

THE EFFECT OF AUDIT QUALITY, COMPANY SIZE, AND LEVERAGE ON EARNINGS MANAGEMENT PRACTICES IN MANUFACTURING COMPANIES

Karina Annisaa Firdaus Sukoharsono¹, Nurul Fachriyah²

^{1,2}*Accounting Department, Faculty of Economics and Business, University of Brawijaya, Indonesia*

Abstract. This research aims to empirically examine the effect of audit quality, firm size, and leverage on earnings management through quantitative approach. The population includes 43 manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2019-2022. This research involves a combination of cross-sectional and time-series data analyzed by Panel Data Regression, utilizing CEM (Common Effect Model). The findings of the research suggest that (a) audit quality has a positive effect on earnings management, (b) firm size does not have an effect on earnings management, and (c) leverage has a negative effect on earnings management.

Keywords: Audit Quality, KAP Size, Company Size, Leverage, Earnings Management.

I. INTRODUCTION

Investors and shareholders consider earnings in financial statements as one of the important factors in their decision making. The practice undertaken by company management to alter or manage earnings in financial statements to achieve specific objectives is known as earnings management. Earnings management practices are used by manufacturing companies to balance producing products at a low cost and meeting the expectations of shareholders, creditors, and regulators. Buraik & Idris (2020) also stated that profit is considered the element that best describes the health and sustainability of an entity. High profits indicate that the organization is operating well and has the ability to generate profits. This is important for investors and creditors in assessing whether the entity is worth investing or crediting. To maximize cost and financial reporting, manufacturing companies must manage raw materials, labor, and overhead effectively. Strategic decisions made by manufacturing companies are strongly influenced by earnings management. Companies can make investment decisions based on stable profits. A situation like this can encourage management to act opportunistically; for example, they can apply special accounting policies to change the company's profits to their liking. Earnings management is a term used (Amelia & Hernawati, 2016).

Manufacturing companies have an important role in society and should be aware of the far-reaching impact of their policies and actions. Prudence in financial reporting is one important way for manufacturing companies to fulfill their social responsibility and build public trust. (Nuryaman, 2009). Larger companies have more complex operations and access to greater financial resources. This complexity provides opportunities for management to engineer financial statements. Internal controls in large companies are more complicated. While this should help prevent earnings management, it is possible that management who

have control over various aspects of the business can exploit loopholes in the system to carry out the practice. This attracts the attention of more stringent external auditors, which may affect the effectiveness of audits in detecting earnings management. However, larger firm size does not necessarily mean higher levels of earnings management. Operational complexity, greater financial resources and market influence are also factors that influence the likelihood of the practice occurring.

According to Selig (2014) states that audit quality plays an important role in maintaining transparency, integrity, and trust in the business environment. A good audit can find and eliminate illegal earnings management practices in the company's financial statements. Audit quality is highly dependent on how well the financial statements show the true condition of the company. Selig (2014) also states that auditors have a duty to ensure that the company's financial statements comply with applicable accounting standards and that the information reported is consistent and comparable with the financial statements of other companies. Quality auditors will conduct a thorough risk assessment to find indications of unauthorized earnings management, changes in numbers, or discrepancies in the report. Audit honesty is critical to public confidence in financial markets and financial statements as a whole. Therefore, investing in high-quality audits is critical to maintaining transparency-which means providing clear and accurate information about a company's financial state-integrity-which means ensuring that financial statements are not manipulated or false, and trust-which means building public confidence in financial markets and the business world. With a high-quality audit, we can be more confident that the financial statements show the true state of the company and provide a solid basis for making informed decisions.

Audit quality is very important to ensure that the company's financial statements are accurate and transparent. One of the components that can affect audit quality is the size of the Public Accounting Firm (KAP). In some ways, the size of KAP plays an important role in the process of supervising and auditing companies. Factors such as the large resources of large audit firms allow for better client monitoring. However, earnings management becomes more difficult due to the potential discovery of ethical violations. The presence of a large KAP with more experts and specialists in the field will increase the capacity of auditors, improve understanding of company transactions, and help discover potential earnings management methods. The reputation of large accounting firms helps explain the risks that companies face when implementing earnings management because they are more careful not to do things that could damage their reputation. Although large Public Accounting Firms (KAP) have several advantages in identifying earnings management. Selig (2007) states that although large public accounting firms (KAP) have several advantages in detecting earnings management, there are several risks that need to be considered. Internal conflicts of interest can occur because large KAPs have many clients with various interests. The complexity of large KAP client companies can make it difficult for auditors to find earnings management techniques. Financial dependence on large clients can pressure KAP to maintain good relationships, which can reduce supervision of earnings management practices.

Leverage is a factor that can affect firm value. Leverage shows how much a company uses borrowed funds (debt). This debt is usually done to fund business operations or expansion. Manufacturing companies need leverage to increase business activities in the company. A company will require large investments in production, equipment, technology, and capacity building. Therefore, using financial leverage can help the company to obtain additional funds

to finance the investment without having to spend the entire capital. This leverage also helps companies manage their cash flow. Businesses can meet their current cash demands and maintain a higher level of liquidity by using long-term loans, which can then be repaid with projected cash flows from future activities. Taxes will also be affected, as the interest that will be paid on debt can often be deducted from taxable income, so that it can reduce the company's tax burden. (Sutrisno, 2007).

Manufacturing companies require substantial capital for investment in production, equipment, and technology. Leverage allows companies to obtain these funds without having to spend all of their own capital. This can help increase firm value by improving efficiency and profitability. In addition, leverage can help companies manage their cash flow. By using long-term loans, companies can meet their current cash demands and maintain a higher level of liquidity. However, this practice should be done with transparency and integrity to maintain market and shareholder confidence. Being too aggressive in earnings management practices can bring serious reputational and legal risks. Therefore, company management needs to understand the implications of leverage on earnings management and manage it wisely. (Sutrisno, 2007).

