



The Effect of Managerial Ownership, Profitability and Leverage on Earnings Management with Audit Quality as a Moderating Variable (A Study of Primary Consumer Goods Manufacturing Companies Listed on the Indonesia Stock Exchange during the 2020–2023 Period)

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ABSTRACT

Earnings management remains a concern in corporate governance, especially in emerging economies with prevalent agency conflicts. This study examines how managerial ownership, profitability, and leverage affect earnings management and tests whether audit quality moderates these links. Using 128 firm-year observations from 32 primary consumer goods firms listed on the IDX for 2020–2023, the analysis applies Partial Least Squares Structural Equation Modeling (PLS-SEM) via WarpPLS 8.0, with discretionary accruals from the Modified Jones Model as the proxy. The results show managerial ownership and leverage significantly increase earnings management ($p < 0.01$), while profitability has no effect. Audit quality reduces the impact of profitability on earnings management but does not moderate the other links. The findings provide evidence on governance practices in Indonesia and highlight the need for stronger audit oversight.

INTRODUCTION

Financial statements remain one of the key instruments used by companies to communicate financial information to stakeholders. This information must be relevant, reliable, and free from distortion so that it can serve as a credible basis for economic decision-making. Almuzaiqer et al. (2022) emphasize that financial reports act as a medium for presenting financial data to users such as shareholders, creditors, and other stakeholders, ensuring that the information provided supports sound decisions.

However, in practice, opportunities still exist for management to intervene in preparing financial statements through earnings management, motivated by objectives such as improving the company's image or meeting performance targets. Agency theory suggests that conflicts of interest between managers and shareholders can give rise to such practices. While managers (agents) are obliged to maximize the wealth of shareholders (principals), they may also pursue personal interests that do not always align with those of the owners. Therefore, transparency and accountability in financial reporting are critical to maintaining investor trust and protecting stakeholder interests (Jensen & Meckling, 1976).

Earnings management continues to attract substantial attention because it can mislead users of financial statements and compromise the integrity of accounting information. Managerial ownership, defined as the proportion of shares owned by a company's management team, is one of several factors that may influence earnings management behavior. When managers hold ownership stakes, they are more likely to align their actions with shareholders' interests, promoting careful behavior and stronger accountability in reporting.

Moreover, profitability is another important factor, as it indicates a company's capacity to generate earnings from its assets and reflects its financial health. High profitability can create incentives for managers to adjust earnings in order to present a more favorable financial condition to shareholders (Sujarweni, 2020).

In addition, leverage plays a significant role in shaping earnings management practices. To meet the expectations of creditors and shareholders, managers may feel compelled to make certain decisions when a company carries a high debt load. Greater leverage can heighten pressure on managers to safeguard the firm's financial position, potentially encouraging manipulative reporting behavior (Kasmir, 2019).

This study includes audit quality as a moderating variable to examine whether it strengthens or weakens the relationships between managerial ownership, profitability, and leverage with earnings management. Independent and competent auditors, particularly those from reputable audit firms, are expected to detect earnings management practices and exercise stricter oversight of financial reports (Asyati & Farida, 2020).

Earnings management cases have occurred in various companies worldwide. For example, PT Tiga Pilar Sejahtera (AISA) in Indonesia was involved in inflating its financial statements by IDR 4 trillion to make its stock more attractive (CNBC Indonesia, 2019). Similarly, the Wirecard AG scandal in

Germany in 2020 revealed that €1.9 billion was missing, resulting in a 90% stock price decline and substantial investor losses (DW Indonesia, 2020). Such cases highlight the need for robust oversight of financial reporting practices.

Nonetheless, prior empirical findings on the relationships between managerial ownership, profitability, and leverage with earnings management remain mixed and dependent on context. For instance, Fidelia & Ardillah (2022) found that higher managerial ownership significantly limits earnings manipulation, whereas Umah & Sunarto (2022) found no such effect. Likewise, profitability and leverage have produced inconsistent results: Zulfia et al. (2023) and Oktaviana & Rivandi (2023) reported significant positive effects, whereas Wowor et al. (2021) and Purwanti et al. (2021) found no significant relationship. Furthermore, there is still a lack of research focusing specifically on primary consumer goods manufacturing companies in Indonesia, which face distinct market conditions and governance challenges, particularly during the economic disruptions of 2020–2023. Therefore, this study aims to address this gap by providing new empirical evidence and examining whether audit quality moderates these relationships.

LITERATURE REVIEW

Agency Theory

Conflicts driven by information asymmetry and diverging interests may emerge in the contractual dynamic between agents (managers) and principals (shareholders), as explained by agency theory (Jensen & Meckling, 1976). Managers, possessing more internal information, may act opportunistically to maximize personal gain often through earnings manipulation at the expense of shareholder interests. This theoretical framework underpins the expectation that governance mechanisms can mitigate earnings management behavior.

Earnings Management

Yahya and Wahyuningsih (2020) define earnings management as the deliberate actions taken by management to influence reported earnings through specific accounting methods. These actions may involve accelerating expenses or revenues, or employing other techniques designed to affect short-term earnings.

