



The Effect of Profitability, Leverage, and Green Accounting on Earnings Management in Manufacturing Companies In Indonesia

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ABSTRACT

This study looks at how profitability, leverage, green accounting, and earnings management relate to Indonesian manufacturing businesses that are listed. Employing a quantitative research design, the study focuses on manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2019–2023 period. A purposive sampling method was utilized to identify the firms included in the study. Secondary data were gathered from PROPER ratings published by the Ministry of Environment and Forestry, annual corporate reports, the IDX website, and firms' official websites. The collected data were processed using multiple linear regression analysis through SPSS version 20. The findings suggest that profitability, represented by Return on Assets (ROA), positively and significantly influences earnings management. On the other hand, leverage has a substantial detrimental impact on earnings management, as indicated by the Debt-to-Equity Ratio (DER). Earnings management strategies are not significantly impacted by green accounting, as seen by environmental performance.

Keywords: Green Accounting, Profitability, Leverage, and Profits Management.

INTRODUCTION

A manager who manipulates financial statements and prepares transactions to falsify the company's financial situation is engaging in earnings management (Hasriani et al., 2021). (Scott, 2015) suggests that earnings management practices are generally implemented using four methods: reducing profits or increasing losses, increasing profits or decreasing losses, smoothing profits to appear more stable, and reporting large losses to offset future profits. Therefore, earnings management is implemented to maintain the stability of the company's relationship with stakeholders, especially in situations where trust in the company begins to decline due to suboptimal performance. This action can trigger errors in economic policymaking among users of financial statements, and can harm stakeholders and negatively impact the company's business continuity.

Scott (2015) suggests that earnings management can be viewed in two different ways. First, earnings management is considered a form of fraud because it is an opportunistic act by a manager who intentionally alters figures in financial statements to gain one-sided benefits to achieve personal goals. Second, earnings management is not considered a form of fraud, but rather the result of managerial freedom in determining the accounting methods used to ensure results align with their desired goals. This occurs because various accounting procedures and methods are recognized, legitimate, and generally applicable. These differing views

demonstrate the importance of monitoring managerial behavior to ensure that their freedom remains aligned with the interests of all stakeholders, while maintaining a balance between achieving sustainable financial, social, and environmental performance.

According to Meckling & Jensen (1976), agency theory is a design that explains the contentual correlation between agents and principals, namely between two or more people, whether individuals, groups, or specific organizations. Based on this theory, principals and company management, as agents, are motivated to increase profitability for their own well-being and to obtain investment, loans, bonuses, and other benefits. Furthermore, principals and agents are motivated to reduce high leverage for profit manipulation to fulfill debt covenants and avoid pressure from creditors. Furthermore, based on the Triple Bottom Line theory, a business entity has three basic pillars: the planet, society or stakeholders (people), and profit. According to Basar et al. (2025), transparency in cost recording can restrict a company's ability to engage in earnings management (profit). Resource allocation for sustainability increases operational costs, which in the short term can reduce profits and limit the flexibility of financial reporting (planet). Environmental transparency may be appreciated by sustainability-minded investors, but for companies focused on short-term profits, it can reduce the attractiveness of financial reports (people). Overall, although green accounting supports sustainability, in the short term, its implementation can suppress and limit earnings management practices.

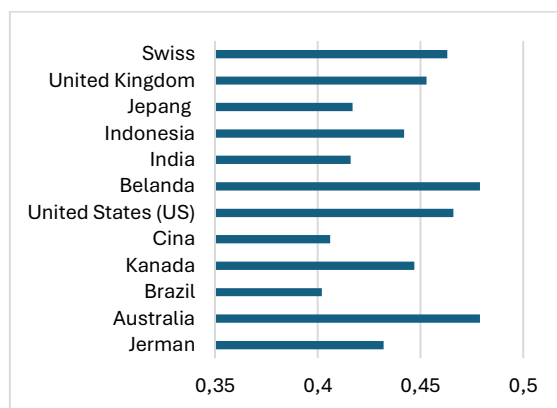
According to IAI (2022), financial statements are reports that methodically outline an entity's performance and financial status in order to help stakeholders make financial decisions. In addition to being a source of financial information, these reports also serve as a transparency tool to maintain trust with stakeholders and demonstrate management's accountability to investors regarding the proper management of the resources entrusted to them. Thus, financial statements are not only used as reference information for economic decision-making but also as a crucial instrument in ensuring accountability, transparency, and stakeholder trust in management's performance and resource management.

The income statement is a crucial financial report because it reflects a company's performance and serves as an indicator of operational success, making it a crucial tool for performance evaluation. The final results of this report serve as a benchmark for the success or failure of a business entity's management. The accuracy of income statements is crucial for stakeholders in making economic decisions. However, management may manipulate income statements for their own benefit, which could hurt creditors, investors, and other stakeholders (Lestari & Wulandari, 2019). This indicates a conflict of interest between stakeholders and management, requiring a dedication to accountability and openness that considers social and environmental factors in addition to financial gain.