Based on previous research, Puspitasari & Nugrahanti (2016) stated that KAP size has a positive effect on the company's actual earnings management procedures. However, a study conducted by Sanjaya (2016) did not find a relationship between earnings management and the size of the KAP factor. Tarigan & Saragih (2020) found that industry specialization auditors do not have a significant impact on earnings management practices, contrary to the statement of Sari & Wahidahwati (2016). Sari & Wahidahwati (2016) that industry specialization has a large and beneficial effect on earnings management. This study aims to further investigate whether audit quality affects earnings management given the variation in previous investigative findings.

Not only the difference in results from KAP size, but also in leverage which is in accordance with research conducted by Agustina (2014) shows that leverage has a significant negative effect on earnings management. In addition, research conducted by Suheny (2019), shows that leverage has a significant positive effect on earnings management. However, research conducted by Dewi & Wirawati (2019) and Savitri (2019) shows that leverage has no effect on earnings management. Seeing this phenomenon, researchers use manufacturing companies as research objects. This is because manufacturing companies face significant business risks, so the ability to implement earnings management measures tends to be higher in this context. The phenomenon of earnings management is considered interesting to study because it can provide insight into the behavior of managers in reporting company performance in a certain period of time. Managers have the ability to manage net income by managing the company's earnings to make them higher, lower, or consistent over several periods. Certain incentives can lead them to engineer financial data, especially published company profits.

Recent academic literature places much emphasis on the study of industrial organizations' earnings management strategies, such as research conducted by Jagaddita (2023) on the impact of audit quality on earnings management in manufacturing companies from 2015 - 2019. The study utilized data from the Indonesia Stock Exchange website and the company's annual financial records using quantitative methodology. The statistical analysis method is used to assess the relationship between the variables being investigated and provide a basis for findings.

The difference between this research and previous research is the research period and measurement of the independent variables. This study uses the independent variables of audit quality, company size, and leverage for three periods, namely 2019 - 2022. The object of this research is manufacturing sector companies listed on the Indonesia Stock Exchange (IDX). The selection of companies in this sector is motivated by their important role in Indonesia's economy and development which is completely vital. As a sector that has great potential in boosting investment and exports, manufacturing is a mainstay sector that helps drive national economic growth. The manufacturing sector plays an important role in increasing the added value of domestic raw materials, absorption of local labor, and foreign exchange earnings. (Ministry of Industry, 2024).

This research addresses the need to expand research variables and offer deeper insights as business conditions and literature change. This study focuses on new variables that may influence earnings management strategies between 2019 - 2022. The belief that there have been differences to Indonesia's economy and business environment during that time period supports the belief in this study. The focus of this research is manufacturing companies listed on the Indonesia Stock Exchange (IDX).

II. LITERATURE REVIEW

A. *Agency Theory*

Agency theory outlines the relationship between agents and principals. In this case, the principal is the party that gives the agent a mandate to perform a task or service on their behalf. The agent is tasked with performing the task and must follow the instructions given by the principal. This theory concentrates on how to overcome possible conflicts of interest between agents and principals. Principals want agents to act in their best interests, but agents may have different goals and incentives. In this case, principals usually refer to shareholders, individuals, or organizations that authorize agents to complete certain tasks or services (Jensen & Mekling, 1976).

Agency theory is a useful framework for understanding various situations, such as the relationship between shareholders and company management, the relationship between investors and investment managers, and the relationship between government and contractors. Agency theory explains how potential conflicts of interest can occur between principals and agents. Principals want agents to act in their best interests, but agents may have different goals and incentives. One example of a potential conflict of interest is in the relationship between shareholders and company management. Shareholders want management to maximize company profits, but management may want to increase their own salaries and bonuses. Agency theory encourages earnings management practices due to the inequality of information acquisition between management (agency) and shareholders (principal) or can be referred to as information asymmetry. Management that has better information will utilize it for personal purposes, to the detriment of shareholders. This information asymmetry is one of the causes of moral hazard, conflicts of interest, constraints in supervision, and the need for trust building.

If managers and shareholders have the same understanding, agency problems can be avoided. When there are differences of opinion between managers and shareholders, managers will take advantage of the opportunity to carry out earnings management. This happens because managers manage the company directly, while shareholders know about the company through managers (Muthmainnah, 2020). Auditors, a third person who serves as an

intermediary between managers and shareholders, can solve this problem. Here, the auditor's job is to ensure that managers' actions meet the expectations and desires of shareholders.

B. Earning Management

To manipulate financial reports about the company's performance and condition, managers use earnings management strategies to alter or trick external financial reports. In this way, managers can create viable financial statements to meet market and internal company expectations. To generate the desired amount of profit, earnings management is a deliberate process of performing certain tasks in compliance with relevant accounting standards. Earnings management is also an attempt by managers to change the company without disrupting long-term profitability (Maqfiroh, 2021).

Real earnings management and accrual earnings management are two basic methods of earnings management. Accounting note adjustments are a component of accrual earnings management. The objective of accrual earnings management is to adjust the level of revenue recognition. By adjusting profits before the end of the period to ensure the adjustments necessary to achieve the predicted profit, accrual earnings management can be performed. Real earnings management is the process of engineering financial reporting periods to achieve predetermined goals, such as achieving profit targets, preventing losses, and maximizing profits to support wiser corporate choices.

C. Audit Quality

Users of financial statements trust high-quality auditors more. They believe that high-quality auditors will be more successful in detecting misstatements or fraud in the financial statements. This is because high-quality auditors have a reputation that must be maintained. One indicator of audit quality is KAP size. Larger KAPs are generally considered to have more expertise, technical experience, capacity, and reputation than smaller KAPs. This allows them to conduct more comprehensive audits and detect potential problems better.