The Modified Jones Model, an advancement of the initial Jones (1991) framework introduced by Dechow et al. (1995), is employed in this study to estimate discretionary accruals as a proxy for earnings management. Recognized for its reliability in detecting earnings manipulation, this refined model addresses estimation inaccuracies found in the original approach and is often regarded as a more robust tool for capturing earnings management behavior.

To begin calculating the Modified Jones Model:

1. The first step involves determining the Total Accruals (TA), which is derived by subtracting operating cash flows from net income in year t , using the following formula:

$$TA_{it} = NI_{it} - CFO_{it}$$

2. Estimate Total Accruals (TA) with a simple linear regression equation.

$$\frac{TA_{it}}{A_{it-1}} = \alpha_1 \left(\frac{1}{A_{it-1}} \right) + \alpha_2 \left(\frac{\Delta REV_{it}}{A_{it-1}} \right) + \alpha_3 \left(\frac{PPE_{it}}{A_{it-1}} \right) + \varepsilon$$

Total Accruals (TA) through linear regression using Ordinary Least Square (OLS), estimation of coefisints $\alpha_1, \alpha_2, \alpha_3$ conducted with software such as SPSS version 27.

3. The next step involves computing the Non-Discretionary Accruals (NDA), which can be determined by applying the following formula:

$$NDA_{it} = \alpha_1 \left(\frac{1}{A_{it-1}} \right) + \alpha_2 \left(\frac{\Delta REV_{it}}{A_{it-1}} - \frac{\Delta REC_{it}}{A_{it-1}} \right) + \alpha_3 \left(\frac{PPE_{it}}{A_{it-1}} \right) + \varepsilon$$

4. Entails determining the Discretionary Accruals (DA), which serve as a proxy indicator for earnings management, calculated using the following equation:

$$DA_{it} = \frac{TA_{it}}{A_{it-1}} - NDA_{it}$$

Where:

TA_{it} = total accruals of company i in period t

A_{it-1} = total assets of company i in year t-1

NI_{it} = net profit of company i in period t

CFO_{it} = cash flow from operating activities of company i in period t

NDA_{it} = nondiscretionary accruals of firm i in period t

DA_{it} = discretionary accruals of company i in period t

ΔREV_{it} = change in net income of company i in period t

ΔREC_{it} = change in receivables of company i in period t

PPE_{it} = property, plant, equipment of company i in period t

$\alpha_1, \alpha_2, \alpha_3$ = parameters of the results of the regression equation

ε = error term of company i in period t

Managerial Ownership

By narrowing the gap between managerial and shareholder interests, agency conflicts can be mitigated through increased managerial ownership. A higher equity stake by managers is expected to constrain opportunistic behavior and enhance accountability in financial reporting (Jensen & Meckling, 1976; Kirimi et al., 2022). However, excessive ownership may incentivize earnings manipulation to maintain share value or personal wealth. Managerial ownership is quantified by calculating the ratio between the number of shares held by company management and the total shares outstanding. This proportion is determined using the following equation:

$$\text{Managerial Ownership} = \frac{\text{Shares Owned by Management}}{\text{Total Outstanding shares}} \times 100\%$$

Profitability

A company's capacity to convert its assets into profits is represented by its profitability, which is typically assessed using the Return on Assets (ROA) metric. Firms with strong financial performance are generally perceived to have fewer incentives to manipulate earnings. However, some managers may still engage in earnings management to maintain growth perceptions or meet market expectations (Sujarweni, 2020).

ROA is calculated using the formula:

$$\text{Return on Asset} = \frac{\text{Net Income}}{\text{Total Asetts}} \times 100\%$$

Leverage

When a business depends heavily on debt relative to equity to sustain its activities, this financial structure is referred to as leverage (Sari & Khafid, 2020). Based on agency theory, managers under high leverage may prioritize their personal interests, leading to a higher likelihood of earnings manipulation to improve reported performance (Elhawary & Hassouna, 2021). High leverage implies greater financial risk, and to meet creditor expectations, managers may engage in earnings management (Prawida & Sutrisno, 2021). This view is supported by studies from Puspitasari et al. (2019), Fagbemi et al. (2020), and Suheny (2019), these results collectively highlight a significant positive relationship between financial leverage and earnings manipulation strategies.

Leverage is measured using the following formula:

$$\text{Debt to Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Total Ekuity}} \times 100\%$$

Audit Quality

Audit quality serves as a governance mechanism that enhances the reliability of financial reports. High-quality auditors, especially those affiliated with Big Four firms, are expected to detect and deter earnings management through stringent oversight (Asyati & Farida, 2020). In this research, audit quality is positioned as a moderating variable and is operationalized using a dummy indicator, assigned a value of 1 for firms audited by Big Four-affiliated auditors, and 0 for others.

