence regarding the effect of managerial ownership, institutional ownership, firm size, leverage, return on assets, sales growth, board size, and audit committee on earnings management.

Agency Theory

Agency theory is a theory that argues that there is a contractual relationship between the management (agent) and the owner or shareholder (principal) (Millenia and Tjhai 2021). Jensen and Meckling (1976) state that the contractual relationship contains the delegation of authority carried out by one or more principals to the agent in terms of making decisions in the company's operational activities. The company is no longer managed by the owner, but is handed over to professionals who have special knowledge in running a business.

The relationship that exists between owners and managers will lead to a conflict as a result of management actions that may not be in accordance with the interests or expectations of investors (Ehrhardt and Brigham 2011, 8). Managers only own a small portion of the company's share ownership, so this partial ownership can lead to a decrease in the effectiveness of the manager's performance and tends to enjoy more facilities, because most of the costs are borne by the majority owner (Jensen and Meckling 1976). The principal will then supervise the agent's performance to avoid things that will harm the principal. The existence of such supervision raises costs called agency costs. In general, agency cost is an amount of money that comes from the difference in welfare experienced by the principal because there are different interests between the principal and the agent (Godfrey et al. 2010, 363). Agency costs are further divided into monitoring costs, residual losses, and bonding costs (Jensen and Meckling 1976).

Differences in interests also arise between owners and management, namely in terms of investment preferences for excess cash flows owned by the company. The investor's interest is to invest excess cash flow in investments with high returns, where investments with high returns have a high level of risk as well. On the other hand, management wants excess cash flows to be invested in low-risk investments with low returns (Chandra and Djashan 2018)

Earnings Management

Schipper (1989) defines earnings management as an act of intentional management intervention in the process of presenting financial statements, with the aim of obtaining benefits for
certain parties. Earnings management is a form of manipulating earnings that can reduce the reliability of earnings (Khosheghbal et al. 2017). Management takes advantage of certain conditions to manipulate financial reports, especially in the profit section (Subramanyam and Wild 2014, 108). Profit figures are important information that is often used as a benchmark for report users in making decisions.

In his book, Subramanyam and Wild (2014, 108) state that there are three strategies for implementing earnings management. First, the manager increases the company's income for a certain period to give an idea that the company is in good condition. The second strategy is known as the big bath, in which managers carry out massive write-offs on expenditure and expense figures in a period, usually periods with very poor performance. The third strategy is that managers reduce profit fluctuations by applying income smoothing. With this strategy, managers increase or even reduce reported profits, thereby reducing fluctuations.

Managerial Ownership and Earnings Management

The definition of managerial ownership according to Alexander and Christina (2017) is the number of shares owned by managers of the company. The existence of managerial ownership can reduce the possibility of earnings management practices (Jensen and Meckling 1976). When managers have little or no ownership of the company, their attitudes and actions will be based on personal interests, as opposed to the interests of shareholders, which ultimately leads to earnings management practices. Conversely, the greater the manager's ownership in a company, the decisions and actions to be taken by managers will be in line with the interests of shareholders.

Research conducted by Saftiana et al. (2017) shows that managerial ownership has no effect on earnings management. This research is consistent with research conducted by Harahap (2021), Alexander (2019), Pradipta (2019), Millenia and Tjhai (2021), and Sebastian and Handoyo (2019). Research conducted by Aygun et al. (2014) showed that managerial ownership has a positive effect on earnings management. On the other hand, research conducted by Astari and Suryanawa (2017), Arthawan and Wirasedana (2018), Ekpulu and Omoye (2018), and Purnama (2017) shows that managerial ownership has a negative effect on earnings management. H1: Managerial ownership has an influence on earnings management.

Institutional Ownership and Earnings Management

According to Saftiana et al. (2017), institutional ownership is shares owned either by the government, financial institutions, legal institutions, foreign institutions or other institutions. Institutional ownership has an important role in efforts to prevent earnings management practices (Arifin and Destriana 2016). The existence of supervision by stakeholders, especially institutional investors, will limit the manager's space to move, thereby preventing opportunistic earnings management. This is consistent with research conducted by Aygun et al. (2014) and Astari and Suryanawa (2017) which state that institutional ownership has a negative effect on earnings management. Research conducted by Arifin and Destriana (2016) and Alexander (2019) shows that institutional ownership has a positive effect on earnings management. Meanwhile, research conducted by Saftiana et al. (2017), Harahap (2021), Anggraeni and Kurnia (2019), and Firtanti et al. (2019) shows that institutional ownership has no effect on earnings management. H2: Institutional ownership has an influence on earnings management.

