



Determinants of Earnings Management: The Moderating Role of Firm Size

Rico Wijaya^{1*}, Ilham Wahyudi², Enggar Diah Puspa Arum³

^{1,2,3}Accounting Department, Universitas Jambi, Jambi, Indonesia; ricowijaya@unja.ac.id (R.W.).

Abstract. This study aims to provide empirical evidence on the impact of financial distress, financial ratios, and corporate governance on earnings management, using company size as a moderating variable. This study focuses on real estate, construction, and property companies listed on the Indonesia Stock Exchange (IDX) between 2020 and 2022, with a sample of 54 companies selected through purposive sampling. Data analysis was conducted using multiple linear regression to test the direct effect of independent variables on earnings management and interaction test to evaluate the moderating role of firm size. The research findings show that financial distress affects earnings management, which suggests that companies under financial stress are more likely to rely on earnings management to present favorable earnings performance. In contrast, financial ratios do not affect earnings management, which suggests that well-performing firms are less likely to engage in the practice. Good corporate governance, represented by the proportion of independent directors, audit committee and managerial ownership, also affects earnings management. In addition, firm size moderates the relationship between financial distress and earnings management, with larger firms showing a greater tendency towards earnings management when facing financial challenges. These results underscore the importance of considering financial conditions and firm size when monitoring earnings management, as larger firms may be more prone to earnings management practices under certain conditions.

Keywords: Company size, Earnings management, Financial difficulty, Governance, Ratio.

1. INTRODUCTION

One of the main objectives of the company is to achieve profit by managing resources and finances effectively and efficiently. Financial reports are the main result of management accountability in overseeing company finances and resources (Marchellina & Firnanti, 2021). Financial statements provide comprehensive insight into the company's results and achievements over a period of time. Compiled by management, these reports serve as a key reference for shareholders in making informed decisions. In practice, companies aim for large profits to attract investors to invest their capital. However, not all companies report actual profit levels, so investors and shareholders do not obtain accurate information. Actions taken by management to manipulate company profits are referred to as earnings management (Fairus & Sihombing, 2020).

Earnings management is often used by property, construction and real estate companies listed on the Indonesia Stock Exchange (IDX), which often involves adjusting revenues or expenses. This includes recognizing revenue from long-term projects before completion or delaying the recognition of expenses to increase profits in a given period. Companies in this sector tend to face fluctuations in financial performance that are influenced by economic cycles and property market conditions. As such, management may engage in earnings management practices to maintain financial statement stability, increase investor appeal, or achieve performance objectives. These practices can be mitigated through strict auditor oversight, stricter regulations, and the implementation of strong corporate governance. One of the recent cases of earnings management is PT Lippo Karawaci which was published in Kompas.com news, in the first quarter of 2018, the parent company's shareholders posted a net profit of Rp1.15 trillion, a significant growth of 135% compared to the same period the previous year of Rp487 billion. This significant increase in net profit was mainly driven by the deconsolidation of PT Mahkota Sentosa Utama, a subsidiary of PT Lippo Karawaci Tbk. Earnings management tends to arise when corporate executives have more detailed knowledge of internal operations and future prospects than shareholders. In certain cases, management may communicate information to shareholders that does not accurately reflect the true condition of the company, thus creating opportunities for earnings management aimed at maximizing profits. This case illustrates the occurrence of earnings management, which has prompted many studies to investigate the variables that influence this practice (Kompas.com, 2018).

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Agency Theory

Agency theory describes the relationship between the principal, who assigns tasks, and the agent, who is authorized to carry out those tasks. In this dynamic, conflicts of interest often occur when the agent's actions are not in line with the principal's interests. Therefore, monitoring and incentive mechanisms are required to minimize potential conflicts. Agency theory has become an important cornerstone in various fields, including accounting and finance, especially in explaining managerial behavior, risk management, and earnings management practices (Jensen & Meckling, 1976). However, in certain situations, agents may not act as expected by the principal, leading to agency problems. In addition, information imbalance occurs because principals and

agents have different levels of information. When there is asymmetric information, the principal will find it difficult to supervise and maintain control properly, which could potentially lead to the implementation of earnings management strategies (Christina & Alexander, 2020). The objective of earnings management is to influence earnings reporting through management involvement in the arrangement of financial reporting data and disclosures to external parties. This gives management flexibility in using accounting techniques and setting discretionary rules that can accelerate or delay costs and revenues as well as company profits (Fairus & Sihombing, 2020). Earnings management, as defined by (Ross et al., 2021), is the process of managing revenues, costs, profits, and losses to minimize earnings fluctuations. A broader review of empirical literature identified several factors that influence earnings management. This study focuses on certain factors, specifically financial distress and financial performance, assessed through profitability, liquidity, leverage, and corporate governance. In this context, corporate governance includes audit committee, independent board members, and managerial equity.

