Analysis of Earnings Management: Using Ownership Structure and Audit Quality Among Banking Industries in Indonesia

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Analysis of Earnings Management: Using Ownership Structure and Audit Quality Among Banking Industries in Indonesia

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\textbf{ABSTRACT}

\textbf{Purpose}: This research aims to examine the impact of ownership structure consisting of managerial ownership, institutional ownership and audit quality which is proxied using size of public accountant firms on earnings management using three control variables, namely company size, leverage and market value.

\textbf{Design/Methodology/Approach}: The population used in this research is banking companies listed on the Indonesian Stock Exchange for the 2020-2022 period. The data used in this research is secondary data and the sampling technique selection used is purposive sampling. There were 35 companies in the sample with a total of 105 data points at the beginning, after the outlier elimination process the final data amounted to 87 data points. The analytical method used to test the hypothesis in this research uses multiple linear regression analysis.

\textbf{Findings}: The results of this research show that managerial ownership and audit quality have a significant negative effect on earnings management, while institutional ownership has a significant positive effect on earnings management.

\textbf{Originality}: This study uses a sample of banking companies in Indonesia. Control variables were added by researchers when testing the influence of research variables. Agency theory is used to explain the relationship between managerial ownership, institutional ownership and audit quality with earnings management.

\textbf{KEYWORDS}
Managerial Ownership, Institutional Ownership, Audit Quality, Earnings Management, Indonesian Banks.

\textbf{JEL CLASSIFICATION}
M41, M42

\section*{I. Introduction}

The act of managing company profits in accordance with management intentions is known as earnings management (Harahap, 2021). Users of the report will be very disadvantaged because they cannot obtain accurate information about the company’s financial position due to earnings management (Oyedokun et al., 2019). Currently, earnings management remains a controversial issue, with investors arguing that it reduces the reliability of financial information and can mislead decision-making (Moslemany and Nathan, 2019). Earnings management arises from agency problems, namely the misalignment of interests between company owners and managers due to information asymmetry (Sumantri et al., 2021). This condition of information asymmetry is where management has more information than outsiders, so there is an imbalance in the acquisition of information between management and owners (shareholders), causing agency problems (Evodila et al., 2020). Although managers are responsible for maximizing the welfare of shareholders, on the other hand managers are also responsible for maximizing their own welfare (Laksmi and Kamila, 2018). Compared to owners (shareholders),

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managers know more about the company’s internal information.

In Indonesia, there are many cases related to unreliable financial reports. Among them is by presenting irrelevant information to stakeholders, namely by carrying out earnings management with the aim of management’s personal interests. One of the cases in Indonesia was carried out by PT Bank Bukopin which was proven to have provided inappropriate financial report information in the last three years, namely from 2015 to 2017. The management of PT Bank Bukopin openly revised the financial reports from 2015 to 2017. PT Bank Bukopin is known to have revised its 2016 financial report which was then published on April 25, 2018. One of the elements of the revised financial report was profit. Initially, net profit for 2016 was presented at Rp. 1.08 trillion and revised to Rp. 183.56 billion. In addition, Bank Bukopin has accounted for interest income on 100,000 fictitious credit cards, so that for three years Bank Bukopin has achieved a significant increase in profits. These modifications caused Bukopin’s credit position and net commission income to increase unreasonably (Rachman, 2018).

Managerial ownership shows the dual role of a manager in order to optimize company profits and does not want the company to experience financial difficulties or even experience bankruptcy which has an impact on the loss of return and investment (Maswadeh, 2018). Managerial share ownership can align the interests of managers with shareholders, because managers feel directly the benefits of the decisions (Steve et al., 2018). Gultom and Wati (2022) stated that institutional ownership is the percentage of shares owned by institutions or institutions such as (insurance companies, pension funds, or other companies). A high level of ownership by institution shareholders will lead to greater supervision so that it can control managers actions that are not in line with the interests of the shareholders (Ekpulu and Omoye, 2018). Institutional investors have the opportunity, resources and ability to supervise, issue and influence company managers in terms of management opportunistic actions (Moslemany and Nathan, 2019).