Drawing from the preceding theoretical foundation and empirical insights, the conceptual framework outlines the interactions among managerial ownership, profitability, and leverage in relation to earnings management, with audit quality incorporated as a moderating influence:

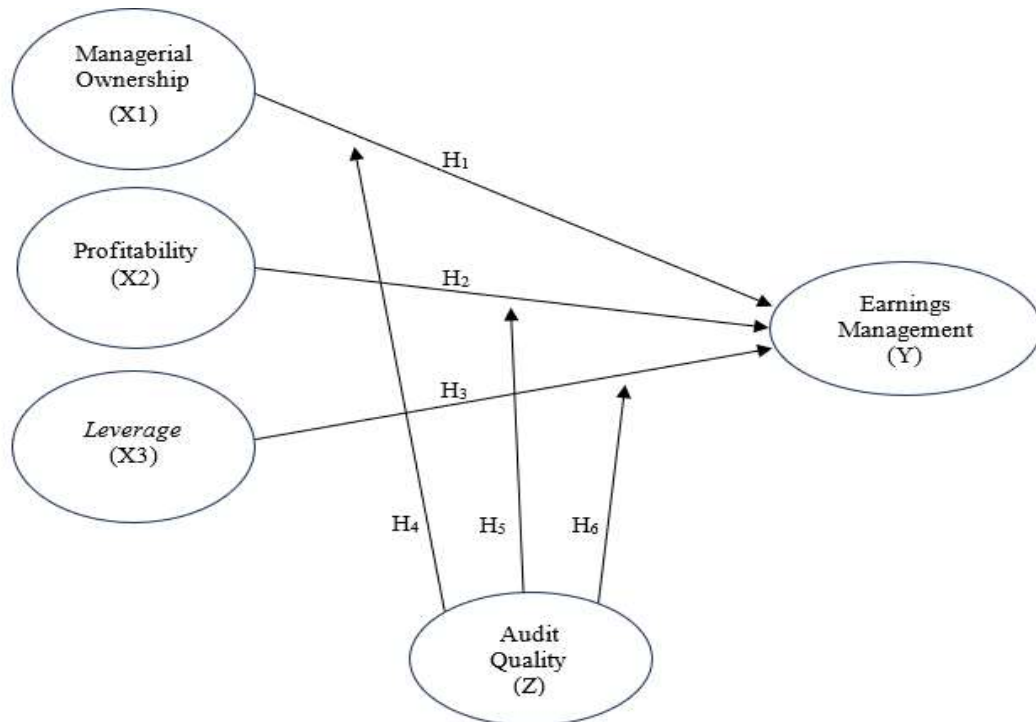


Figure 1. Conceptual Framework

Guided by the conceptual framework presented above, the following hypotheses are proposed:

- H1: There is a significant relationship between managerial ownership and earnings management.
- H2: Profitability exerts a notable influence on the practice of earnings management.
- H3: Leverage significantly contributes to variations in earnings management behavior.
- H4: Audit quality moderates the linkage between managerial ownership and earnings management.
- H5: The effect of profitability on earnings management is conditioned by the level of audit quality.
- H6: Audit quality serves as a moderating factor in the relationship between leverage and earnings management.

METHODOLOGY

To explore the relationship between managerial ownership, profitability, and leverage on earnings management, while also examining the moderating effect of audit quality, this study adopts a quantitative methodology framed within an explanatory-associative research design. A total of 32 companies were purposively selected from a broader pool of 125 consumer goods manufacturers listed on the Indonesia Stock Exchange (IDX) for the period 2020–2023, using criteria based on data accessibility and reporting completeness.

Secondary data were sourced from publicly available financial statements on the IDX platform and cross-verified financial databases. Earnings management is represented using discretionary accruals calculated via the

Modified Jones Model. The independent variables consist of managerial ownership, profitability (measured by Return on Assets/ROA), and leverage (Debt-to-Equity Ratio/DER), whereas audit quality, denoted by a dummy variable distinguishing Big Four auditors from others, serves as the moderating variable.

Data analysis employs Partial Least Squares Structural Equation Modeling (PLS-SEM), executed using WarpPLS 8.0, which is particularly effective for estimating models with interaction effects and small sample sizes. A detailed overview of the sample selection procedure is provided in Table 1.

Table 1. Sample Selection Criteria

No.	Sample Criteria	Number of Companies
1.	Total primary consumer goods manufacturing companies listed on IDX (2020–2023)	125
2.	Companies not presenting financial statements during the 2020–2023 period	(35)
3.	Companies that did not generate profit during the 2020–2023 period	(33)
4.	Companies with incomplete required data during the 2020–2023 period	(25)
Final sample meeting criteria		32
Observation period (years)		4
Total firm-year observations (32 x 4 years)		128

Source: Processed Data 2025

These companies primarily operate in the food and beverage, household goods, and other essential consumer product segments. The sample reflects firms with consistent annual reporting and positive earnings throughout the observation period. This ensures that the characteristics are representative of financially viable companies in Indonesia’s primary consumer goods sector.

RESEARCH RESULT

Descriptive Statistical Analysis

Table 2. Results of Descriptive Statistical Analysis

Variables	N	Min	Max	Mean	SD
Managerial Ownership (X_1)	128	0.000	1.000	0.152	0.246
Profitability (X_2)	128	-0.003	0.417	0.085	0.065
Leverage (X_3)	128	0.108	7.732	0.851	0.920
Earnings Management (Y)	128	-6.372	8.030	0.118	2.283
Audit Quality (Z)	128	0.000	1.000	0.523	0.501

Source: WarpPLS 8.0 Processed Data, 2025

Descriptive statistics for a total of 128 data points, derived from 32 consumer goods manufacturing firms listed on the Indonesia Stock Exchange (IDX) during the 2020–2023 period, are outlined in Table 2.