2.2. Financial Distress and Earnings Management

Financial difficulties in a company can greatly affect earnings management, because having sufficient resources, especially finance, is very important to maintain operational activities and pay debts. Without sufficient resources to fulfill its business obligations, the company will inevitably face financial difficulties. In these conditions, management will manipulate financial reports to manage profits, with the aim of providing good news and information to the capital market, so as to prevent the company from experiencing shrinkage (Christina & Alexander, 2020). The company's operational activities that are not running smoothly will cause the company's operating income and net profit to be negative (Ranjbar & Amanollahi, 2018a). If the profit level does not increase, investment will decrease because dividends to shareholders must be paid from retained earnings. In addition, dividend payments will be delayed as the profit level does not increase. Companies experiencing financial distress can be measured using several measurement methods, such as Z-score or Zmijewsk (Binti & Ameer, 2010). Financial difficulties can affect management decisions in implementing policies, especially financial policies that reflect the desired financial condition. This is in line with research conducted by Hanum et al. (2023), Feni et al. (2022), Natha & Wirajaya (2024) & Luhung & Sari (2024) state that financial difficulties affect earnings management, which indicates that companies facing financial challenges tend to adjust their earnings to maintain a good perception among investors. However, this study challenges the findings of previous research by Inayah et al. (2021), which shows that financial distress has no impact on earnings management.

2.3. Financial Ratios and Earnings Management

Financial ratios provide a method to evaluate a company's financial performance by examining its financial statement data within the same period or several periods (Nadilla et al., 2019). This study examines three main financial ratios: profitability, liquidity, and debt ratio. Profitability is identified as the main indicator to assess the potential of the company in this study profitability is measured by Return on Assets (ROA). Return on Assets (ROA) specifically assesses how effectively a company's management utilizes its investments, which acts as a leading indicator of the rate of return. The greater the profitability, the greater the tendency of companies to carry out earnings management in order to reduce tax liabilities. One way to achieve this is through efficient tax management. The findings of research conducted by Yuli et al. (2023) state that the profitability ratio has a significant effect on earnings management. However, the results of this study differ from research conducted by Naue et al. (2023) which concluded that there is no effect of profitability on earnings management.

The second ratio is liquidity, which indicates a company's capacity to meet its short-term obligations as they fall due. A company's liquidity can greatly affect the way investors evaluate it, as a strong liquidity ratio can show that the company is able to survive even in difficult situations. Research conducted by Syafiqoh & Rochmatullah (2024) which states that liquidity affects earnings management. However, this study provides a view that contradicts the research conducted by Huang et al. (2017) which states that liquidity does not affect earnings management.

The next ratio to examine is Leverage, which shows the level of funding of the company's assets by debt and assesses its ability to meet financial obligations. In this study, Leverage is assessed using the Debt to Assets Ratio (DAR), which allows companies to compare their total debt to their total assets (Nadilla et al., 2019). The level of leverage is one of the factors that encourage company management to carry out earnings management. Companies with high leverage will face considerable risk and pressure because their debt exceeds their assets, and vice versa. The findings of this study are in accordance with research conducted by Awuye & Aubert (2022), which determined that leverage affects earnings management. However, these findings are inversely proportional to research conducted by Putra et al. (2023) which states that leverage does not affect earnings management.

2.4. Good Corporate Governance and Earnings Management

Good Corporate Governance refers to a system of management and oversight within a company designed to align with the interests of its stakeholders. This research explores the mechanisms used, which include independent committees, managerial ownership, and audit committees. Corporate committees serve as a

regulatory body that oversees the company's operations. For effective oversight, it is crucial for the board of directors to remain independent (Foster, 2023). The formation of an independent committee increases management compliance in carrying out its activities, which in turn reduces agency problems. This structure limits managers' opportunities to manipulate financial figures, as supported by research conducted by Marchellina & Firnanti (2021b) good corporate governance characterized by the presence of an independent board of commissioners has proven to have an effect on earnings management. The company's independent board of directors is responsible for supervision and management. However, the board of directors has limited time and information and cannot closely monitor company operations or analyze the implementation of earnings management actions. In contrast to research conducted by Zaman et al. (2024), the study found that the presence of independent commissioners had no significant effect on earnings management.

Furthermore, research on managerial ownership was conducted by (Augustine & Dwianika, 2019) and Mudjiyanti et al. (2021) found that managerial ownership has an influence on earnings management. However, the findings are different from the research of O'Callaghan et al. (2018) which shows managerial ownership has no impact on earnings management. In companies with significant executive participation, managers tend to refrain from engaging in earnings management practices, as their focus is on achieving long-term success.

The last component of effective corporate governance is the audit committee. According to research conducted by Muda et al. (2018) The audit committee is proven to have an effect on earnings management. This research is inversely proportional to Ali (2024) showing that the audit committee has no impact on earnings management. Furthermore, this committee, which consists of three members including the chairman, plays an important role in assisting the board of directors. This arrangement highlights the importance of strong oversight and control, both of which are essential for effective corporate governance.