Several studies have shown a positive relationship between KAP size and audit quality. KAP size is one of the factors that can affect audit quality. According to Lennox (1999), large audit firms have an advantage in identifying and communicating signs of financial theft in their audit conclusions. A number of additional studies, such as those conducted by Nuraini & Sumarno (2007) and Fitria (2013), also utilize public accounting firm size as a proxy for measuring audit quality.

The theory that larger KAPs have greater expertise, technical experience, capacity, and reputation than smaller KAPs to prevent earnings management Herusetya (2012). The size of the KAP affiliated with The Big Four is considered to provide a guarantee of audit quality in auditing the company's financial statements which is better than the Non Big Four KAP. Larger KAPs are generally considered to have higher audit quality because they have a better reputation, more expertise and experience, and access to more resources. However, it is important to remember that there are several other factors that can also affect audit quality.

D. Company Size

Firm size refers to a scale or value used to classify firms as large or small, based on factors such as total assets, log size, share value, number of employees, and market capitalization. Total assets, sales, and market capitalization are indicators that reflect firm size, with larger values indicating larger firm size. For example, large total assets indicate significant capital

investment, high sales indicate large business activity, and large market capitalization reflects the company's level of prominence in society.

Total assets or total sales determine the size of a company, and this becomes an important assessment for investors of the company's assets and performance. Research highlights the use of asset size as an indicator of company size, suggesting that larger companies have greater access to information. Larger company size means the availability of more information, facilitating the decision-making process. A large scale gives the company an advantage in obtaining loans due to its ability to generate greater profits.

Large companies with widely distributed shares are more willing to issue new shares to finance their sales growth than small companies. The larger the company, the greater the tendency to use external funds. This is due to the large need for funds in large companies and one of the alternatives is to use debt. Therefore, large companies are more likely to use debt to meet their funding needs than small companies. (Riyanto, 2010).

E. Leverage

Leverage is the use of assets or capital to cover the fixed costs of a business. This is shown through a comparison between the company's total liabilities and total assets. This ratio shows the extent to which a company's assets are financed by debt. The higher the debt value, the higher the rate that investors will face, thus leading to higher return requirements from investors. Companies can use debt (leverage) to obtain capital to obtain higher profits. (Kulsum, 2022).

Cashmere (2018) stated that actually companies with high leverage may have a higher risk of loss. This risk can reduce profit margins (stock yields) which in turn can reduce investor interest in these stocks and cause stock prices to fall. Leverage has two types in a business context, namely operating leverage and financial leverage.

Operating leverage refers to a company's reliance on fixed costs in operations, which affects profits when sales are strong but also increases the risk of losses when sales decline. At the same time, financial leverage involves the use of debt or borrowed capital to increase profit margins for shareholders. Although it can increase profits, the use of debt also carries the risk of loss due to the fixed interest costs that must be paid regardless of the company's operating results. These two types of leverage are interconnected and should be managed wisely to optimize the capital structure and avoid excessive financial risks.

Yatulhusna (2015) stated that operating leverage measures operating risk through fixed operating costs shown in the income statement. At the same time, financial leverage measures financial risk through the fixed cost of debt capital used. High financial leverage leads to high financial risk and investment costs. Highly leveraged companies have significant debt ratios, creating significant risk and stress. A high leverage ratio can increase the risk of a company, causing investors to prefer companies that have lower leverage. Companies with high leverage tend to use manipulative actions, such as earnings management, to avoid debt transactions.

F. Research Hypothesis

1. The Effect of Audit Quality on Earnings Management Practices

Accurate financial reports are needed by users both internal and external to the company. The Public Accounting Firm (KAP) through auditors helps ensure that the information is accurate and free from material misstatement. The size of the Public Accounting Firm indicates the auditor's ability to be independent and carry out audits professionally. KAP Big Four is an auditor who has high expertise and reputation

compared to auditors of KAP Non Big Four (Nurina, 2010). If the company is audited by a big four KAP, it means that it shows better performance so that it will further reduce indications of earnings management. In addition, auditors in the Big Four KAP group tend to have more experienced auditors who in turn have the ability to limit the amount of earnings management of a company.

Big Four KAPs play an important role in minimizing potential agency conflicts so as to improve the quality of financial statements. Their expertise, reputation, sophisticated audit methodologies, strict governance enforcement and global influence make them valuable partners for companies looking to ensure transparency and accountability in their financial reporting.

In research Sembiring (2019), explains that KAP size can have a negative effect on earnings management. Meanwhile, according to research conducted by Awuye (2022) and Pangesti & Cheisviyanny (2023)) explain that audit quality has a positive and significant effect on earnings management. However, Marlisa & Fuadati (2016) claim that the test findings show that there is no statistical support for the relationship between audit quality and earnings management practices. Sinurat & Sudjiman (2023) also stated that audit quality has no impact on earnings management. Based on this explanation, the hypothesis proposed by the researcher is as follows:

H1: Audit quality has a negative effect on earnings management practices in manufacturing companies.

2. The Effect of Company Size on Earnings Management Practices

Company size is an indicator used to measure the size of a company. Company size is a value that indicates the size of the company and can be measured using various proxies, including total assets, revenue, market capitalization, and number of employees. Companies with large assets will have more capital planted and more sales occur, so the company will do a lot of money turnover.

Large companies have a tendency to do less earnings management than small companies because the bigger a company is, the tighter the supervision carried out by the company's internal parties will be. (Agustia & Suryani, 2018). Large companies more often experience agency conflict because they have many and widespread stakeholders so that strict supervision from various parties, including the government, analysts, and investors can be an obstacle for managers to practice earnings management.

Research Adyastuti & Khafid (2022), Simajuntak & Anugerah (2019) and Alam et al. (2020) state that company size has a negative effect on earnings management. However, research from Wiyogo et al. (2021) and Setiowati et al. (2023) state that company size has a positive effect on earnings management. In contrast to research conducted by Yatulhusna (2015) and Agustia & Suryani (2018), which states that company size has no effect on earnings management. This study uses the natural logarithm of total revenue because company size can be represented to show the amount calculated based on company revenue. The hypothesis proposed by the researcher is as follows:

H2: Audit quality has a positive effect on earnings management practices in manufacturing companies.