1. The managerial ownership variable (X1) exhibits a minimum of 0.000 and a maximum of 1.000, with a mean value of 0.152 and a standard deviation of 0.246, reflecting considerable dispersion within the dataset.
2. Profitability (X2), assessed using Return on Assets (ROA), spans from 0.003 to 0.417. The mean is 0.085 with a standard deviation of 0.065, indicating relatively stable variation across observations.
3. The leverage variable (X3), calculated via the Debt-to-Equity Ratio (DER), ranges widely from 0.108 to 7.732. It has an average value of 0.851 and a standard deviation of 0.920, suggesting notable variability in capital structure among firms.
4. Earnings management (Y), measured through discretionary accruals, demonstrates substantial variance, with values extending from -6.372 to 8.030, a mean of 0.118, and a standard deviation of 2.283.
5. Audit quality (Z), captured through a dummy variable (1 for Big Four auditors, 0 otherwise), has a mean of 0.523 and a standard deviation of 0.501, signifying a fairly even split between high- and non-Big Four audit assignments.

Evaluation of Measurement Model (Outer Model)

In testing the measurement model, convergent validity tests (factor loading and average variance extracted), discriminant validity tests (cross loading and square roots AVE) and reliability tests (composite reliability and Cronbach's alpha) were carried out.

Convergent Validity

Table 3. Convergent Validity Test Results *Loading Factor*

No	Indicator	Loading Factor	Information	P-Value	Information
1	KM (X ₁)	1.000	Valid	<0.001	Significant
2	ROA (X ₂)	1.000	Valid	<0.001	Significant
3	DER (X ₃)	1.000	Valid	<0.001	Significant
4	DA(Y)	1.000	Valid	<0.001	Significant
5	KA (Z)	1.000	Valid	<0.001	Significant
6	Z*X ₁	1.000	Valid	<0.001	Significant
7	Z*X ₂	1.000	Valid	<0.001	Significant
8	Z*X ₃	1.000	Valid	<0.001	Significant

Source: WarpPLS 8.0 Processed Data, 2025

The criteria used to draw conclusions regarding convergent validity are derived from the loading factor values presented in Table 3:

1. If the loading factor (example for KM = 1.000) > 0.70 then it meets convergent validity. It can be seen in the table above stating that the KM, ROA, DER

- variables and the moderation values $KA*KM$, $KA*ROA$, $KA*DER$ meet the loading factor criteria with a value of 1.000 with a P-value <0.001 .
- If the loading factor is significant (example $X_1 = 1.000$; $p < 0.001$) then it meets the convergent validity <0.05 . The table above states that the variables KM , ROA , DER and the moderation value $KA*KM$, $KA*ROA$, $KA*DER$ are 1.000; $P < 0.001$. in other words, all variables have met the criteria.

Validity of Discrimination

Table 4. Discrimination Validity Test Result (*Cross Loading*)

Indicator	KM	ROA	DER	DA	KA	Z*X1	Z*X2	Z*X3	Information
KM (X_1)	(1.000)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Valid
ROA (X_2)	0.000	(1.000)	0.000	0.000	0.000	0.000	0.000	0.000	Valid
DER (X_3)	0.000	0.000	(1.000)	0.000	0.000	0.000	0.000	0.000	Valid
DA(Y)	0.000	0.000	0.000	(1.000)	0.000	0.000	0.000	0.000	Valid
KA (Z)	0.000	0.000	0.000	0.000	(1.000)	0.000	0.000	0.000	Valid
Z*X ₁	0.000	0.000	0.000	0.000	0.000	(1.000)	0.000	0.000	Valid
Z*X ₂	0.000	0.000	0.000	0.000	0.000	0.000	(1.000)	0.000	Valid
Z*X ₃	0.000	0.000	0.000	0.000	0.000	0.000	0.000	(1.000)	Valid

Source: Processed Data, WarpPLS 8.0, 2025

The results of the cross-loading discriminant validity test are shown in Table 4. Based on the criteria that the loading value (the value in brackets) to the cross-loading must be greater horizontally. Sholihin & Ratmono,(2020). For example, in KM with a loading value of 1.000 and cross-loading ROA of 0.000, DER of 0.000, DA of 0.000 and KA of 0.000. If loading $>$ cross-loading then the cross-loading discriminant validity is met. Based on the table above, it can be seen that all variables have met the predetermined criteria.

Reliability Test

Table 5. Test Results Composite Reliability

No	Variables	Composite Reliability Coefficients	Cronbach's Alpha Coefficients	Information
1	Managerial Ownership (X_1)	1.000	1.000	Reliable
2	Profitability (X_2)	1.000	1.000	Reliable
3	Leverage(X_3)	1.000	1.000	Reliable
4	Earnings Management (Y)	1.000	1.000	Reliable
5	Audit Quality (Z)	1.000	1.000	Reliable
6	Z*X ₁	1.000	1.000	Reliable
7	Z*X ₂	1.000	1.000	Reliable
8	Z*X ₃	1.000	1.000	Reliable

Source: Processed data, WarpPLS 8.0, 2025

Table 5 displays the composite reliability results, indicating that every variable examined has both composite reliability and Cronbach's alpha values exceeding the threshold of 0.7. These outcomes confirm that all constructs satisfy

the established reliability standards, which require coefficients greater than 0.7 to be considered acceptable (Sholihin & Ratmono, 2020).