2.5. Firm Size and Earnings Management

Firm size is determined by various criteria, including total assets, market value, total revenue, equity, earnings, and capital. This study measures firm size based on total assets. Companies with larger assets tend to increase their overall value, encouraging managers to focus more on profitability and implement earnings management strategies. Earnings management actions can also be carried out for companies that have small assets and want visibility of company assets on a large scale. Previous research on company size in its role as a moderating variable in the relationship with earnings management has been carried out, such as those conducted by Githaiga et al. (2022) and Rahman et al. (2024).

2.6. Hypothesis

Research on the factors that influence earnings management shows that corporate financial health, corporate governance, and ownership characteristics have a significant impact on financial statement manipulation practices. This study focuses on examining the factors that influence earnings management, with a focus on financial distress, financial ratios, and corporate governance. This study also examines the moderating effect of company size, specifically among property, construction, and real estate companies listed on the IDX from 2020 to 2022. These factors are closely related to the tendency of companies to participate in earnings management.

The estimation technique used is the panel data regression model, and the research hypothesis is tested in the following way:

Hypothesis 1: Financial distress affects earnings management.

Hypothesis 2: Profitability affects earnings management.

Hypothesis 3: Likuditas affects earnings management.

Hypothesis 4: Leverage influence on earnings management.

Hypothesis 5: Independent commissioners affect earnings management.

Hypothesis 6: Managerial ownership affects earnings management.

Hypothesis 7: The effect of the audit committee on earnings management.

Hypothesis 8: Company size is able to moderate the relationship between financial distress, profitability, liquidity, leverage, independent commissioners, managerial ownership, and audit committee on management profit.

3. METHODOLOGY

This study uses panel data, which integrates time series and cross-sectional information. Secondary data for this study comes from audited annual financial reports. The sample consists of companies in the real estate, property, and construction sectors listed on the Indonesia Stock Exchange from 2020 to 2022. The selection criteria for these companies include: (1) being part of the real estate, property, and construction sector listed on the IDX, and (2) providing the necessary data for this study. Thus, 54 companies were identified over the three-year period, resulting in a total of 162 observations. The collected data will be analyzed using descriptive statistics and partial least squares structural equality modeling (SEM-PLS) with WarpPLS software. SEM-PLS is a causal modeling technique designed to maximize the explained variance of the latent criterion variable from the identified predictor variables (Kock, 2021).

Table 1: Definition of Research Variables.

No	Variables	Definition	Measurement
1	Earnings Management (Y)	Management intervenes in the preparation of financial reports for external parties to manipulate profit reporting as desired by the company or in the case of liquidation. (Ranjbar & Amanollahi, 2018)..	$DAC_{i,t} = \frac{TAC_{i,t}}{TA_{i,t}} NDA_{i,t}$
2	Financial Distress (X1)	A financial crisis occurs when a company's financial health deteriorates or declines, which may ultimately result in bankruptcy or liquidation (Ranjbar & Amanollahi,	$Z = 6.5 X_1 + 3.2 X_2 + 6.73 X_3 + 1.05 X_4$ Z = Overall Index X1 = Capital / Total Assets X2 = Retained Earnings / Total Assets X3 = Earning Before Interest and Taxes / Total Assets X4 = Book Value of Equity / Book Value of Total Debt
3	Profitability (X2)	Profitability serves as a measure of a company's capacity to generate earnings (Wirianata, 2020).	$ROA = \frac{Net\ Profit}{Total\ Assets}$
4	Liquidity (X3)	Liquidity serves as a widely recognized metric for evaluating a company's capacity to fulfill its short-term liabilities as they become due (Syaputra, 2022).	$Current\ Ratio = \frac{Current\ Asset}{Current\ Debt}$
5	Leverage (X4)	Leverage is a company's ability to fulfill and maintain an ability in order to always be able to fulfill its obligations in paying debts on time (Syaputra, 2022).	$DAR = \frac{Total\ Liabilities}{Total\ Aktiva}$
6	Independent Commissioner (X5)	Independent commissioners function as a form of control over management, because what independent commissioners do is a form of supervision to reduce agency conflicts (Sunarso & Nurcahyono, 2024).	$IC = \frac{Total\ independent\ commissioner}{Total\ board\ of\ commissioner}$
7	Managerial Ownership (X6)	Is a share of ownership by company management in which management will have a sense of ownership of the company (Suartama & Sukartha, 2020).	$MO = \frac{Total\ managerial\ shareholding}{Total\ saham\ beredar}$
8	Audit Committee (X7)	The audit committee is considered one of the committees of the board of directors (Zadeh et al., 2023).	AC = Total Audit Committee Members
9	Company Size (Z)	Company size is an illustration of market capitalization which influence earning management, total assets, and sales owned by a company (Safarida et al., 2023).	Logarithm of nominal value total assets of the company.