Company Size and Earnings Management

Company size is a value that can describe the size of a company (Alexander and Hengky 2017). Company size provides information about the size of the company which can be seen based on the total assets or sales of the company (Wardani and Santi 2018). The larger the size of the company will reduce earnings management practices. This can happen because large-scale companies are usually more frequently eyed by the public, so they try to report their finances according to actual conditions and are reluctant to take risks (Alexander and Hengky 2017). Meanwhile, small-scale companies tend to practice earnings management by increasing the profit value than it should so that the company's condition looks good.

Research conducted by Khosheghbal et al. (2017), Mardjono and Chen (2020), Astari and
Suryanawa (2017), and Asim and Ismail (2019), show that company size has a positive effect on earnings management. Research conducted by Firnanti (2017), Arthawan and Wirasedana (2018), and Ramadhani and Sulistyowati (2021) shows that company size has a negative effect on earnings management. Meanwhile, research conducted by Harahap (2021), Alexander and Hengky (2017), and Anindya and Yuyetta (2020) shows that company size has no effect on earnings management.

**H3:** Firm size has an influence on earnings management.

### Leverage and Earnings Management

According to Saftiana et al. (2017), leverage can be interpreted as a measure that can show how much the value of a company's assets is financed by debt. Sebastian and Handojo (2019) state that leverage is a financial ratio that shows the relationship between a company's debt and the capital or assets of a company. The higher the value of the company's leverage ratio, the tighter the supervision carried out by creditors towards the company. This causes the opportunity for management to manage earnings is getting smaller. This statement is in line with research conducted by Firnanti et al. (2019), Millenia and Tjhai (2021), and Wijaya et al. (2020) which shows that leverage has a negative effect on earnings management.

Research conducted by Florencia and Susanty (2019), Sebastian and Handojo (2019), and Firnanti (2017) shows that leverage has a positive effect on earnings management. Meanwhile, research conducted by Chandra and Djashan (2018), Anindya and Yuyetta (2020), and Mardjono and Chen (2020) shows that leverage has no effect on earnings management.

**H4:** Leverage has an influence on earnings management.

### Return on Assets and Earnings Management

Return on Assets is a type of profitability ratio. This ratio is used to measure the ability of a company's management to gain profits by utilizing assets in operating activities (Firnanti et al. 2019). The greater the profitability which is proxied by Return on Assets will increase profits, but the higher the possibility of earnings management practices (Yuliana and Trisnawati 2015). Management who has opportunistic motivation in obtaining more bonuses is encouraged to practice earnings management by increasing profits so that Return on Assets increases (Florencia and Susanty 2019). According to Watts and Zimmerman (1986) in Yuliana and Trisnawati (2015) the greater the amount of bonus the manager will receive, the more motivated the manager will be in managing earnings.

Research conducted by Harahap (2021), Wijaya et al. (2020), and Bangun (2019) show that profitability has a positive effect on earnings management. Research conducted by Millenia and Tjhai (2021), Almalita (2017), and Chandra and Djashan (2018) shows that profitability has no effect on earnings management.

**H5:** Return on assets has an influence on earnings management.

### Sales Growth and Earnings Management

Sales growth or sales growth shows the level of sales that changes from one year to another (Firnanti et al. 2019). Annisa and Hapsoro (2017) in Edison and Nugroho (2020) state that sales growth describes a company's ability to maintain its existence amidst intense business competition. The existence of sales growth provides a signal for creditors to provide loans to the company concerned. In addition, companies that have high sales growth tend to maintain sales and profit trends, thereby triggering earnings management practices (Yunietha and Palupi 2017). This is in line with research conducted by Harahap (2021), Edison and Nugroho (2020), Astari and Suryanawa (2017), and Anindya and Yuyetta (2020) which state that sales growth has a positive effect on earnings management.

Research conducted by Firnanti et al. (2019) shows that sales growth has a negative effect on earnings management. Meanwhile, research conducted by Karina and Sutandi (2019), Mardjono and Chen (2020), and Asim and Ismail (2019) shows that sales growth has no effect on earnings management.