Structural Model Evaluation (Inner Model)

The inner model evaluation includes goodness of fit (model suitability test). In determining goodness of fit, it can be determined in 2 (two) ways, namely R squared analysis, Q squared and general result output analysis (APC, ARS, AVIF etc.).

Model Fit Analysis

Table 6. Model Fit Test Results

No	Model Fit and Quality Indices	Fit Criteria	Analysis Results	Information
1	Average Path Coefficient (APC)	P<0.05	0.183 (P = 0.008)	Accepted
2	Average R-Squared (ARS)	P<0.05	0.295 (P<0.001)	Accepted
3	Average Adjusted R-Squared (AARS)	P<0.05	0.260 (P<0.001)	Accepted
4	Average block VIF(AVIF)	Acceptable if ≤ 5 ; Ideal ≤ 3.3	2.983	Ideal
5	Average full collinearity VIF (AFVIF)	Acceptable if ≤ 5 ; Ideal ≤ 3.3	1.920	Ideal
6	Tenenhaus GoF (GoF)	Small ≥ 0.1 ; Medium ≥ 0.25 ; Large ≥ 0.36	0.543	Large
7	Simpson's Paradox Ratio (SPR)	Acceptable if ≥ 0.7 ; Ideal 1	0.667	Rejected
8	R-Squared Contribution Ratio (RSCR)	Acceptable if ≥ 0.9 ; Ideal = 1	0.934	Accepted
9	Statistical Suppression Ratio (SSR)	Acceptable if ≥ 0.7	1.000	Accepted
10	Non Linear Bivariate Causality Direction Ratio (NLBCDR)	Acceptable if ≥ 0.7	0.917	Accepted

Source: Processed Data, WarpPLS 8.0, 2025

Based on the results of the model fit test shown in Table 6, it can be seen that for the APC value of 0.1183 P = 0.008, ARS of 0.295 P < 0.001, and AARS of 0.260 P < 0.001 have met the criteria in the model fit test, namely P < 0.05. For AVIF has reached the ideal category with a value of 2.983 and AFVIF has also reached the ideal category with a value of 1.920. The GoF value is included in the large category, namely 0.543, the SPR value with a value of 0.667 is rejected because it has not reached the minimum number, namely for SPR ≥ 0.7 and does not reach the ideal level, the RSCR value of 0.934 and SSR are included in the accepted category and reach the ideal level, namely 1.000.

The NLBCDR value with a value of 0.917 is included in the accepted category and reaches the minimum figure for $NLBCDR \geq 0.7$. The interpretation of the model fit indicator depends on the purpose of the SEM analysis. If only conducting hypothesis testing between latent variables, then the fit model becomes less important (optional) (Sholihin & Ratmono, 2020).

R-Squared (R²)

Table 7. R-test results *Squared*

	KM	ROA	DER	DA	KA
R-Squared				0.295	

Source: Processed Data, WarpPLS 8.0, 2025

Table 7 illustrates the R-squared outcomes, where the value for the endogenous construct, earnings management, is reported at 0.295. This indicates that 29.5% of the variability in the earnings management variable can be accounted for by the combined influence of managerial ownership, profitability, leverage, and audit quality, including their respective interaction effects.

Q-Squared (Q²)

Table 8. Q-Test Results *Squared*

	KM	ROA	DER	DA	KM
Q-Squared				0.275	

Source: Processed Data, WarpPLS 8.0, 2025

The Q² value must have a value greater than 0 ($Q^2 > 0$) (Ghozali & Latan, 2015). Based on Table 8 which shows the results of the Q-squared test of 0.275 which is greater than 0.15. So it can be stated that Q² is accepted and has a fairly good predictive capability in predicting the dependent variable DA based on the independent variables KM, ROA, DER and other interaction or moderation variables in the analysis.

DISCUSSION

The Effect of Managerial Ownership on Earnings Management

The findings reveal a statistically significant positive effect of managerial ownership on earnings management, as demonstrated by a path coefficient of 0.252 and a p-value of 0.001, well below the 0.05 significance threshold. This result suggests that as managers hold a larger portion of company shares, their propensity to engage in earnings management increases. This supports Hypothesis 1 (H1) and is consistent with the agency theory proposed by (Jensen & Meckling, 1976), which posits that managerial ownership may trigger opportunistic actions aimed at preserving firm value. Thus, H1 is supported by the data.

This result is consistent with Fidelia & Ardillah (2022) and Rosyidah & Rahayu (2024) who found that managerial ownership positively influences earnings management. In an agency context, a larger managerial shareholding

may exacerbate conflicts of interest and encourage financial manipulation to serve personal objectives.