Audit quality is the probability of detecting and finding violations of the client's accounting system, and reporting them (Suheny, 2019). Quality audit services can affect management’s tendency to carry out earnings management because the higher the quality of the audit, the more it can reduce the tendency to erode the predictive ability of financial statements due to earnings management (Nirmalasari and Sapari, 2022). Based on the explanation above, the purpose of this study is to analyze earnings management: using ownership structure and audit quality among banking industries in Indonesia.

II. Literature Review and Hypotheses Development

Agency Theory

Agency theory is an agency relationship as a contract that states that one or more persons (principal) ask another person (agent) to perform certain services for the benefit of the principal by delegating authority to the agent (Jensen and Meckling, 1976). Differences in interests between principals and agents can lead to agency problems, one of the causes of agency problems is information asymmetry (Evodila et al., 2020). Information asymmetry is a condition that makes one party have a lot of information compared to other parties who have little information so that there is an imbalance of information (Kusumaningtyas et al., 2019).

The parties involved are management as a provider of information (preparer) with shareholders and stakeholders in general as information users (Asim and Ismail, 2019). Managers have more information than shareholders because managers know more
about the conditions in the company (Supri et al., 2018). Less information held by shareholders can trigger managers to use their position in the company to manage reported earnings (Ekpulu and Omoye, 2018). The difference in information obtained can make one party to manipulate information. The manager's actions can be limited by good corporate governance and third party supervision, namely the auditor (Ulina et al., 2018). There are three types of agency conflicts that often occur (1) conflicts between shareholders and management, (2) conflicts between shareholders and debt holders, and (3) conflicts between majority and minority shareholders (Maswadeh, 2018).

**Earnings Management**

According to (Healy and Wahlen, 1999) earnings management occurs when managers make judgmental changes to financial statements in preparing financial reports and transactions to mislead shareholders about the company's economic performance or to influence contractual outcomes that depend on reported accounting performance. Therefore, it can be concluded that earnings management is the opportunistic behavior of managers who want to maximize profits by changing the numbers of reported earnings. Managers carry out earnings management by choosing certain accounting policies so that profits can be adjusted, according to their wishes (Laksmi and Kamila, 2018). The existence of earnings management practices can reduce the reliability of financial statements and relevant financial reports, which can affect investors or potential investors in making investment decisions (Nguyen et al., 2021).

**Managerial Ownership**

Managerial ownership is the share ownership by management (directors and commissioners) who play an active role in making company decisions (Mahyuddin and Nor, 2020). Managers as professionals are expected to act on behalf of the owner to achieve company goals and for the benefit of shareholders (Laksmi and Kamila, 2018). However, managers are often tempted to increase their own wealth, which ultimately leads to agency problems (Nguyen et al., 2021).

Agency problems can be minimized by aligning the interests of management and shareholders, which can be achieved by increasing managerial ownership (Prayogi and Setyorini, 2021). Managerial ownership is seen as an attempt to reconcile the interests of shareholders with the interests of managers, this is because managers benefit directly from the decisions made and are responsible for the consequences of wrong decisions (Moslemany and Nathan, 2019).

**Institutional Ownership**

Institutional ownership is shares in a company that are owned by institutions (such as insurance companies, banks, investment companies and other institutional ownership) (Maswadeh, 2018). Institutional ownership has the ability to reduce earnings management practices by controlling management through effective monitoring (Kablan, 2021). Such supervision will certainly ensure the welfare of holders because the influence of institutional ownership as a supervisor can be suppressed by institutions that invest heavily in the capital market (Ekpulu and Omoye, 2018).