The following is the research estimation model evaluated using the panel data regression approach.

$$EM_{it} = \alpha + \beta_1 FD_{it} + \beta_2 P_{it} + \beta_3 Lq_{it} + \beta_4 LV_{it} + \beta_5 IC_{it} + \beta_6 MO_{it} + \beta_7 AC_{it} + \beta_8 FD_{it} * Z_{it} + \beta_9 P_{it} * Z_{it} + \beta_{10} Lq_{it} * Z_{it} + \beta_{11} LV_{it} * Z_{it} + \beta_{12} IC_{it} * Z_{it} + \beta_{13} MO_{it} * Z_{it} + \beta_{14} AC_{it} * Z_{it} + \varepsilon_{it}$$

Where EM = Earnings Management, α = Constant Number, β = Research equation coefficient, FD = Financial Distress, P = Profitability, Lq = Liquidity, LV = Leverage, IC = Independent Commissioner, MO = Managerial Ownership, AC = Audit Committee, Z = Type of Moderator Variable, ε = Interference Error.

4. RESULTS

The statistical data are detailed in Table 2. The data set consists of 162 observations and reveals variations in the mean, median, minimum, and maximum values for each variable.

Table 2: Descriptive Statistics.

Variables	N	Minimum	Maximum	Average	Standard Deviation
Financial Distress	162	-9.16	9.88	3.69	2.92
Profitability	162	-0.25	0.16	0.01	0.05
Liquidity	162	0.08	9.60	2.34	1.77
Leverage	162	0.00	4.55	0.61	0.57
Independent Commissioner	162	0.13	0.75	0.41	0.11
Managerial Ownership	162	0.00	1.06	0.18	0.27
Audit Committee	162	2.00	6.00	3.06	0.37
Earnings Management	162	-1.00	5.26	0.02	0.71
Company Size	162	25.06	31.95	28.65	1.74

Table 2 shows the descriptive analysis of the variables used in this study. The average score for financial distress is 3.69, indicating that companies in the property, real estate, and construction sectors are experiencing a relatively high level of financial distress. In addition, the average profitability ratio is 0.01, while the average liquidity is 2.34, and Leverage is recorded at 0.61.

This indicates that the companies studied have low financial performance. In addition, effective corporate governance, exemplified by the presence of Independent Commissioners, has an average score of 0.41, while managerial ownership is at 0.18, and the audit committee is at an average of 3.06. This indicates that corporate governance practices are still lacking. Regarding earnings management, the company's performance is also low at 0.02, with a company size of 28.65.

Table 3: Model Suitability Test.

Suitability Model and Quality Index	Value Cut	Results	Evaluation
Average Path Coefficient (APC)	p-value <0.05	0.131 (p=0.010)	Accepted
Average R-Square (ARS)	p-value <0.05	0.375 (p < 0.001)	Accepted
Average Adjusted R-Square (AARS)	p-value <0.01	0.296 (p < 0.001)	Accepted
Average Block VIF (AVIF)	Accepted if ≥ 5 , Ideally ≤ 3.3	1.713	Ideal
Full Collinearity Average VIF (AFVIF)	Accepted if ≥ 5 , Ideally ≤ 3.3	2.157	Ideal
GoF Tenan House	0.1 < 0.25 < 0.36	0.597	Big
	Small < Medium < Large		
Sympson Sparadox Ratio (SPR)	Acceptable if ≥ 0.7 , Ideally = 1	0.786	Accepted
R-Squared Contribution Ratio (Bibliography)	Accepted ≥ 0.9 , Ideally = 1	0.884	Accepted
Statistical Suppression Ratio (SSR)	Accepted ≥ 0.7	0.929	Accepted
Q-Square	Accepted $Q^2 > 0$	0.387	Accepted

The purpose of internal model assessment in this study is to identify the influence between variables and the overall relationship between them. The structural model, also known as the internal model, explains the causal relationship between latent variables based on the main theoretical concepts. The structural model (internal model) testing was conducted using the Bootstrapping and Blindfolding procedures in WarpPLS. Table 3 presents some test results that help clarify the relationship between variables. The table shows that the values for APC, AARS, and ARS meet the established criteria, with a p-value of 0.10 for APC and $p < 0.001$ for ARS and AARS. In addition, the AVIF value is 1.713, and the AFVIF value is 2.157, both of which are considered ideal because their values are less than or equal to 3.3. Complete results for other measurements of the internal model can also be found in Table 3.

Table 4: P-Value Test Results.