The Effect of Profitability on Earnings Management

With a path coefficient of -0.031 and a p-value of 0.362 , the analysis suggests that profitability does not significantly affect earnings management. These results lead to the rejection of Hypothesis 2 (H2), which initially posited a significant association between the two. This means that strong financial performance does not necessarily motivate managers to manipulate earnings, particularly in the primary consumer goods sector, which tends to be stable and faces lower market pressure.

This finding is consistent with Listiyani & Nuswandari (2024); Devanka et al. (2022), and Joe & Ginting (2022), who also reported no significant relationship between profitability and earnings management. According to agency theory, firms with strong profitability may have fewer incentives to engage in earnings management, as performance targets are already met. Additionally, other factors such as industry regulation or internal control mechanisms may play a more dominant role in constraining earnings manipulation than profitability itself.

The Effect of Leverage on Earnings Management

The empirical findings indicate that leverage, as reflected by the Debt-to-Equity Ratio (DER), exerts a statistically significant positive impact on earnings management. This is substantiated by a path coefficient of 0.350 and a p-value below 0.001 , both of which confirm that the relationship meets the standard threshold for significance (< 0.05). As such, the evidence upholds the validity of the third hypothesis (H3), affirming that higher leverage is associated with an increased likelihood of earnings management. This indicates that firms with higher debt levels are more likely to manipulate financial statements in order to maintain favorable financial ratios and comply with debt covenants (*debt covenant hypothesis*).

This result is in line with Oktaviana & Rivandi (2023), Devanka et al. (2022), and Purnama & Taufiq (2021), who found that leverage increases the likelihood of earnings management. A higher Debt to Equity Ratio (DER) implies greater reliance on external debt, placing pressure on managers to present a strong financial position sometimes through earnings manipulation.

Audit Quality Moderates the Effect of Managerial Ownership on Earnings Management

The interaction between audit quality and managerial ownership does not appear to significantly affect earnings management, as indicated by the hypothesis testing results. This is supported by the path coefficient value of -0.023 and a p-value of 0.397 , which exceeds the 0.05 significance threshold, implying the moderating effect is statistically insignificant, indicating that the involvement of a high-quality auditor (such as those affiliated with the Big Four) does not meaningfully alter the effect of managerial ownership on earnings management behavior. As such, Hypothesis 4 (H4) is not supported.

In line with Rosyidah & Rahayu's research (2024) who reported that audit quality fails to mitigate the opportunistic behavior of managers who have substantial ownership stakes. Although agency theory assumes that external auditors reduce information asymmetry, their effectiveness may be limited when managerial control is dominant or when internal governance is weak.

Audit Quality Moderates the Effect of Profitability on Earnings Management

The analysis reveals that audit quality plays a significant moderating role in the link between profitability and earnings management, with the interaction occurring in a negative direction. This conclusion is supported by a path coefficient of -0.397 and a p-value below 0.001, indicating statistical significance at the 5% level. This indicates that high-quality auditors are effective in reducing the likelihood of managers manipulating earnings when firms report high profitability so that H5 is accepted.

Such a result reflects Syarif M. Helmi et al. (2023), with Roslita & Daud (2019), who found that audit quality plays a key role in suppressing earnings management, particularly in financially strong firms. A credible external audit enhances transparency and limits the opportunity for opportunistic reporting behavior.

Audit Quality Moderates the Effect of Leverage on Earnings Management

Audit quality cannot moderate the effect of leverage on earnings management, based on the previous hypothesis statement. The results of the analysis show a path coefficient value of -0.044 and a p-value of 0.309. This implies that even high-quality audits are not sufficient to mitigate the pressure managers face from high debt obligations so that H6 is rejected.

This finding is aligned with Rosyidah & Rahayu (2024) and Savitri & Priantinah (2019), who found that audit quality fails to moderate the leverage earnings management relationship. In this context, financial pressure from creditors appears to outweigh the oversight provided by external auditors, suggesting that high leverage may encourage earnings manipulation regardless of audit quality.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the analysis, this study concludes the following:

1. Managerial ownership is found to positively and significantly influence earnings management. This suggests that when managers possess a larger proportion of company shares, their likelihood of engaging in financial report manipulation tends to increase. This result is in line with agency theory, which argues that equity ownership by managers may drive opportunistic actions for personal gain.
2. Profitability, represented by Return on Assets (ROA), does not exhibit a significant effect on earnings management. This implies that in the primary consumer goods industry where market demand is relatively stable and competition is less intense profitability may not serve as a critical factor driving earnings manipulation.

3. Leverage, proxied by the Debt-to-Equity Ratio (DER), shows a significant and positive relationship with earnings management. Firms with higher debt levels tend to manipulate earnings, potentially as a strategic move to retain credibility with creditors and stakeholders or to remain compliant with debt-related agreements.
4. The moderating role of audit quality on the link between managerial ownership and earnings management is found to be insignificant. In other words, employing a high-quality external auditor does not appear to alter the strength or direction of this relationship.
5. On the other hand, audit quality plays a negative moderating role in the relationship between profitability and earnings management. This indicates that when firms achieve strong profitability and are audited by Big Four firms, they are less inclined to manipulate earnings – highlighting the monitoring function of high-quality audits in curbing agency conflicts.
6. Finally, the interaction between leverage and audit quality does not yield a significant moderating effect. Even under the scrutiny of reputable auditors, leverage continues to drive earnings management behavior, likely due to the overriding pressure of financial obligations.