The high level of institutional ownership of the company will strengthen the supervisory efforts of institutional investors to ensure that managers do not take actions that harm shareholders (Jane and Firnanti, 2019). Changing the behavior of institutional investors from passive to active can force managers to pay more attention to their actions and decisions (Oyedokun et al., 2019).
Audit Quality

The emergence of earnings management practices can be explained by agency theory. Agency theory states that agents have more information than principals, this is because principals cannot continuously observe the actions taken by agents (Jensen and Meckling, 1976). In this situation, a third party is needed, namely the auditor as a party who is considered capable of combining the interests of the principal and the management (agent) in managing the company's finances (Nirmalasari and Sapari, 2022).

Audit quality is considered to be a measure of the quality of the company's financial statements, and high audit quality is expected to increase the reliability of users of financial statements (Fandriani and Tunjung, 2019). Audit quality variables are difficult to measure because audit results cannot be observed directly. To overcome this problem, previous researchers have looked for alternative indicators of audit quality. Indicators that are often used in research include size of public accounting firm, auditor independence and auditor industry specialization (Ulina et al., 2018).

Size of public accounting firm (public accounting firm Big four and non-Big four) is used in this study to measure audit quality. The quality of the audit results carried out by the auditor is thought to be influenced by the size of public accounting firm. Size of Big four public accounting firm is considered to have higher quality when conducting an audit compared to non-Big four size of public accounting firm (Natalia et al., 2018). Big four auditors are more experienced and reputable than non-Big four auditors. For this reason, Big four auditors are serious in providing protection to the public by maintaining market share, public trust and reputation (Suheny, 2019).

Empirical Review

Ekpulu and Omoye (2018) investigated the impact of ownership structure on earnings management in Nigeria using a sample of 75 quoted companies for the period 2009 to 2014. The credibility and reliability of the primary purpose of external financial reporting has been questioned by many users of financial statements due to the effect of earnings management on the information content of the reports. They concluded that managerial ownership is negatively and significantly related to earnings management, while institutional ownership and foreign ownership show a positive but insignificant relationship. They recommend that firms should consider increasing managerial ownership by issuing policy statements that require managers and executive directors to own more equity shares. In addition, there may be a need for firms to have a high percentage of institutional ownership especially participatory institutional ownership which can influence efficient monitoring and reduce earnings management.

Kablan (2021) identified the effect of a combination of ownership structures on earnings management practices in companies listed on the Libyan stock market, as an addition and evidence for developing countries such as Libya. Due to the importance of presenting an integrated model to disclose true comprehensive income, to measure management performance fairly and to take rational decisions related to dividends away from earnings management practices. The results of the investigation found that managerial ownership structure; institutional ownership structure and foreign ownership structure, respectively have a positive significant effect on earnings management practices in companies listed on the Libyan stock market. On the other hand, public ownership structure has a negative significant effect on earnings management practices in companies listed on the Libyan stock market.
Nirmalasari and Sapari (2022) examined the effect of managerial ownership, auditor independence and audit quality on earnings management practices in food and beverages companies listed on the Indonesia Stock Exchange for the 2015-2019 period. Based on the purposive sampling method, 57 samples were obtained from 12 manufacturing companies listed on the Indonesia Stock Exchange during 2015-2019. The test results they conducted showed that managerial ownership had no significant effect on earnings management, as well as audit independence. Meanwhile, audit quality was found to have a significant negative effect on earnings management.

**Hypothesis Development: Earnings Management**

**Managerial Ownership and Earnings Management**

Jensen and Meckling (1976) state that when there is management ownership in a company, management will work harder to fulfill the interests of shareholders more effectively. Ekpulu and Omoye (2018) stated that management ownership is seen as an opportunity to reconcile potential conflicts of interest between management and other shareholders. A high level of managerial ownership can reduce actions to carry out earnings management because managers will have good and bad consequences for every decision they make. Therefore, increasing managerial ownership can reduce actions by managers to carry out earnings management (Steve et al., 2018).