Track	Immediate Effects		Results Received
	Coefficient	P Value	
Financial Distress > Earnings Management	-0.366	<0.001	Received
Profitability > Earnings Management	-0.180	0.003	Received
Liquidity > Earnings Management	0.083	0.096	Rejected
Leverage > Earnings Management	0.067	0.148	Rejected
Independent Commissioner > Earnings Management	0.027	0.338	Rejected
Managerial Ownership > Earnings Management	-0.190	0.002	Received
Audit Committee > Earnings Management	0.217	<0.001	Received
Financial Distress*Company Size > Earnings Management	-0.105	0.049	Received
Profitability*Company Size > Earnings Management	0.118	0.032	Received
Liquidity*Company Size > Earnings Management	-0.056	0.191	Rejected
Leverage*Company Size > Earnings Management	-0.078	0.110	Rejected
Independent Commissioner*Company Size > Earnings Management	-0.241	<0.001	Received
Managerial Ownership*Company Size > Earnings Management	-0.049	0.220	Rejected
Audit Committee*Company Size > Earnings Management	0.054	0.200	Rejected

The test results show that each variable with a p value of less than 0.05 shows a significant effect on the relationship between the independent and dependent variables. Conversely, variables with a p value greater than 0.05 do not show any effect. In this study, financial distress, profitability, managerial ownership, and audit committee have p values less than 0.005, which means these variables are accepted. On the other hand, Leverage, liquidity, and independent commissioners have p values greater than 0.05, which indicates that these variables are not accepted or have no effect. Company size acts as a moderating variable in this study, because it only moderates the relationship between profitability, financial distress, and independent commissioners, which have p values less than 0.005. However, company size does not moderate the relationship between audit committees, managerial ownership, liquidity, and Leverage with earnings management, because this relationship has a p value greater than 0.005, which means that this hypothesis cannot be accepted.

5. DISCUSSION

The empirical findings indicate that financial distress has an impact on earnings management. This is supported by the p-value of less than 0.001, which confirms that the first hypothesis is accepted. Companies with

higher Z scores experience less financial distress and manage their earnings more effectively. However, in this particular company, the Z score is low, so that the involvement in earnings management is minimal (Agrawal & Chatterjee, 2015). Z scores less than 1.1 are generally considered profitable. Companies in the property, real estate, construction, and building sectors generally have an average Z score of 3.69 (Table 2). The results of this study indicate that the Z score, which serves as a measure of financial distress, can affect the likelihood of a company engaging in earnings management. This study supports the agency theory which states that companies experiencing financial distress can show poor performance and are considered as agent failures in managing the company, so that to cover it up, management chooses to engage in earnings management. Companies facing financial pressure tend to engage in financial statement manipulation practices to improve their financial image. When a company approaches bankruptcy or experiences liquidity difficulties, management may be motivated to present better performance than reality to attract investors, maintain creditor confidence, or avoid contract failure. This study is in line with the study of Ranjbar & Amanollahi (2018) which shows that the financial distress coefficient affects unexpected income and earnings management. Companies that experience a decline in financial conditions in the current year will cause managers to tend to carry out earnings management to increase profits. However, this is different from the study conducted by Agrawal & Chatterjee (2015). The difference in this study may be due to the indicators used and the sample of companies.

The empirical results show that profitability has a p-value of 0.03, which indicates that profitability has a significant effect on earnings management. Thus, the second hypothesis of this study is proven. According to Marchellina & Firnanti (2021), profitability reflects the ability of management to manage profits effectively. Companies that generate large profits will try to maintain and increase their profit levels while providing benefits to the company and its investors. Profitability is often the target of managers when carrying out earnings management. If the company experiences low profitability, managers may use earnings management strategies to maintain perceived performance in the eyes of shareholders and show that the company is operating successfully. This study is in line with the research of Christina & Alexander (2020) which shows that profitability affects earnings management. Likewise, the research of Hanum et al. (2023) which states that profitability affects earnings management, but this result is different from the research of Wirianata (2020).

Meanwhile, empirical evidence regarding liquidity shows no effect on earnings management. This is evidenced by the p-value of 0.096 which exceeds the significance level of 0.05 so that the third hypothesis is rejected. High liquidity reflects effective management performance in meeting short-term obligations. The current ratio reflects the company's ability to meet its short-term obligations by comparing current assets with current liabilities. In agency theory, this provides an incentive for management as an agent to manage earnings in a way that is considered good performance, so that the main investor does not lose money due to information asymmetry, this study is in line with the study conducted by Syaputra (2022), but not in line with the study conducted by Moghaddam & Abbaspour (2017).

The third financial ratio analyzed is Leverage. In this study, Leverage shows a p-value of 0.148, which is higher than the significance level of 0.05, so the fourth hypothesis is rejected. The absence of a relationship between Leverage and earnings management may stem from the significant amount of debt that can be verified through the audit process, limiting the ability of company management to engage in earnings management. Furthermore, companies with more equity than debt tend to be subject to strict supervision by creditors, making it difficult for them to implement earnings management practices Marchellina & Firnanti (2021). The findings of this study are in line with the conclusions drawn by Putra et al. (2023) which state that Leverage does not affect earnings management. This is because companies with significant levels of debt are more closely monitored by creditors, which limits management's ability to manipulate earnings. However, these results contradict the results of Awuye & Aubert's (2022) study which found that Leverage affects earnings management.