ADVANCED RESEARCH

Future research could enhance the generalizability of findings by incorporating a broader sample across different industrial sectors. Additionally, integrating other explanatory variables such as corporate governance practices, dividend policy, ownership concentration, or macroeconomic indicators could offer a more nuanced understanding of earnings management behavior. Extending the observation period is also recommended to capture long-term trends and cyclical patterns in earnings management practices. Moreover, future studies may benefit from using alternative analytical approaches, such as longitudinal panel data or mixed-methods designs, to explore both quantitative relationships and qualitative motivations behind earnings manipulation. By considering these directions, future research can contribute more robustly to efforts aimed at improving financial transparency, corporate accountability, and the effectiveness of monitoring mechanisms in mitigating opportunistic reporting behavior.

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REFERENCES

- Almuzaiqer, M. A., Fatima, A. H., & Ahmad, M. (2022). Royal Family Members and Corporate Governance Characteristics: the Impact on Earnings Management in UAE. *International Journal of Business and Society*, 23(2), 689–713. <https://doi.org/10.33736/IJBS.4834.2022>
- Asyati, S., & Farida, F. (2020). Pengaruh Good Corporate Governance, Leverage, Profitabilitas dan Kualitas Audit terhadap Praktik Manajemen Laba (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di BEI Periode 2014-2018). *Journal of Economic, Management, Accounting and Technology*, 3(1), 36–48. <https://doi.org/10.32500/jematech.v3i1.1073>
- Devanka, D., Endiana, I. D. M., & Kumalasari, P. D. (2022). Analisis Faktor-Faktor Yang Mempengaruhi Manajemen Laba Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2018-2020. *Jurnal Kharisma*, 4(1), 85–96. <https://ejournal.unmas.ac.id/index.php/kharisma/article/download/4540/3525>
- Elhawary, E., & Hassouna, D. (2021). Earnings Management Determinants: a Study of Egyptian Listed Firm Characteristics Post the Egyptian Revolution. *Corporate Governance and Organizational Behavior Review*, 5(2 Special Issue), 165–183. <https://doi.org/10.22495/cgobrv5i2sip5>
- Fagbemi, T. O., Osemene, O. F., & Agbaje, O. (2020). Management Entrenchment, Firm Characteristics and Earnings Management Of Conglomerate Companies In Nigeria. *Jurnal Administrasi Bisnis*, 9(1), 1–14. <https://doi.org/10.14710/jab.v9i1.28576>
- Fidelia, & Ardillah, K. (2022). Pengaruh Kepemilikan Manajerial, Konservatisme Akuntansi, dan Asimetri Informasi terhadap Manajemen Laba pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2017-2019. *KALBISIANA Jurnal Sains, Bisnis Dan Teknologi*, 8(3), 3445–3458. <http://112.78.142.42/index.php/kalbisiana/article/view/1554/498>
- Helmi, S. M., Kurniadi, A., Anam, M. K., & Soraya Nurfiza. (2023). Pengaruh Profitabilitas Dan Kualitas Audit Terhadap Manajemen Laba Dengan

- Ukuran Perusahaan Sebagai Variabel Moderasi. *Jurnal Akuntansi Trisakti*, 10(1), 51–68. <https://doi.org/10.25105/jat.v10i1.15496>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 4, 305–360. <http://papers.ssrn.com/abstract=94043>
- Joe, S., & Ginting, S. (2022). Pengaruh Ukuran Perusahaan, Leverage, dan Profitabilitas terhadap Manajemen Laba. *Journal of Education, Humaniora and Social Sciences (JEHSS)*, 5(2), 1641–1648. <https://doi.org/10.34007/jehss.v5i2.1520>
- Kirimi, P. N., Kariuki, S. N., & Ocharo, K. N. (2022). Ownership structure and financial performance: Evidence from Kenyan commercial banks. *PLoS ONE*, 17(5 May), 1–20. <https://doi.org/10.1371/journal.pone.0268301>
- Listiyani, D., & Nuswandari, C. (2024). the Effect of Good Corporate Governance and Profitability on Earnings Management. *Journal of Economic, Business and Accounting*, 7(2), 134. <https://doi.org/10.60090/kjm.v2i2.593.134-144>
- Oktaviana, F., & Rivandi, M. (2023). Ukuran Perusahaan Dan Leverage Terhadap Manajemen Laba Pada Perusahaan Transportasi Tahun 2019 – 2021. *Jurnal Mahasiswa Manajemen Dan Akuntansi*, 2(1), 22–30. <https://doi.org/10.30640/jumma45.v2i1.939>
- Prawida, N., & Sutrisno, S. (2021). Leverage, profitability, corporate governance mechanism and earning management: cases in manufacturing company in Indonesia Stock Exchange. *Asian Management and Business Review*, 1(1), 35–45. <https://doi.org/10.20885/amb.v1i1.iss1.art4>
- Purnama, Y. M., & Taufiq, E. (2021). Pengaruh Profitabilitas, Leverage, Firm Size, Dan Earnings Power Terhadap Manajemen Laba Pada Perusahaan Sektor Properti Yang Terdaftar Di Bursa Efek Indonesia Periode 2017-2019. *Journal of Accounting, Finance, Taxation, and Auditing (JAFTA)*, 3(1), 71–94. <https://doi.org/10.28932/jafta.v3i1.3280>
- Purwanti, P. I., Kepramareni, P., & Pradnyawati, S. O. (2021). Pengaruh Corporate Governance, Ukuran Perusahaan Dan Leverage Terhadap Manajemen Laba Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Periode 2017-2019. *Jurnal Kharisma*, 3(1), 197–206. <https://ejournal.unmas.ac.id/index.php/kharisma/article/view/1693>
- Puspitasari, E. P., Nur, D., & Mawardi, M. C. (2019). Pengaruh Faktor Good Corporate Governance, Free Cash Flow, dan Leverage Terhadap Manajemen Laba Pada Perusahaan Batu Bara. *E-Jra*, 08(03), 87–100.