The results of research conducted by (Ekpulu and Omoye, 2018), (Laksmi and Kamila, 2018), (Nguyen et al., 2021) stated that managerial ownership has a negative and significant effect on earnings management. Based on this, the following hypothesis can be drawn:

\[ H_1: \text{Managerial ownership has a negative and significant effect on earnings management.} \]

**Institutional Ownership and Earnings Management**

Agency theory states that institutional ownership plays a very important role in minimizing agency conflicts between managers and shareholders (Jensen and Meckling, 1976). Institutional ownership can be an effective monitoring tool for companies (Ekpulu and Omoye, 2018).

Ownership by an institutional is important because it can function to oversee the parties running a company. Company supervision by institutional investors can encourage managers to pay more attention to company performance. Increasing the amount of institutional ownership can make supervisory control more effective and can reduce opportunistic actions or prioritize their own interests (Oyedokun et al., 2019).

The results of research conducted by (Maswadeh, 2018), (Yovianti and Dermawan, 2020), (Immanuel and Hasnawati, 2022) stated that institutional ownership has a negative and significant effect on earnings management. Based on this, the following hypothesis can be drawn:

\[ H_2: \text{Institutional ownership has a negative and significant effect on earnings management.} \]

**Audit Quality and Earnings Management**

Based on agency theory, auditing is a form of monitoring used by companies to reduce agency costs (Jensen and Meckling, 1976). Public accounting firm Big four has better capabilities and experience, thus making managers avoid doing earnings management. If the manager continues to carry out earnings management, the auditor
will quickly detect the fraud (Natalia et al., 2018).

Measurement of audit quality in this study is proxied by using size of the public accounting firm. The size of public accounting firm is expected to affect the quality of the audit results carried out by its auditors. (Ulina et al., 2018) stated that auditors who work at Big four public accounting firm are considered more qualified because they are more experienced and have better expertise than auditors from non-Big four public accounting firm, making it easier to detect earnings management practices in the company. Therefore, the larger the size of public accounting firm, the lower the earnings management activity.

The results of research conducted by (Fandriani and Tunjung, 2019), (Kusumaningtyas et al., 2019), (Nirmalasari and Sapari, 2022) stated that audit quality proxied by the size of the Big four public accounting firm has a negative and significant effect on earnings management. Based on this, the following hypothesis can be drawn:

\[ H_3: \text{Audit quality has a negative and significant effect on earnings management.} \]

### III. Methodology

This study uses quantitative research methods with secondary data collection techniques. The purpose of this study was to determine the effect of ownership structure and audit quality on earnings management. This study also adds control variables, namely company size, leverage and market value. The ownership structure used is managerial ownership, and institutional ownership. Meanwhile, audit quality is measured using the dummy variable size of public accounting firm. Earnings management used is accrual earnings management proxied by discretionary accrual (DA). The sample collection method in this study uses purposive sampling method with predetermined criteria. The secondary data in this study were taken from the annual financial statements of banking companies listed on the Indonesia Stock Exchange (IDX) with the research years 2020 to 2022. Secondary data sources in the study were obtained through Indonesia Stock Exchange Bursa Efek Indonesia and processed using SPSS application assistance with descriptive statistical tests, classical assumption tests, multiple linear regression analysis, coefficient of determination tests, \( t \) (partial) tests.