Good corporate governance includes elements such as independent commissioners, managerial ownership, and audit committees. In the fifth hypothesis, independent commissioners show a p-value of 0.338, which is higher than the threshold of 0.05, so H5 is rejected. Usually, independent commissioners are responsible for monitoring and ensuring the quality of information provided in financial reports. Agency theory states that it is generally assumed that company directors do not act as wise and fair representatives of shareholders, but rather as agents who are fully aware of their own interests. This shows that, regardless of the size of a company's independent board of commissioners, there is no guarantee that financial reports will be free from fraudulent activities. The supervision provided by the independent board of commissioners has not succeeded in curbing management behavior that prioritizes personal interests. According to agency theory, company owners seek to maximize profits, while managers can increase profits through earnings management practices. This study is in line with the results of research conducted by Sunarso & Nurcahyono (2024) which shows that the existence of independent commissioners who are tasked with overseeing opportunistic management behavior to maintain good corporate governance (GCG) does not significantly prevent earnings manipulation. However, this finding contradicts the conclusion of Fairus & Sihombing (2020) which states that independent commissioners do have an influence on earnings management.

Managerial ownership has a p-value of 0.002, indicating that the sixth hypothesis is accepted because the p-value is below 0.05. The motivation of corporate managers affects earnings management practices, thus causing

variations in how these practices are implemented. Corporate ownership serves as a means to mitigate agency problems between the government and the company by aligning the interests of managers with those of shareholders. Their research shows that when managers increase their shareholding, it helps align the interests of managers and external shareholders, thereby reducing the likelihood of managers engaging in earnings manipulation for personal gain. Likewise, research by Suartama & Sukartha (2020) has shown that the level of ownership by management affects earnings management practices. The involvement of management owners aligns their goals with those of the company's shareholders, which encourages the alignment of management and shareholder interests. However, this study presents a contrast to the results found in other studies conducted by Christina & Alexander (2020) which shows that ownership held by management has no effect on earnings management.

The audit committee shows a p-value below 0.001, indicating a significant effect on earnings management practices, thus validating the acceptance of the seventh hypothesis. The research findings show that the audit committee plays a significant role in effectively reducing earnings management practices. This underlines that the primary task of the audit committee in a company is to uphold the integrity of financial reporting. The Audit Committee and the Board of Supervisors are responsible for overseeing and managing operations to ensure impartiality, transparency, accountability, and responsibility, four key factors that improve the quality of financial reporting. This report is very important because it provides information to investors regarding the fundamental condition of the company, the company's stock returns can ultimately be determined by factors that affect stock prices. Therefore, organizations with efficient audit committees tend to offer better oversight, which can reduce the level of earnings management and encourage a favorable market response. This study is in accordance with the results of Fairus & Sihombing's (2020a) study but agrees with the results of Zadeh et al. (2023) study which stated that the audit committee has no effect on earnings management.

In addition, in this study, company size functions as a moderating variable; however, it does not affect the overall relationship with earnings management. Table 4 shows that financial distress, profitability, and independent commissioners have p-values lower than 0.05, while liquidity, leverage, managerial ownership, and audit committee show p-values higher than 0.05. As a result, we can conclude that company size does not ensure that a company will engage in financial manipulation or earnings management. This shows that companies of various sizes, both small and large, continue to have the potential to participate in earnings management (Githaiga et al., 2022).

6. CONCLUSION

This study aims to obtain empirical evidence on the effect of financial distress, financial ratios, and corporate governance on earnings management, with company size as a moderating variable, in real estate, construction, and property companies listed on the Indonesia Stock Exchange from 2020 to 2022. The findings of the study indicate that financial distress, profitability, managerial ownership, and audit committees have a significant impact on earnings management. The findings suggest that management can manipulate financial information in response to financial challenges, which can ultimately lead to earnings management. This behavior is driven by the need to stabilize earnings and ensure the survival of the company during financial difficulties. Company size acts as a moderating variable that substantially affects the strength of the relationship between various factors and earnings management. Larger companies often implement tighter governance, which reduces the likelihood of participating in earnings management practices. However, this study has several limitations. First, the study period is relatively short, covering only three years (2020–2022). Second, focusing on companies in the property, construction, and real estate sectors limits the ability to generalize the impact of independent variables on earnings management across industries. Given these limitations, the following are recommendations for future research:

- 1) Extending the research period to obtain more accurate and comprehensive results;
- 2) expanding the sample to include companies from various sectors listed on the IDX; and
- 3) investigating additional independent variables, such as free cash flow (FCF) or information asymmetry, which may also affect earnings management.