3. Research Framework

This study aims to determine the effect of audit quality, company size, and leverage on earnings management practices in manufacturing companies. From various theories and previous studies, it is stated that audit quality, company size, and leverage affect earnings management practices. audit quality, company size, and leverage, which are independent variables (X) and earnings management is the dependent variable (Y). The framework can be seen in the following figure:

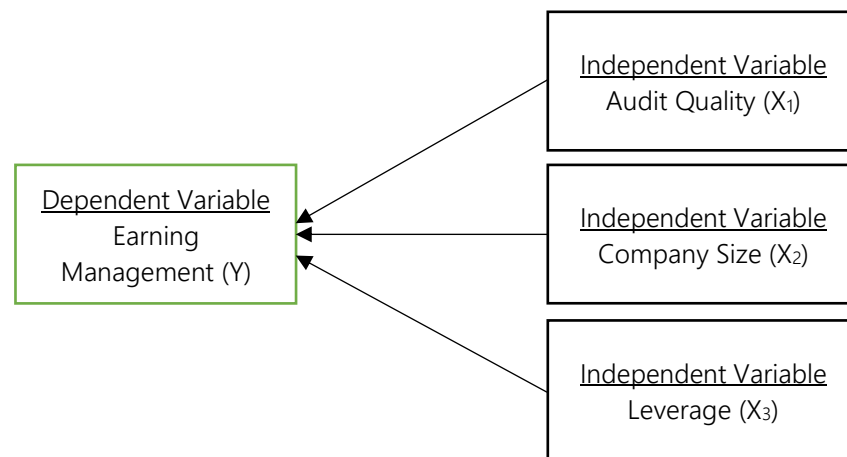


Figure 1 Research Framework

III. RESEARCH METHODOLOGY

A. Type of Research

This study uses quantitative methods in hypothesis testing. This research uses a quantitative approach in research methodology. Researchers use quantitative research methods because in this study using data in the form of numbers as a means of analyzing the desired information in finding knowledge. This research uses secondary data, using the main data contained in the company's annual financial statements downloaded from the Indonesia Stock Exchange website (<http://www.idx.co.id/>). This research focuses on the financial statements of manufacturing companies listed on the Indonesia Stock Exchange during the 2019-2022 period.

B. Population and Sample

This research uses purposive sampling method, which is a technique of selecting samples from the population based on certain criteria that have been previously determined in sampling. In this study, researchers conducted a survey of 43 manufacturing companies as samples representing the population. The total sample to be used in this study amounted to 43 companies with the research period conducted during 2019 - 2022 so that 172 observed data were obtained.

C. Data Collection Method

The data collection method in this study uses the documentation method. The documentation method is carried out by recording and exploring the data and documents needed in the research. Researchers used financial reports available on the Indonesia Stock Exchange website (<http://www.idx.co.id/>) and the company's official website. The data used is panel data, which is a combination of monthly data or time series data from 2019 to 2022, with

closing price data for each individual company per month or cross section data. The data used in this study include:

Table 1 Data Collection Methods

Variables	Operational Definition	Measurement
Earnings Management	This study uses discretionary accrual (DA) with the modified jones model as a representation of earnings management (2019-2022).	$DA_{it} = \left(\frac{TAC_{it}}{A_{it-1}} \right) - NDA_{it}$ $TAC_{it} = Ni_{it} - CFO_{it}$ $\frac{TAC_{it}}{A_{it-1}} = \beta_1 \left(\frac{1}{A_{it-1}} \right) + \beta_2 \left(\frac{\Delta Rev_{it}}{A_{it-1}} \right) + \beta_3 \left(\frac{PPE_{it}}{A_{it-1}} \right) + e$ $NDA_{it} = \beta_1 \left(\frac{1}{A_{it-1}} \right) + \beta_2 \left(\frac{\Delta Rev_{it}}{A_{it-1}} - \frac{\Delta Rect_{it}}{A_{it-1}} \right) + \beta_3 \left(\frac{PPE_{it}}{A_{it-1}} \right)$
Audit Quality	Researchers choose KAP size to measure audit quality (2019-2022)	Using Dummy Data with number 1 by <i>Big Four</i> KAP and number 0 by <i>Non Big Four</i> KAP
Company Size	This study uses the natural logarithm of total revenue.	Natural Log (Ln) Total Revenue
<i>Leverage</i>	Leverage ratio uses the amount of liabilities borne compared to the total assets.	(Total Liabilities)/(Total Assets)

D. Data Analysis Method

This study uses panel data regression because panel data regression is a method used to analyze longitudinal data that has several observations on several units. and using Econometric Views 12 (Eviews 12) and Microsoft Excel. The analysis methods used include; Model Selection Test, Panel Data Regression Test, and Hypothesis Test.

E. Model Selection Test

Before conducting panel data regression analysis, it is necessary to first determine the most appropriate regression model. This is done to determine the type of variable data repeated in the panel data structure. In addition, it is also necessary to conduct a classical assumption test to ensure that the data meets the assumptions required in panel data regression analysis. The following is the model selection test method used in this study:

1. Chow Test

The Chow test is a statistical test used to compare two panel data regression models, namely the Common Effect Model (CEM) and the Fixed Effect Model (FEM) (Rusiadi, 2017). This test is performed using the fixed effect panel option, then regression analysis is performed in general and viewed using the Chow-test. The Chow test uses the F probability value and Chi-square to determine the best regression model. An F probability value greater than the significance level ($\alpha = 0.05$) indicates that the CEM model is better. Meanwhile, an F probability value that is smaller than the significance level ($\alpha = 0.05$) indicates that the FEM model is better.