### Table 1: Operational Definition and Measurement of Variables

<table>
<thead>
<tr>
<th>No.</th>
<th>Variables</th>
<th>Operational Definition</th>
<th>Variable Measurement</th>
<th>Reference Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Managerial Ownership</td>
<td>Managerial ownership is share ownership in a company whose shares are held by managers</td>
<td>( MO = \frac{\text{Number of managerial shares}}{\text{Total shares outstanding}} )</td>
<td>(Steve et al., 2018; Anshori et al., 2023)</td>
</tr>
<tr>
<td>2</td>
<td>Institutional ownership</td>
<td>Institutional ownership is shares in a company that are owned by institutions or institutions</td>
<td>( IO = \frac{\text{Number of institutional shares}}{\text{Total shares outstanding}} )</td>
<td>(Maswadeh, 2018; Mardiani and Asmanah, 2020)</td>
</tr>
<tr>
<td>3</td>
<td>Audit quality</td>
<td>Companies that use public accounting firm to audit financial statements</td>
<td>Value 1 if the company is audited by size of public accounting firm ( Big four ), value 0 if the company is audited</td>
<td>(Suheny, 2019; Sinurat and Sudjiman, 2023)</td>
</tr>
</tbody>
</table>
by public accounting firm non-Big four.

4. Company size

Company size is a measure that determines the size of the company can be assessed from equity, sales, number of employees and total assets.

\[ SIZE = \log_{\text{natural}} (\text{Total Assets}) \]

(Hasan et al., 2021; Putri and Pohan, 2022)

5. Leverage

Leverage is a ratio to measure the size of a company's assets that are financed by debt.

\[ \text{Leverage} = \frac{\text{Total Amount of Debt}}{\text{Total Assets}} \]

(Asim and Ismail, 2019; Suwasono et al., 2019)

6. Market value

Market value refers to the size of a company.

\[ \text{MV} = \text{Closing share price} \times \text{Total shares outstanding at the end of the year} \]

(Toumeh et al., 2020)

7. Earnings management

Earnings management is an opportunistic action of managers in managing profits.

Using the Modified Jones Model with discretionary accruals = 0.

\[
\begin{align*}
\text{Total Accrual (TAC)} &= \text{Net Income (NI)} - \text{Cash Flow from Operations (CFO)} \\
(TAC_{t}/At - 1) &= a_1 (1/At - 1) + a_2 ((\Delta REV_t - \Delta REC_t)/At - 1) + a_3 (PPE_{t}/At - 1) + e \\
\end{align*}
\]

1) Using the Modified Jones Model with discretionary accruals =

\[
\begin{align*}
\text{Total Accrual (TAC)} &= \text{Net Income (NI)} - \text{Cash Flow from Operations (CFO)} \\
(TAC_{t}/At - 1) &= a_1 (1/At - 1) + a_2 ((\Delta REV_t - \Delta REC_t)/At - 1) + a_3 (PPE_{t}/At - 1) + e \\
\end{align*}
\]

\[
\begin{align*}
\text{NDAt} &= a_1 (1/At - 1) + a_2 ((\Delta REV_t - \Delta REC_t)/At - 1) + a_3 (PPE_{t}/At - 1) \\
\text{DACt} &= (TAC_{t}/At - 1) - \text{NDAt} \\
&= (TAC_{t}/At - 1) - \text{NDAt} \\
\end{align*}
\]

(Ekpulu and Omoye, 2018; Hapsari and Hartikasari, 2022)

Table 2: Operational Definition and Measurement of Variables

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Banking companies listed on the Indonesia Stock Exchange from 2020-2022</td>
<td>46</td>
</tr>
<tr>
<td>2.</td>
<td>Banking companies that do not publish annual financial reports for the period December 31, 2020-2022</td>
<td>(2)</td>
</tr>
<tr>
<td>3.</td>
<td>Data on the independent, control and dependent variables to be studied are not available in full in the annual financial reports of banking companies published in 2020-2022.</td>
<td>(9)</td>
</tr>
<tr>
<td></td>
<td>Sample Quantity</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Year of Observation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Final Sample Size</td>
<td>105</td>
</tr>
</tbody>
</table>

Source: Indonesia Stock Exchange
From a total population of 46 banking companies’ populations listed on the Indonesia Stock Exchange over 2020-2022 period, we have filtered sample based on purposive sampling techniques. Based on the results of the sample screening, 35 companies were obtained which were used as research samples multiplied by the research period of 3 years, so that a total of 105 research sample data was obtained.