REFERENCES

- Agrawal, K., & Chatterjee, C. (2015). Earnings Management and Financial Distress: Evidence from India. *Global Business Review*, 16(5_suppl), 140S-154S. <https://doi.org/10.1177/0972150915601928>
- Ali, A. (2024). Audit committee characteristics and earning management of insurance companies in Ethiopia. *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2023.2301136>
- Augustine, Y., & Dwianika, A. (2019). Earnings Management In Indonesia: Determinant Of Company Size, Structure Of Managerial Ownership And Profitability On Earnings Management With Asymmetry Information And Green Intellectual Capital As Moderating Variables. *South East Asia Journal of Contemporary Business, Economics and Law*, 19(5).
- Awuye, I. S., & Aubert, F. (2022). Journal of Accounting and Taxation The impact of leverage on earnings management and the trade-off between discretionary accruals and real earnings management. *Journal of Accounting and Taxation*, 14(1), 89–101. <https://doi.org/10.5897/JAT2022.0519>
- Binti, S., & Ameer, R. (2010). Turnaround prediction of distressed companies: evidence from Malaysia. *Journal of Financial Reporting and Accounting*, 8(2), 143–159. <https://doi.org/10.1108/19852511011088398>

- Christina, S., & Alexander, N. (2020). The Effect of Financial Distress and Corporate Governance on Earnings Management. *Proceedings of the 8th International Conference on Entrepreneurship and Business Management (ICEBM 2019) UNTAR*. <https://doi.org/10.2991/aebmr.k.200626.023>
- Fairus, M., & Sihombing, P. (2020). The Effect of Good Corporate Governance (GCG) Mechanism on Earnings Management Practices of The Stubben Model (Study Case on Mining Sector Companies Listed on The Indonesia Stock Exchange 2014-2019). *European Journal of Business and Management Research*, 5(6). <https://doi.org/10.24018/ejbmr.2020.5.6.602>
- Feni, W., Wardayati, S. M., & Winarno, A. W. (2022). Financial Distress and Earnings Management: The Role of Internal Control as Moderating Variable. *International Journal of Social Science and Business*, 6(3), 304-309. <https://doi.org/10.23887/ijssb.v6i3.46510>
- Foster, G. (2023). Real earnings management in the motion picture industry: strengthening the inferences from academic research. *Review of Accounting Studies*, 28(3), 1250-1262. <https://doi.org/10.1007/s11142-023-09798-1>
- Githaiga, P. N., Muturi Kabete, P., & Caroline Bonareri, T. (2022). Board characteristics and earnings management. Does firm size matter? *Cogent Business & Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2088573>
- Hanum, N., Kusuma Wardhani, D., Ayu, R., & Utami, B. (2023). The Effect Of Financial Distress And Profitability On Earning Management. In *Tax Accounting Applied Journal* (Vol. 02).
- Huang, K., Lao, B., & McPhee, G. (2017). Does Stock Liquidity Affect Accrual-based Earnings Management? *Journal of Business Finance & Accounting*, 44(3-4), 417-447. <https://doi.org/10.1111/jbfa.12236>
- Inayah, R. A., Amiruddin, A., & Pontoh, G. T. (2021). Analysis the Effect of Financial Distress, Leverage and Free Cash Flow on Earnings Management. *GATR Accounting and Finance Review*, 6(3), 111-119. [https://doi.org/10.35609/afr.2021.6.3\(1\)](https://doi.org/10.35609/afr.2021.6.3(1))
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Kock, N. (2021). *WarpPLS User Manual: Version 7.0*. WarpPLS, LLC.
- Kompas.com. (2018). *Laba LPKR Tembus Rp 1,1 Triliun*.
- Luhung, I. A., & Sari, S. P. (2024). The Impact of Financial Distress, Free Cash Flow, Information Asymmetry, and Firm Size on. *Real Earnings Management. E-Jurnal Akuntansi*, 34(9), 2253-2264. <https://doi.org/10.24843/EJA.2024.v34.i09.p07>
- Marchellina, V., & Firnanti, F. (2021). *Financial Ratio and Company Characteristics Effect on Earnings Management*. 178-183. <https://doi.org/10.2991/aebmr.k.210507.027>
- Moghaddam, A., & Abbaspour, N. (2017). International Review of Management and Marketing The Effect of Leverage and Liquidity Ratios on Earnings Management and Capital of Banks Listed on the Tehran Stock Exchange. *International Review of Management and Marketing*, 7(4), 99-107. <http://www.econjournals.com>
- Muda, I., Maulana, W., Siregar, H. S., & Indra, N. (2018). The Analysis of Effects of Good Corporate Governance on Earnings Management in Indonesia with Panel Data Approach. In *Econ. Rev* (Vol. 22, Issue 2).