**H6:** Sales growth has an influence on earnings management.

### Board Size and Earnings Management

The board of directors is a group of people who are responsible for running and managing the company (Chandra and Djashan 2018). According to...
Effendi (2016) in Asitalia and Trisnawati (2017) in implementing a two-tier system, the board of directors functions to run the company, while the board of commissioners functions to supervise and provide advice to the board of directors. The existence of a board of directors is expected to reduce the possibility of earnings management practices, because if the number of company boards of directors is large, communication and coordination will be more intertwined with the company's management. This is in line with research conducted by Aygun et al. (2014) and Saona et al. (2020) which shows that the size of the board of directors has a negative effect on earnings management.

Research conducted by Anggraeni and Kurnia (2019) shows that the size of the board of directors has a positive effect on earnings management. Meanwhile, research conducted by Khoshegbal et al. (2017), Rinta (2021), and Cantika and Tjhai (2020) show that the size of the board of directors has no effect on earnings management.

H7: The size of the board of directors has an influence on earnings management.

Audit Committee and Earnings Management

The audit committee is tasked with overseeing the process of presenting financial reports (Firnanti et al. 2019). The audit committee ensures that the presentation of financial reports by management is accurate and reliable (Solikhah et al. 2017). With additional supervision, the opportunity for management to manipulate earnings is getting smaller. Therefore, the existence of an audit committee is expected to reduce earnings management. This is in line with research conducted by Mardjono and Chen (2020) and Sofia and Dasmaram (2021) which show that audit committees have a negative effect on earnings management.

Research conducted by Susanto (2013) shows that the audit committee has a positive effect on earnings management. Meanwhile, research conducted by Firnanti et al. (2019), Millenia and Tjhai (2021), and Rinta (2021) show that the audit committee has no effect on earnings management. Hypothesis H8 is: The audit committee has influence over earnings management.

RESEARCH METHODS

This study uses a form of causality research. The research object that will be used in this study is a non-financial company listed on the Indonesia Stock Exchange (IDX). The method used in sampling is purposive sampling method. In this method, sample selection is limited by certain criteria presented in Table 1.

Earnings Management

Earnings management is an act of intentional management intervention in the process of presenting financial statements, with the aim of obtaining benefits for certain parties (Schipper 1989). Earnings management is measured using a ratio scale. Based on the research of Khosheghbal et al. (2017), this study will measure the dependent variable of earnings management using discretionary accruals which is the Modified Jones model. Below is the DACC formula according to Khosheghbal et al. (2017) and supported by Saftiana et al. (2017) which is divided into four steps, including:

Step 1:

\[ TAC_t = \text{net income} - \text{cash flow from operating} \]

Step 2:

\[ TAC_t = \alpha_1 \left( \frac{1}{A_{t-1}} \right) + \alpha_2 \left[ \frac{\Delta REV_t - \Delta REC_t}{A_{t-1}} \right] + \alpha_3 \left( \frac{PPE_t}{A_{t-1}} \right) + \epsilon_t \]

Step 3:

\[ NDA_t = \alpha_4 \left( \frac{1}{A_{t-1}} \right) + \alpha_2 \left[ \frac{\Delta REV_t - \Delta REC_t}{A_{t-1}} \right] + \alpha_3 \left( \frac{PPE_t}{A_{t-1}} \right) \]

Step 4:

\[ DA_t = \left( \frac{TAC_t}{A_{t-1}} \right) - NDA_t \]

Information:

\[ DA_t = \text{Discretionary Accruals pada tahun t} \]
\[ TAC_t = \text{Total Accruals perusahaan pada tahun t} \]
\[ NDA_t = \text{Non-Discretionary Accruals pada tahun t} \]
Table 1 Sample Selection Procedure

<table>
<thead>
<tr>
<th>No.</th>
<th>Sample Selection Criteria</th>
<th>Number of Companies</th>
<th>Amount of data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Non-financial companies that are consistently listed on the Indonesia Stock Exchange during the period 2018 to 2021.</td>
<td>510</td>
<td>1.530</td>
</tr>
<tr>
<td>2.</td>
<td>Non-financial companies that present financial statements that do not end on December 31 during the period 2018 to 2021.</td>
<td>(30)</td>
<td>(90)</td>
</tr>
<tr>
<td>3.</td>
<td>Non-financial companies that do not present financial statements in Rupiah during the period 2018 to 2021.</td>
<td>(79)</td>
<td>(237)</td>
</tr>
<tr>
<td>4.</td>
<td>Non-financial companies that do not report consecutive profits from 2019 to 2021.</td>
<td>(221)</td>
<td>(663)</td>
</tr>
<tr>
<td>5.</td>
<td>Non-financial companies that do not provide information regarding managerial ownership during the period 2019 to 2021.</td>
<td>(67)</td>
<td>(201)</td>
</tr>
<tr>
<td>6.</td>
<td>Non-financial companies that do not provide information on institutional ownership during the period 2019 to 2021.</td>
<td>(6)</td>
<td>(18)</td>
</tr>
<tr>
<td></td>
<td><strong>Total Research Data before Outlier Test</strong></td>
<td><strong>107</strong></td>
<td><strong>321</strong></td>
</tr>
</tbody>
</table>