IV. Results and Discussion

Descriptive Statistical Analysis

| Table 3: Descriptive Statistics |
|---|---|---|---|---|
| N | Minimum | Maximum | Mean | Std. Deviation |
| Managerial Ownership | 87 | .00 | .32 | .0182 | .05390 |
| Institutional Ownership | 87 | .01 | 1.32868 | 35.8016 | 207.01048 |
| Audit Quality | 87 | .00 | 1.00 | .5143 | .50219 |
| Company Size | 87 | 27.98 | 37.35 | 31.8110 | 2.01976 |
| Leverage | 87 | .07 | 1.10 | .7793 | .17228 |
| Market Value | 87 | 2.73E+10 | 1.05E+15 | 7.0184E+13 | 1.91347E+14 |
| Earnings Management | 87 | -.95 | .12 | -.0614 | .11911 |

Source: Data processed, 2023

Based on the output results in Table 3 above, the results show the managerial ownership variable with a minimum value of 0.00, a maximum value of 0.32, a mean value of 0.0182, and a standard deviation value of 0.05390. Institutional ownership variable with a minimum value of 0.01, a maximum value of 1.328, a mean value of 35.8016, and a standard deviation value of 207.01048. The audit quality variable proxied by size of public accounting firm shows a minimum value of 0.00, a maximum value of 1.00, a mean value of 0.5143, and a standard deviation value of 0.50219.

The first control variable is company size proxied by the natural logarithm of total assets with a minimum value of 27.98, a maximum value of 37.35, a mean value of 31.8110, and a standard deviation value of 2.01976. The second control variable is leverage with a minimum value of 0.07, a maximum value of 1.10, a mean value of 0.7793, and a standard deviation value of 0.17228. The third control variable is market value with a minimum value of 2.73E+10, a maximum value of 1.05E+15, a mean value of 7.0184E+13, and a standard deviation value of 1.91347E+14.

The dependent variable is management using the modified jones model with a minimum value of -0.95, a maximum value of 0.12, a mean value of -0.0614, and a negative mean value indicates that there has been a reduction in the value of discretionary accruals by banking companies. This indicates that earnings management actions in the company are relatively low in reporting company profits by taking accounting methods that can reduce company profits.

Classical Assumption Test

From the test, it is known that 18 data are outlier data. The way to normalize the research data is to delete the outlier data. Outlier data is data with unique characteristics that appear different from other observation data and appear as
extreme values (Ghozali, 2018). The following are the results of data outliers:

Table 4: Outlier Data

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria</th>
<th>Sample Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Number of companies based on data selection criteria</td>
<td>105</td>
</tr>
<tr>
<td>2.</td>
<td>Number of data outliers</td>
<td>(18)</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>87</strong></td>
</tr>
</tbody>
</table>

Source: Data processed, 2023

To obtain normally distributed data, it is necessary to remove extreme value data (outliers) from the research data. After the data outlier process, 18 extreme data were removed from the study, so there were 87 valid data in this study.

Normality Test

The data normality test in this study uses the Kolmogorov-Smirnov test with identification if the p-value is greater than the 0.05 significance level, the assumption of normality can be accepted. (Ghozali, 2018). The following table shows the results of the normality test using the Kolmogorov-Smirnov test:

Table 5: Normality Test Results with One-Sample Kolmogorov-Smirnov

<table>
<thead>
<tr>
<th>N</th>
<th>87</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Parameters&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>.000000</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.028466</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td></td>
</tr>
<tr>
<td>Absolute</td>
<td>.091</td>
</tr>
<tr>
<td>Positive</td>
<td>.065</td>
</tr>
<tr>
<td>Negative</td>
<td>-.091</td>
</tr>
<tr>
<td>Test Statistic</td>
<td></td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.075&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> Test distribution is Normal.  
<sup>b</sup> Calculated from data.  
<sup>c</sup> Lilliefors Significance Correction.  