- Mudjiyanti, R., Agustin, E. A., Rachamwati, E., & Wibowo, H. (2021). *The Effect Of Managerial Ownership, Institutional Ownership, Family Ownership, And Free Cash Flow Management Toward Earnings Management*. 4(1). <http://proceedings.stiewidyagamalumajang.ac.id/index.php/>
- Nadilla, T., Ulfah, A., Hayati, H., Midesia, S., & Puspita, D. (2019). The Effect Of Leverage And Earning Per Share On Earning Management (A Study Of Companies Listed In Indonesia Stock Exchange). *Proceedings of the Proceedings of The 2nd International Conference On Advance And Scientific Innovation, ICASI 2019, 18 July, Banda Aceh, Indonesia*. <https://doi.org/10.4108/eai.18-7-2019.2288646>
- Natha, I. K. S. A., & Wirajaya, I. G. A. (2024). The Effect of Financial Distress on Earnings Management with Managerial Ownership as Moderating Variable. *E-Jurnal Akuntansi*, 34(11), 2752-2765. <https://doi.org/10.24843/EJA.2024.v34.i11.p03>
- Naue, T. F., Anastasia, Y., Harjanto, F. H. P., & Novyarni, N. (2023). The Effect of Sales Growth, Profitability, and Leverage on Earnings Management. *PERWIRA - Jurnal Pendidikan Kewirausahaan Indonesia*, 6(1), 1-18. <https://doi.org/10.21632/perwira.6.1.1-18>
- O'Callaghan, S., Ashton, J., & Hodgkinson, L. (2018). Earnings management and managerial ownership in private firms. *Journal of Applied Accounting Research*, 19(4), 648-668. <https://doi.org/10.1108/JAAR-11-2017-0124>
- Putra, K. B., . E., & . R. (2023). The Effect of Good Corporate Governance, Leverage, and Profitability on Earning Management with Firm Size as a Moderating Variable in Banking Companies Listed on the Indonesian Stock Exchange. *International Journal of Research and Review*, 10(2), 730-741. <https://doi.org/10.52403/ijrr.20230289>
- Rahman, H. U., Zahid, M., Khan, P. A., Al-Faryan, M. A. S., & Hussainey, K. (2024). Do corporate sustainability practices mitigate earnings management? The moderating role of firm size. *Business Strategy and the Environment*, 33(6), 5423-5444. <https://doi.org/10.1002/bse.3754>
- Ranjbar, S., & Amanollahi, G. F. (2018). The effect of financial distress on earnings management and unpredicted net earnings in companies listed on Tehran Stock Exchange. *Management Science Letters*, 933-938. <https://doi.org/10.5267/j.msl.2018.6.015>
- Ross, S. A., Westerfield, R., & Jordan, B. D. (2021). *Fundamentals of Corporate Finance* (30th ed.). McGraw Hill LLC.
- Safarida, N., Lili Irawati, & Safwan Kamal. (2023). Earning Management Analysis: The Role of Firm Size, Leverage, Managerial Ownership and Profitability. *J-EBIS (Jurnal Ekonomi Dan Bisnis Islam)*. <https://doi.org/10.32505/j-ebis.vi0.5909>
- Suartama, M. B., & Sukartha, M. (2020). The Effect Of Managerial Ownership On Earnings Management Of Acquirers On The Indonesian Stock Exchange. *American Journal of Humanities and Social Sciences Research*, 7, 31-34. www.ajhssr.com
- Sunarso, U. A., & Nurcahyono, N. (2024). *The Role of Independent Commissioners, Audit Committee, Audit Committee Expertise, Activities of the Audit Committee and Leverage on Earnings Management* (Vol. 1, Issue 2).
- Syafiqoh, N., & Rochmatullah, M. R. (2024). The Effect of Profitability, Liquidity, Company Size, and Institutional Ownership On Earning management In Industrial Sector Companies Listed On The Indonesia Stock Exchange In 2019-2022. *Dinasti International Journal of Economics, Finance and Accounting (DIJEFA)*, 5(3), 1734-1747. <https://doi.org/10.38035/dijeja>
- Syaputra, R. (2022). Influence of Profitability, Liquidity, Leverage and Company Size on Earnings Management. *Jurnal Ekobistek*, 79-85. <https://doi.org/10.35134/ekobistek.v1i2.316>
- Wirianata, H. (2020). Analysis of Factors Affecting Earnings Management Moderated by Institutional Ownership. *Jurnal Akuntansi*, 24(1), 1. <https://doi.org/10.24912/ja.v24i1.638>
- Yuli, S., Subagyo, Istanti, L. N., & Zen, F. (2023). Debt Ratio, Return on Asset, Firm Size and Earnings Management: Age Moderation. *Jurnal Aplikasi Manajemen*, 21(2), 331-345. <https://doi.org/10.21776/ub.jam.2023.021.02.0>
- Zadeh, F. N., Askarany, D., Shirzad, A., & Faghani, M. (2023). Audit committee features and earnings management. *Heliyon*, 9(10). <https://doi.org/10.1016/j.heliyon.2023.e20825>
- Zaman, A. N., Maharani, A. P., & Firmansyah, A. (2024). Does Independent Commissioner Contribute To Decrease Earnings Management And Tax Avoidance Activities. *Jurnal EQ*