2. Hausman Test

The Hausman test is a statistical test used to compare two panel data regression models, namely the Random Effect Model (REM) and the Fixed Effect Model (FEM) (Rusiadi, 2017). This test is carried out using the random effect panel option, then regression analysis is carried out in general and viewed using the Hausman test. The Hausman test uses the F probability value and Chi-square to determine the best regression model. An F probability value greater than the significance level ($\alpha = 0.05$) indicates that the REM model is better. Meanwhile, an F probability value that is smaller than the significance level indicates that the FEM model is better.

3. Lagrange Multiplier (LM) Test

The Lagrange Multiplier test is the last test in determining the model, so the decision from this test will determine the best model to use in panel data regression analysis. The Lagrange Multiplier test is a statistical test used to compare two panel data regression models, namely the Random Effect Model (REM) and the Common Effect Model (CEM) (Rusiadi, 2017). This test is carried out using the common / none effect panel option, then regression analysis is carried out in general and viewed using the LM-test. The Lagrange Multiplier test assumes that certain variables have a constant effect (common) between observation units, while other variables have different effects (random). The Lagrange Multiplier test uses the Breusch-Pagan cross section value to determine the best regression model. The Breusch-Pagan cross section value that is greater than the significance level ($\alpha = 0.05$) indicates that the CEM model is better. Meanwhile, the Breusch-Pagan cross section value that is smaller than the significance level indicates that the REM model is better.

F. Classical Assumption Test

This study uses classical assumption testing to analyze the available data. This test aims to ensure that the regression equation used has accuracy in estimation, is consistent, and does not produce errors caused by data that does not meet classical assumptions. Classical assumption testing consists of four types, namely normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test.

1. Multicollinearity Test

The multicollinearity test is a test conducted to check whether there is a correlation between the independent variables in the regression model. High correlation between independent variables is called multicollinearity. It can be seen that the value of the correlation coefficient is <0.85 , so it can be concluded that it is free of multicollinearity or passes the multicollinearity test (Napitupulu et al., 2021: 141).

2. Heteroscedasticity Test

Heteroscedasticity test is a test conducted to check whether the variance of the residuals in the regression model is constant or not. A constant residual variance is called homoscedasticity, while a residual variance that is not constant is called heteroscedasticity. This research uses the Residual Graph. If the graph does not cross the 500 and -500 limits, it means that the residual variance is the same. Therefore, there are no symptoms of heteroscedasticity or pass the heteroscedasticity test. (Napitupulu et al., 2021: 143).

G. Panel Data Regression Analysis

Panel data regression analysis is a statistical analysis method used to test the effect of independent variables on the dependent variable, with data derived from several observation units observed over a period of time. According to (Agus Tri Basuki & Nano Prawoto, 2017) Panel data consists of a combination of time-series data with cross section data. The time dimension shows the observation time period, while the individual dimension shows the observed observation unit. The purpose of panel data regression analysis is to examine the effect of independent variables on the dependent variable, taking into account the influence of time and individuals. The results of panel data regression analysis can be used to identify the most significant variables in predicting changes in the dependent variable. In addition, the results of panel data regression analysis can also be used to describe the relationship between variables. This research panel data regression model used is:

$$ML = \alpha + \beta_1 KU + \beta_2 UP + \beta_3 L + e_i$$

Where:

M = Earnings management

KU = Audit quality

UP = Company size

L = Leverage

α = Constant coefficient

β_1 = Coefficient of the independent variable audit quality

β_2 = Coefficient of company size variable

β_3 = Coefficient of the independent variable leverage

e_i = Error variable

H. Hypothesis Test

Hypothesis testing is a statistical procedure to determine the conformity of observations with the proposed hypothesis (Arifin, 2017). In this study, hypothesis testing was carried out with the T-test (partial test) and F-test. The T-test is a test conducted to measure how much influence one independent variable has on the dependent variable (Rusiadi, 2017). This effect is measured by comparing the t value with the t table value. The t test criteria are if t count > t table, then H₀ is rejected. That is, there is an influence of the independent variable on the dependent variable or if t count < t table, then H₀ is accepted. That is, there is no effect of the independent variable on the dependent variable. Simultaneous Test (F test) is conducted to determine the effect of independent variables together on the dependent variable.

IV. RESULT AND DISCUSSION

A. Model Selection Test

The Chow test results show an F probability and chi-square value of 0.2307, which is greater than the 0.05 significance level. This indicates that the CEM is more suitable for this research model. Furthermore, the Hausman test is conducted to determine whether the CEM is really suitable for this study. The Hausman test resulted in a value of 0.0230, which is smaller than the significance level of 0.05. This indicates that FEM is more suitable for this research model. Then, if what is selected in the Hausman test is the REM model and the chow test is the CEM, it is necessary to do the lagrange multiplier test. The lagrange multiplier test results also show the same results as the chow test, which is $0.1938 > 0.05$. Because the results of the chow test and lagrange multiplier test show consistent results, it is stated that the CEM model is the best model used in this study.

B. Classical Assumption Test

The selected model is CEM, therefore the classical assumption test must be carried out. The classic assumption tests used are multicollinearity and heteroscedasticity (Basuki & Yuliadi, 2014; 183) (Napitupulu et al., 2021: 120).

1. Multicollinearity Test

Table 2 Result of Multicollinearity Test

	X1	X2	X3
X1	1.000000	0.523796	-0.113728
X2	0.523796	1.000000	-0.163609
X3	-0.113728	-0.163609	1.000000

The correlation coefficient between X1 and X2 is $0.524 < 0.85$, X1 and X3 are $-0.114 < 0.85$, and X2 and X3 are $-0.164 < 0.85$, so it can be concluded that it is free of multicollinearity or passes the multicollinearity test (Napitupulu et al., 2021: 141).