Source: Data processed, 2023

From the results of the normality test above, it can be seen that the p-value is 0.075 or greater than 0.05, so it can be concluded that the assumptions required for the regression test that the data must be normally distributed are met or in other words that this regression model can be continued.

Heteroscedasticity Test

In this study, heteroscedasticity is tested by looking at the Scatterplot image with the basis for decision making as follows:
Figure 1: Heteroscedasticity Test Results

Based on the scatterplot graph above, it appears that the data distribution does not form a clear pattern, the data points spread below and above the number 0 on the Y axis. This indicates that there is no heteroscedasticity in the regression model.

Multicollinearity Test

Table 6: Multicollinearity Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td></td>
</tr>
<tr>
<td>Managerial Ownership</td>
<td>.726</td>
</tr>
<tr>
<td>Institutional Ownership</td>
<td>.951</td>
</tr>
<tr>
<td>Audit Quality</td>
<td>.832</td>
</tr>
<tr>
<td>Company Size</td>
<td>.548</td>
</tr>
<tr>
<td>Leverage</td>
<td>.963</td>
</tr>
<tr>
<td>Market Value</td>
<td>.462</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Earnings Management

Source: Data processed, 2023

From the results of the table above, it shows that all independent variables have a tolerance value that is above 0.1 and a VIF value that is below 10. This shows that the independent variables used in this study do not show any multicollinearity symptoms. So, this regression model is suitable for hypothesis testing.

Multiple Linear Regression Analysis
Table 7: Multiple Linear Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.241</td>
</tr>
<tr>
<td>Managerial Ownership</td>
<td>-.002</td>
</tr>
<tr>
<td>Institutional Ownership</td>
<td>.027</td>
</tr>
<tr>
<td>Audit Quality</td>
<td>-.014</td>
</tr>
<tr>
<td>Company Size</td>
<td>-.110</td>
</tr>
<tr>
<td>Leverage</td>
<td>-.005</td>
</tr>
<tr>
<td>Market Value</td>
<td>.003</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Earnings Management

Source: Data processed, 2023

Based on the output from SPSS in Table 7, multiple linear equations are obtained as follows:

\[ Y = 0.241 - 0.002 X_1 + 0.027 X_2 - 0.014 X_3 - 0.110 X_4 - 0.005 X_5 + 0.003 X_6 + \varepsilon \]

**Hypothesis Test**

**Test Coefficient of Determination**

Table 8: Determination Coefficient Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.469a</td>
<td>.220</td>
<td>.162</td>
<td>.02951</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Market Value, Institutional Ownership, Leverage, Audit Quality, Managerial Ownership, Company Size

b. Dependent Variable: Earnings Management

Source: Data processed, 2023

Based on the results of the coefficient of determination test in Table 8, it shows that the adjusted R square value is 0.162 or 16.2%, meaning that 16.2% of the model variation can be explained by variations in the six variables, namely managerial ownership, institutional ownership, audit quality, company size, leverage and market value. While the remaining 83.8% is explained by other variables outside the discussion of this study.
Based on the t test results in Table 9, it can be explained as follows: the managerial ownership variable shows a beta coefficient value of -0.002 and a significance value of 0.016 which is smaller than the significance level of 0.05 so that H1 is accepted. This shows that managerial ownership has a significant negative effect on earnings management.

The institutional ownership variable shows a beta coefficient value of 0.027 and a significance value of 0.003 less than the significance level of 0.05 so that H2 is rejected. Because the direction proposed in the hypothesis is that institutional ownership has a negative and significant effect on management. The results found that institutional ownership has a positive and significant effect on earnings management.

The audit quality variable shows a beta coefficient value of -0.014 and a significance value of 0.034 smaller than 0.05 so that H3 is accepted. This shows that audit quality has a negative and significant effect on earnings management.