Source: Data Processing

\[
\begin{align*}
A_{t-1} &= \text{Total Assets on year } t-1 \\
\Delta \text{REV}_t &= \text{Changes in Operating Revenue on year } t \\
\Delta \text{REC}_t &= \text{Changes in Accounts Receivable on year } t \\
PPE_t &= \text{Gross Property, Plant, and Equipment on year } t \\
\epsilon_t &= \text{Error term} \\
\alpha_1, \alpha_2, \alpha_3 &= \text{Regression Parameters}
\end{align*}
\]

Managerial ownership
According to Alexander and Christina (2017), managerial ownership is the number of shares owned by managers of the company. The scale used to measure managerial ownership is the ratio scale. In this study, managerial ownership is denoted by \( KM \). Based on research by Saftiana et al. (2017), managerial ownership is measured using proxies:

\[
KM = \frac{\text{Number of shares owned by management}}{\text{Number of shares outstanding}}
\]

Institutional Ownership
According to Saftiana et al. (2017), institutional ownership is shares owned either by the government, financial institutions, legal institutions, foreign institutions or other institutions. The scale used to measure institutional ownership is the ratio scale. In this study, institutional ownership is denoted by \( IP \). Based on research by Saftiana et al. (2017), institutional ownership is measured using proxies:

\[
KI = \frac{\text{Number of shares of institutional ownership}}{\text{Number of outstanding shares}}
\]

Company Size
Company size is a value that can describe the size of a company (Alexander and Hengky 2017). The scale used to measure company size is a ratio scale. In this study, company size is denoted by \( SIZE \). Based on the research of Khosheghbal et al. (2017), company size is measured by

\[
SIZE = \text{Natural logarithm of Total Asset}
\]

Leverage
Leverage is a measure that can show how much the value of a company’s assets is financed by debt (Saftiana et al. 2017). The scale used to measure
leverage is a ratio scale. In this study, leverage is denoted by LEV. Based on research by Saftiana et al. (2017), leverage is measured using a proxy:

\[
LEV = \frac{Total \ Liabilities}{Total \ Assets}
\]

**Return on Assets**

Return on Assets describes management's ability to generate profits by utilizing assets in operating activities (Firmanti et al. 2019). Based on research by Firmanti et al. (2019), return on assets is denoted by ROA. The scale used to measure ROA is a ratio scale. ROA is measured using proxies:

\[
ROA = \frac{Net \ Income \ After \ Tax}{Total \ Assets}
\]

**Sales Growth**

Sales growth or sales growth shows the level of sales that changes from one year to another (Firmanti et al. 2019). The scale used to measure sales growth is the ratio scale. In this study, sales growth is denoted by SG. Based on research by Edison and Nugroho (2020), sales growth is measured using proxies:

\[
SG = \frac{Current \ year's \ sales - Previous \ year's \ sales}{Previous \ year's \ sales}
\]

**Size of the Board of Directors**

The board of directors is an organ that has a very important role, namely making policies that will be implemented by the company. The size of the board of directors is measured using a ratio scale. In this study, the size of the board of directors is denoted by UDD. Based on the research of Khosheghbal et al. (2017), the size of the board of directors is measured by

\[
UDD = \frac{Size \ of \ Board \ of \ Directors}{Size \ of \ Board \ of \ Directors}
\]

**Audit Committee**

The audit committee is tasked with overseeing the process of presenting financial reports (Firmanti et al. 2019). The scale used to measure the audit committee is a ratio scale. In this study, the audit committee is denoted by KA. Based on research by Firmanti et al. (2019), the audit committee is measured using by number of audit committee members