2. Heteroscedasticity Test

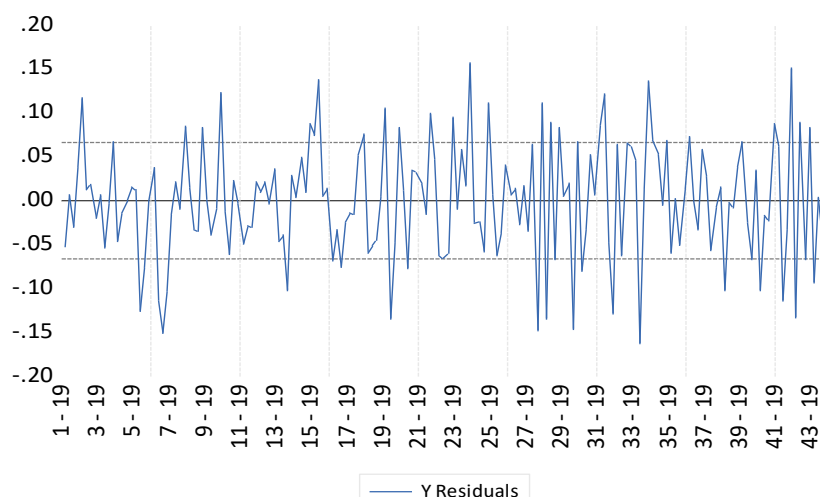


Figure 2 Residual Graph

From the residual graph (blue color), it can be seen that it does not cross the boundaries (500 and -500), meaning that the residual variance is the same. Therefore,

there are no symptoms of heteroscedacity or pass the heteroscedacity test. (Napitupulu et al., 2021: 143).

3. Panel Data Regression Analysis

Panel data regression analysis is a statistical analysis method used to test the effect of independent variables on the dependent variable, with data derived from several observation units observed over a period of time. The results of panel data regression analysis are as follows:

Table 3 Panel Data Regression Analysis				
	B	t	Sig.	Conclusion
(constant)	-0,0105	-0,1172	0,9069	
KAP size	0,0264	2,2169	0,0280	Positively affected
Company Size	-0,0011	-0,3609	0,7186	No Effect
Leverage	-0,0641	-2,2717	0,0244	Negatively affected

After the panel data regression analysis has been conducted, the following equation can be formulated:

$$Y = -0.0105 + 0.0264 \cdot X_1 - 0.0011 \cdot X_2 - 0.0641 \cdot X_3 + e_i$$

4. Simultaneous Significance Test (F-Test)

Simultaneous Test (F test) is conducted to determine the effect of independent variables together on the dependent variable. The results of the simultaneous test (F test) are as follows:

Table 4 Model Feasibility Test (F-Test)		
F	Sig.	Conclusion
4,0498	0,0082	Significant

The calculated F value of 4.0498 > F table, namely 2.6583 and sig value. 0.0082 < 0.05, then the audit quality, company size, and leverage variables affect earnings management in manufacturing companies listed on the Indonesia Stock Exchange in 2019-2022 so that the model is feasible to use.

5. Hypothesis Test (T-Test)

Partial test (T test) is used to determine the extent of the ability of the independent variable in explaining the dependent variable. Decision making on the T test, based on a significance level greater than 0.05, it can be concluded that the hypothesis is rejected and if the significance level is less than 0.05, it can be concluded that the hypothesis is accepted. The partial test results (t test) are as follows:

Table 5 Result of T-Test

	B	t	Sig.	Conclusion
(constant)	-0,0105	-0,1172	0,9069	
KAP size	0,0264	2,2169	0,0280	H1 is not supported
Company Size	-0,0011	-0,3609	0,7186	H2 not supported
Leverage	-0,0641	-2,2717	0,0244	H3 supported

From the results of the previous panel data regression analysis, it is known that each variable has a value of t-statistic and different probabilities. And it can be known that:

1. The t test results on the Audit Quality variable (X1) obtained from the t value of $2.216899 > 1.9740167$ and a sig value of $0.0280 < 0.05$, meaning that the Audit Quality variable (X1) has a significant positive effect on Earnings Management.
2. The t test results on the Company Size variable (X2) obtained from the t value of $0.360890 < 1.9740167$ and a sig value of $0.7186 > 0.05$, meaning that the Company Size variable (X2) has no effect on Earnings Management.
3. The t test results on the Leverage variable (X3) obtained from the t value of $2.271716 > 1.9740167$ and a sig value of $0.0244 < 0.05$, meaning that the Leverage variable (X3) has a significant negative effect on Earnings Management.

C. Discussion of the Research Results

1. The Effect of Audit Quality on Earnings Management Practices

This study shows that audit quality has a significant positive effect on earnings management practices. This finding refutes the hypothesis that audit quality has a negative impact on earnings management. Generally, companies use the services of reputable public accounting firms (KAP), such as the Big Four, to increase the credibility of their financial statements, thereby increasing investor confidence. However, this step is not enough to limit the practice of financial statement manipulation by company management. Therefore, although the Big Four KAPs have a good reputation, this does not guarantee their ability to always prevent earnings management.

Factors such as potential legal disputes, overconfidence, and lack of supervision may increase the likelihood of companies manipulating their earnings when audited by Big Four KAPs. This is consistent with agency theory, where high audit quality can increase the likelihood of earnings management. As a result, it is important for company owners (shareholders) to implement good corporate governance practices and conduct effective oversight of management and KAP.

This research is in line with research Pangesti & Cheisviyanny (2023) and Awuye (2022) which says that KAP size has a positive and significant effect on earnings management. This is also supported by research Annisa & Hapsoro (2017) explained that KAP Big Four does not guarantee a reduction in earnings management practices in the company. This shows that even though companies use audit services from KAP Big Four, earnings management practices still occur. The use of Big Four KAP services is more of an effort to get a positive image from external parties of the company.

2. The Effect of Company Size on Earnings Management Practices

The findings of this study indicate that there is no statistically significant relationship between firm size and earnings management practices. Therefore, it can be concluded that company size does not always correlate with its level of aggressiveness in manipulating financial statements to show positive results, and vice versa. This finding challenges the hypothesis that large companies are less likely to engage in earnings management because they are more closely monitored by various parties.