The first control variable, namely company size, obtained a beta coefficient value of -0.110 and a significance value of 0.133 greater than the significance level of 0.05. This shows that company size as a control variable cannot affect earnings management. The second control variable, leverage, obtained a beta coefficient value of -0.005 and a significance value of 0.897 greater than the significance level of 0.05. This shows that leverage as a control variable cannot affect earnings management. The third control variable, namely market value, obtained a beta coefficient value of 0.003 with a significance value of 0.269 greater than the level of 0.05.

**Discussion**

**The Effect of Managerial Ownership on Earnings Management**

Based on the test results, it shows that managerial ownership has a negative and significant effect on earnings management. Based on agency theory proposed by (Jensen and Meckling, 1976), the low amount of managerial ownership can increase the tendency of management to carry out opportunistic actions that can benefit themselves. The average management share ownership is less than 5% so that it is less effective in controlling management activities in making decisions related to managing company profits. Management considers itself unable to fully contribute to the company because not all profits can be enjoyed by management. Low managerial ownership can lead to an increase in the tendency of management to pursue personal interests. This can affect the allocation of company resources and lead to inefficient management decisions.
ownership triggers company management to prioritize their interests as managers rather than shareholders. The results of this study are in line with research conducted by Ekpulu and Omoye (2018), Laksmi and Kamila (2018), Nguyen et al. (2021) which states that managerial ownership has a negative effect on earnings management.

**The Effect of Institutional Ownership on Earnings Management**

Based on the test results, it shows that institutional ownership has a positive and significant effect on earnings management. Based on agency theory proposed by Jensen and Meckling, (1976), institutional ownership as an owner who is able to supervise managers so that it has an important role in minimizing agency problems. Institutional ownership is a temporary owner who has a tendency to focus more on short-term profits so that they will support management performance actions. These conditions make the opportunity to carry out earnings management high. The greater the institutional ownership, the greater the earnings management and vice versa. The solution so that earnings management can be reduced is that institutional ownership is wiser in monitoring management so that company management is not rash in carrying out earnings management. The results of this study are in line with research conducted by Oyedokun et al. (2019), Kablan (2021), Prayogi and Setyorini (2021) which states that institutional ownership has a positive and significant effect on earnings management.

**The Effect of Audit Quality on Earnings Management**

Based on the test results, it shows that audit quality has a negative and significant effect on earnings management. The results of this study support agency theory which explains the information asymmetry that occurs between managers (agents) and shareholders (principals) (Jensen and Meckling, 1976). To overcome this, an auditor is needed to bridge the interests of shareholders and managers who manage company finances (Natalia et al., 2018). The public accounting firm auditor used by the company is a third party in the company to solve problems related to information asymmetry in the company (Marchellina and Firnanti, 2021). These auditors can come from Big four public accounting firm and non-Big four public accounting firm. Size of public accounting firm Big four is known to have better resources and experience to provide quality audit compared to public accounting firm non-Big four (Ulina et al., 2018). The results of this study are in line with research conducted by Fandriani and Tunjung (2019), Kusumaningtyas et al. (2019), Nirmalasari and Sapari (2022) that stated the audit quality proxied by the size of the Big four public accounting firm has a negative and significant effect on earnings management.

**V. Conclusion**

Based on the results of the research that has been conducted, it can be concluded that the managerial ownership variable and audit quality have a negative and significant effect on earnings management. The institutional ownership variable has a positive and significant effect on earnings management. Of the three control variables used in this study, none of the control variables can affect earnings management. The adjusted R square value of 16.2% can be explained by the variables contained in this study, while the remaining 83.8% is influenced by factors not explained in this study. The use of the model in this study to detect earnings management may not be able to detect earnings management properly so that it still requires justification of other models, especially to find the discretionary accrual value. Suggestions for further researchers include adding other variables that may have a greater influence on earnings management so that they will produce a greater Adjusted R Square value.
For example, by adding the variables educational level of the president director, bonus plan, percentage of shares offered to the public and others.

**References**