**RESULT AND DISCUSSION**

Information regarding the results of the t statistical test is presented in Table 2. The results of the t statistical test show that managerial ownership (KM) has a coefficient value of -0.066 and a significance value of 0.309. sig. value is greater than alpha (0.05), so Ha1 is unacceptable. So it can be concluded that there is no influence between managerial ownership (KM) and earnings management (EM). This can happen because the composition of managerial ownership in Indonesia is low, and thus has not been able to influence earnings management actions. The results of the t statistical test show that institutional ownership has a coefficient value of 0.009 and a significance value of 0.825. sig. value is greater than alpha (0.05), so Ha2 is unacceptable. Therefore, it can be concluded that there is no influence between institutional ownership (IC) and earnings management (EM). This can happen because of the nature of institutional investors who are not sophisticated, do not have many abilities and opportunities to monitor management performance (Agustia 2013). Based on the results of the t statistical test, firm size (SIZE) has a coefficient value of -0.0004 and a significance value of 0.946. sig. value is greater than alpha (0.05), then Ha3 is unacceptable. So it can be concluded that there is no influence between firm size (SIZE) and earnings management (EM). This is probably because both large and small companies still have the opportunity to manage earnings, because basically they are trying to avoid political costs that may occur. Based on table 2, leverage shows a coefficient value of -0.013 and a significance value of 0.677. sig. value is greater than alpha (0.05), so Ha4 is unacceptable. Therefore, it can be concluded that leverage (LEV) has no effect on earnings management (EM). This can happen because companies with high levels of leverage will face a high risk of default, so management actions cannot be used to avoid this risk, instead companies must fulfill these debt obligations (Harahap 2021).
Based on the results of the t statistical test, return on assets (ROA) has a significance value of 0.002. This value is smaller than alpha (0.05), so $H_{a5}$ is acceptable. Therefore, it can be concluded that there is an influence between return on assets (ROA) and earnings management (EM). The beta coefficient value of 0.289 indicates that the return on assets has a positive effect on earnings management. That is, the greater the ratio of return on assets, the practice of earnings management will also increase, namely with the income maximization method. This can happen because management is motivated to carry out earnings management by increasing profits so that the company's performance looks good, so that management will get a bigger bonus too.

Based on the results of the t test, sales growth (SG) has a coefficient value of 0.002 and a significance value of 0.939. sig. value is greater than alpha (0.05), then $H_{a6}$ is unacceptable. Therefore, it can be concluded that sales growth (SG) has no effect on earnings management (EM). This can happen because every year management must try to maintain the company's sales trends, so that changes in sales growth are not a factor in earnings management practices (Karina and Sutandi 2019).

Based on table 2, the size of the board of directors (UDD) has a coefficient value of -0.005 and a significance value of 0.185. sig. value is greater than alpha (0.05), then $H_{a7}$ is unacceptable. Therefore, it can be concluded that the size of the board of directors (UDD) has no effect on earnings management. This can happen because basically members of the board of directors who act as agents in the agency concept tend to try to maximize their utility, so that it does not become a driving factor for earnings management.

Based on the results of the t test, the audit committee (KA) has a coefficient value of -0.005 and a significance value of 0.710. sig. value is greater than alpha (0.05), then $H_{a8}$ is unacceptable. Therefore, it can be concluded that the audit committee (KA) has no effect on earnings management (EM). This can happen because the audit committee does not come from an independent party because it was formed by the board of commissioners with the aim of fulfilling the requirements of the Financial Services Authority so that members appointed only come from acquaintances or close people, not professionals (Rinta 2021).

**CONCLUSION, IMPLICATION, LIMITATION**

Based on the test results of 107 non-financial companies listed on the Indonesia Stock Exchange for the period 2019 to 2021, the conclusion obtained is that return on assets affects earnings management, while managerial ownership, institutional ownership, company size, leverage, sales growth, board size, and the audit committee has no effect on earnings management. This study has an Adjusted R Square value of only 3%, which means that the variation of the independent variables that can explain the dependent variable is only 3%. The remaining 97% is explained by variations in other independent variables that are not included in the research. Based on the test results of 107 non-financial companies listed on the Indonesia Stock Exchange for the period 2019 to 2021, the conclusion obtained...
is that return on assets affects earnings management, while managerial ownership, institutional ownership, company size, leverage, sales growth, board size, and the audit committee has no effect on earnings management. This study has an Adjusted R Square value of only 3%, which means that the variation of the independent variables that can explain the dependent variable is only 3%.

The remaining 97% is explained by variations in other independent variables that are not included in the regression model in this study. Therefore, researchers can replace other independent variables that are expected to have an influence on earnings management, for example Free Cash Flow or Firm Age.

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HALAMAN INI SENGAJA DIKOSONGKAN