Although large companies usually generate higher revenues, this correlation does not necessarily indicate poor management. On the contrary, large companies generally have well-organized internal management systems that aim to minimize errors and maximize efficiency. However, the possibility of financial reporting errors remains in every manufacturing company, regardless of size. These errors can be exploited to carry out earnings management practices, especially given the many complex activities and transactions involved in manufacturing operations. Close scrutiny from various parties, including the government, analysts, and investors, may prevent managers from engaging in earnings management practices substantially.

Investors should prioritize factors beyond company size, such as company profitability or future business prospects, when making investment decisions. Manufacturing companies often face agency conflicts because they have many dispersed stakeholders. The existence of strict supervision from various parties, such as the government, analysts, and investors, can deter managers from engaging in earnings manipulation practices.

This research is in line with research Yatulhusna Najmi (2015) and Setyaningtyas & Hadiprajitno (2014) explains that earnings management is not influenced by company size. This is also supported by research Agustia & Suryani (2018) and Gunawan et al. (2015) which explains that earnings management is not influenced by company size and company size is not the only factor that investors consider in making investment decisions. Other factors such as the level of profit and future business prospects are much more important. The size of the company does not directly affect the level of earnings management.

3. The Effect of Leverage on Earnings Management Practices

This study found that leverage (X3) has a significant negative effect on earnings management. The relationship between a company's leverage and its earnings management practices is inverse. When the company has high leverage, its earnings management practices are low, and vice versa, when the company has low leverage, its earnings management practices are high. This phenomenon can arise due to the presence of minimal debt levels, which is the result of extensive use of earnings management techniques by companies. These techniques are used to beautify the company's financial statements, thereby generating creditor confidence and attracting potential investors. Investors and creditors can use a firm's leverage data to predict the likelihood of a firm engaging in earnings manipulation. By understanding the level of leverage, individuals can make more informed investment and credit decisions.

Companies with high leverage are more vulnerable to default risk. If the company defaults, it will face several consequences, including accelerated debt repayment, increased interest rates, and the need to renegotiate debt. The company's large debt will make it more closely monitored by creditors, thus limiting management's ability to carry out earnings management. Companies tend to implement lower earnings management practices when they have high

leverage. This is in line with the principles of agency theory, where principals (shareholders and creditors) need to closely monitor management to ensure accurate and transparent financial reporting. Management also needs to demonstrate accountability and be responsible for the decisions it makes.

This research is in line with research Deviyanti & Sudana (2018) explains that earnings management can be influenced by leverage. This is supported by research Savitri & Priantinah (2019) and Istanita & Ulfah (2023) Agency theory explains that the information gap between agents and principals can encourage agents to carry out earnings management. High leverage can be a solution because it increases company risk and tightens supervision, making it difficult for agents to carry out earnings management. The results showed that high leverage significantly had a negative effect on earnings management.

V. CONCLUSION

This study examines the variables that influence corporate earnings management practices. These factors include audit quality, firm size, and leverage. The research findings show that audit quality and leverage are key factors that influence decisions related to earnings management. The results of this study did not find a significant effect of firm size on earnings management. Leverage is the main determinant of earnings management, followed by audit quality as a secondary factor. This shows empirical evidence that these factors influence earnings management practices applied by company managers.

ACKNOWLEDGEMENT

The author would like to express gratitude to all the people who have helped in the completion of this study.

REFERENCES

- Adyastuti, N. A., & Khafid, M. (2022). The Effect of Company Size, Leverage and Profitability on Earnings Management with Bonus Compensation as a Moderating Variable. *Owner*, 6(2), 2071-2084. <https://doi.org/10.33395/owner.v6i2.830>
- Agustia, Y. P., & Suryani, E. (2018). The Effect of Company Size, Company Age, Leverage, and Profitability on Earnings Management (Study of Mining Companies Listed on the Indonesia Stock Exchange for the 2014-2016 Period). *ASET Journal (Accounting Research)*, 10(1), 71-82. <https://doi.org/10.17509/jaset.v10i1.12571>
- Alam, N., Ramachandran, J., & Nahomy, A. H. (2020). The impact of corporate governance and agency effect on earnings management - A test of the dual banking system. *Research in International Business and Finance*, 54. <https://doi.org/10.1016/j.ribaf.2020.101242>
- Awuye, I. S. (2022). The impact of audit quality on earnings management: Evidence from France *Journal of Accounting and Taxation* The impact of audit quality on earnings management: Evidence from France. *Journal of Accounting and Taxation*, 14(1), 52-63. <https://doi.org/10.5897/jat2021.0514i>
- Basuki, A. T., & Prawoto, N. (2016). *Regression Analysis in Economic & Business Research*. PT Raja Grafindo Persada.