- Roslita, E., & Daud, A. (2019). Pengaruh Kepemilikan Saham, Profitabilitas, Leverage, dan Pajak Tanggungan Terhadap Manajemen Laba Dengan Kualitas Audit Sebagai Variabel Pemoderasi. *Jurnal Manajemen Bisnis*, 22(2), 213-234.
- Rosyidah, N., & Rahayu, R. A. (2024). *Effect of Audit Quality as A Moderator Between Managerial Ownership, Leverage, Free Cash Flow, and Profitability on Earnings Management*. 2, 196-219. <https://doi.org/10.20473/baki.vvix.xxxx>
- Sari, N. P., & Khafid, M. (2020). Peran Kepemilikan Manajerial dalam Memoderasi Pengaruh Profitabilitas, Leverage, Ukuran Perusahaan, Kebijakan Dividen Terhadap Manajemen Laba pada Perusahaan BUMN. *Moneter - Jurnal Akuntansi Dan Keuangan*, 7(2), 222-231. <https://doi.org/10.31294/moneter.v7i2.8773>
- Savitri, D., & Priantinah, D. (2019). Pengaruh Leverage Terhadap Manajemen Laba Dengan Corporate Governance Sebagai Variabel Pemoderasi Pada Perusahaan Manufaktur Sektor Aneka Industri Yang Terdaftar Di Bei Periode 2013-2016. *Nominal: Barometer Riset Akuntansi Dan Manajemen*, 8(2), 179-193. <https://doi.org/10.21831/nominal.v8i2.26543>
- Sholihin, M., & Ratmono, D. (2020). *Analisis SEM-PLS dengan WarpPLS 7.0 untuk Hubungan Nonlinier dalam Penelitian Sosial dan Bisnis* (C. Mitak (ed.); 2nd ed.). Yogyakarta: ANDI.
- Suheny, E. (2019). Pengaruh Corporate Governance, Ukuran Perusahaan, Leverage, Dan Kualitas Audit Terhadap Manajemen Laba. *Jurnal Ekonomi Vokasi*, 2(1), 1-18. <https://ejournal.lppmunsera.org/index.php/JEV/article/view/1060/925>
- Sujarweni, V. W. (2020). *Metodelogi Penelitian Bisnis & Ekonomi*. Yogyakarta: Pustaka Baru Press.
- Umah, A. khiarotul, & Sunarto, S. (2022). Faktor-Faktor Yang Mempengaruhi Nilai Perusahaan Pada Perusahaan Manufaktur Tahun 2016 - 2018. *Jurnal Ilmiah Mahasiswa Akuntansi*, 13(2), 531. <https://doi.org/10.24912/jpa.v3i2.11807>
- Wowor, J. C., Morasa, J., Rondonuwu, S., Ekonomi dan Bisnis, F., & Akuntansi, J. (2021). Pengaruh Profitabilitas Terhadap Manajemen Laba Pada Perusahaan Sektor Consumer Goods Industry Di Bursa Efek Indonesia (BEI). *Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 9(1), 589-599. <https://ejournal.unsrat.ac.id/index.php/emba/article/view/32400>
- Yahya, A., & Wahyuningsih, D. (2020). Pengaruh Perencanaan dan Aset Pajak Tanggungan Terhadap Manajemen Laba Pada Perusahaan Telekomunikasi

dan Konstruksi Yang Terdaftar di Bursa Efek Indonesia Periode 2013 – 2017. *Sosiohumanitas*, 21(2), 86–92. <https://doi.org/10.36555/sosiohumanitas.v21i2.1242>

Zulfia, G., Setyowati, T., & Komara. (2023). Pengaruh Profitabilitas, Risiko Keuangan, dan Pertumbuhan Perusahaan Terhadap Manajemen Laba Pada Perusahaan Manufaktur Yang Terindeks Lq45 Di Bursa Efek Indonesia Periode 2016-2021. *JMBI UNSRAT (Jurnal Ilmiah Manajemen Bisnis Dan Inovasi Universitas Sam Ratulangi)*., 10(3), 1774–1788. <https://doi.org/10.35794/jmbi.v10i3.50468>