- Buraik, O., & Idris, M. (2020). Board characteristics and intentions of earnings management. In International Journal of Innovation, Creativity and Change (Vol. 14, Number 5, pp. 429-443).
- Deviyanti, N. W. T., & Sudana, I. P. (2018). The Effect of Bonus, Company Size, and Leverage on Earnings Management. E-Journal of Accounting, Udayana University, 23(2).
- Dewi, P. E. P., & Wirawati, N. G. P. (2019). The Effect of Leverage on Earnings Management with Corporate Governance as a Moderating Variable. E-Journal of Accounting. <https://doi.org/10.24843/eja.2019.v27.i01.p19>
- Fitria, A. A. (2013). The Effect of Audit Quality on Earnings Management with Audit Fees as an Intervening Variable (Empirical Study of Manufacturing Companies Listed on the Indonesia Stock Exchange (BEI) in 2009-2011). E-Journal of Accounting, 53 (9).
- Herusetya, A. (2012). Analysis of Audit Quality on Accounting Earnings Management: Study of Composite Measure Versus Conventional Measure Approach. Journal of Indonesian Accounting and Finance, 9(2). <https://doi.org/10.21002/jaki.2012.08>
- Istanita, R., & Ulfah, Y. (2023). The effect of profitability and leverage on earnings management with the independent board of commissioners as a moderating variable. Journal of Economics, Management and Accounting, 25(3), 503-513.
- Jagaddita, A. P. D. (2023). The Effect of Audit Quality on Earnings Management (Empirical Study of Manufacturing Companies Listed on the Indonesia Stock Exchange 2015-2019). Journal of Accounting, Finance and Taxation, 6 (1). <https://doi.org/10.51510/jakp.v6i1.1088>
- Jensen, M. C., Meckling, W. H., Benston, G., Canes, M., Henderson, D., Leffler, K., Long, J., Smith, C., Thompson, R., Watts, R., & Zimmerman, J. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. In Journal of Financial Economics (Number 4, pp. 305-360). Harvard University Press. <http://hupress.harvard.edu/catalog/JENTHF.html>
- Cashmere. (2018). Financial Statement Analysis. Jakarta: Raja Grafindo Persada, 1(11).
- Kulsum, F. U. (2022). The Effect of Leverage on Earnings Management with Institutional Ownership as a Moderating Variable in Property and Real Estate Companies Listed on the Indonesia Stock Exchange (IDX) for the 2017-2020 Period. Maulana Malik Ibrahim State Islamic University.
- Lennox, C. S. (1999). Audit quality and auditor size: An evaluation of reputation and deep pockets hypotheses. Journal of Business Finance and Accounting, 26(7-8). <https://doi.org/10.1111/1468-5957.00275>
- Lutfiyah, A., Hendarmin, R., & Sari, R. (2023). The Effect of Profitability, Company Size and Leverage on Earnings Management. Journal of Contemporary Accounting and Finance (JAKK), 6(1), 77-86.
- Marlisa, O., & Fuadati, S. R. (2016). Analysis of Factors Affecting Earnings Management of Property and Real Estate Companies. Journal of Management Science and Research, Indonesian College of Economics (STIESIA) Surabaya, 5(7).
- Muthmainnah, D. R. (2020). The Effect of Audit Quality and Audit Committee Effectiveness on Earnings Management. Business and Economics Conference in Utilization of Modern Technology, 15(2).

- Napitupulu, R. B., S., T. P., H. L., D., H., H., S., & R. T. M., T. (2021). Business Research: Techniques and Data Analysis with SPSS - STATA - EViews.
- Nuryaman. (2009). The Effect of Ownership Concentration, Company Size and Corporate Governance Mechanisms on Earnings Management. Pontianak XI National Accounting Symposium. Indonesian Journal of Accounting and Finance, 6(1).
- Pangesti, V., & Cheisviyanny, C. (2023). The Effect of KAP Size, Managerial Ownership and Company Growth on Earnings Management. JOURNAL OF ACCOUNTING EXPLORATION, 5(3), 963-977. <https://doi.org/10.24036/jea.v5i3.773>
- Riyanto, B. (2010). Fundamentals of Corporate Finance 4th Edition.
- Rusiadi. (2017). Practical Guidelines for Research Data Analysis with Simple Linear Regression, Partial Correlation, t Test and Determination, Using SPSS Tools.
- Sanjaya, I. P. S. (2016). The Effect of Auditor Quality on Real Activity Manipulation. Journal of Accounting and Finance, 18(2), 85-91. <https://doi.org/10.9744/jak.18.2.85-91>
- Sari, T. W., & Wahidahwati. (2016). The Effect of Audit Quality on Earnings Management in Manufacturing Companies. Journal of Accounting Science and Research, 5(12).
- Savitri, D., & Priantinah, D. (2019). The Effect of Leverage on Earnings Management with Corporate Governance as a Moderating Variable in Miscellaneous Industry Sector Manufacturing Companies Listed on Bei for the 2013-2016 Period. Nominal Journal, 8(2), 1-15.
- Savitri, E. (2019). Analysis of the Effect of Leverage and Life Cycle on Earnings Management in Real Estate and Property Companies Listed on the Indonesia Stock Exchange.
- Sembiring, A. F. (2019). The Effect of KAP Size, Audit Tenure and Audit Industry Specialization on Earnings Management.
- Setiowati, D. P., Salsabila, N. T., & Eprianto, I. (2023). The Effect of Company Size, Leverage, and Profitability on Earnings Management. ECONOMINA JOURNAL, 2(8), 2137-2146. <https://doi.org/10.55681/economina.v2i8.724>
- Simajuntak, B., & Anugerah, L. A. (2019). The Effect of Managerial Skills, Implementation of Corporate Governance, Bonus Compensation and Leverage on Earnings Management with Company Size as a Moderating Variable (In Manufacturing Companies Listed on Bei 2015-2017). Journal of Master of Accounting Trisakti, 5 (2), 165-184. <https://doi.org/10.25105/jmat.v5i2.5072>
- Sinurat, S. J., & Sudjiman, L. S. (2023). The Effect of Audit Quality and Audit Committee on Earnings Management in Manufacturing Companies on the IDX. 16(1).
- Suheny, E. (2019). The Effect of Corporate Governance, Company Size, Leverage and Audit Quality on Earnings Management. Journal of Vocational Economics, 2(1).
- Sutrisno. (2007). Financial Management: Theory. Concepts and Applications.
- Tarigan, M. O. T., & Saragih, A. E. (2020). The Effect of Audit Quality on Earnings Management in Banking Companies Listed on the Indonesia Stock Exchange. Journal of Accounting & Financial Research. <https://doi.org/10.54367/jrak.v6i2.1057>
- Wiyogo, A., Sumiati, A., Zulaihati, S., & Respati, D. K. (2021). The Effect of Leverage, Company Size, Free Cash Flow on Earnings Management of Manufacturing Companies Listed on Bei in 2019. Indonesian Journal of Economy, Business, Entrepreneurship and Finance, 1(1).