According to the 2020 Report to the Nations by (ACFE, 2020), Indonesia had the highest number of fraud cases in the Asia Pacific region, with 36 cases, followed by China with 33 cases, Australia with 29 cases, and so on. Furthermore, the top three industrial sectors committing fraud were the banking and financial services sector (386 cases), the government and administration sector (195 cases), and the manufacturing sector (185 cases). However, the manufacturing sector experienced the largest losses, reaching \$198,000, compared to the banking sector (100,000) and the government and administration sector (100,000), where losses were mostly caused by financial statement fraud (Association of Certified Fraud Examiners, 2020). This indicates that fraud has a significant impact on corporate finances, one of which is earnings management. These findings underscore the importance of corporate oversight of earnings management practices, particularly in the manufacturing sector, which is prone to financial reporting irregularities.

In addition to financial statement fraud cases, research conducted by (Mazzioni & Klann, 2018) found that Indonesia is one of the countries that is still not optimal in producing quality accounting information. Furthermore, the Indonesia E-Government Ranking (PEGI)

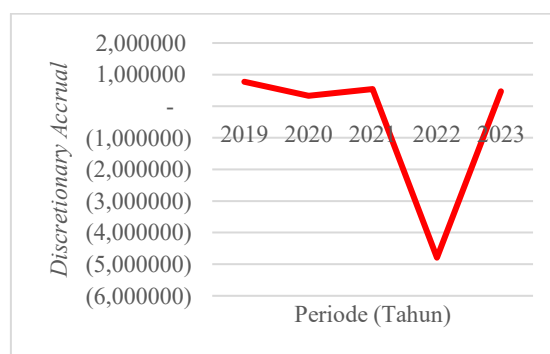
assessment found that Indonesia received an inadequate assessment of 71.42% for the quality of accounting information, and 19.04% for providing useful information. Therefore, representing 21 municipalities in West Java, Indonesia is categorized as suboptimal (weak) in terms of the quality of its earnings. This indicates that earnings quality in Indonesia is still suboptimal. The current state of accounting information presentation in Indonesia indicates that the resulting financial reports may contain elements of fraud. The following data shows the average ranking of accounting information quality:



Source: Mazzioni & Klann, 2018

Figure 1. Average Accounting Information Quality Rating

Financial reporting transparency in Indonesia continues to face significant challenges. Based on the data presented in Figure 1.1, Indonesia ranks last among the 12 countries evaluated in the market score assessment, achieving a transparency score of 33.6%. This finding highlights the need for continued improvements in the quality and disclosure of financial information. Financial statements that fail to present information faithfully may not satisfy the qualitative characteristics required by the accounting conceptual framework, thereby diminishing their relevance and reliability for users. Such conditions can adversely affect earnings quality and potentially mislead stakeholders in making economic decisions. Moreover, alongside cases of financial misstatement and inadequate disclosure practices, evidence of earnings management has been observed in companies such as PT Kimia Farma Tbk (KAEF), as depicted in the following graph:



Source: PT Kimia Farma Tbk, 2025

Figure 2. Discretionary Accrual Graph of PT Kimia Farma Tbk

Figure 1.2 illustrates a marked decrease in the discretionary accrual value of PT Kimia Farma Tbk (KAEF) during 2022, declining from 0.539996 in the previous period to -4.792471. Such a significant fluctuation may serve as an indication of earnings management activities and highlights the potential occurrence of these practices among manufacturing companies in

Indonesia. According to Yannizar et al. (2020), earnings management practices frequently persist across multiple accounting periods, implying that they are not merely incidental actions but rather deliberate and sustained efforts undertaken by management to attain specific objectives.

Alongside the problems of financial statement fraud, weak reporting transparency, and the occurrence of earnings management in manufacturing firms, attention has also been drawn to the management of hazardous and toxic waste (B3). In many cases, ineffective waste handling can create environmental degradation and health risks for nearby communities. The effects are not only felt in the present but may also continue over time. The condition of B3 waste management during the 2020–2022 period is illustrated in the data presented below.

Table 1. Hazardous Waste Management

Sector	Amount of B3 Waste (tons)		
	2020	2021	2022
Manufacturing	15.868.574	21.266.539	38.663.883
Agroindustry	2.901.881	3.654.645	3.498.959
Mining, Energy & Oil and Gas	310.657.793	54.093.048	60.133.158
Infrastructure	203.520	245.259	260.430
Service	8.072.500	5.851.762	5.732.465
Health Service Facilities	396.979	107.826	726.817

Source: Badan Pusat Statistik, 2023

According to the data presented in Table 1, manufacturing firms are among the largest contributors to hazardous and toxic waste in Indonesia, occupying the second position after the mining, energy, and oil and gas sectors. The environmental issues arising from industrial waste have triggered numerous public complaints, leading KLHK to halt the operations of several companies. To minimize environmental damage and ensure ecosystem preservation, the government has implemented a number of legal provisions related to corporate environmental responsibility. These regulations require companies whose activities involve natural resources to participate in social and environmental stewardship. To monitor corporate compliance, KLHK developed the PROPER program, which evaluates and rates companies based on their environmental performance and sustainability efforts.

Profitability is a benchmark for estimating earnings management. This ratio serves to evaluate a company's profit-making ability. Companies with high profitability may seek to maintain their reputation by reporting stable performance, while companies with low profitability may attempt to increase profits to attract investors. Research by Hardirmaningrum et al. (2021) and Pratika & Nurhayati (2022) showed that ROA, used to measure profitability, has a positive and significant effect on earnings management. However, research by Hardiyanti (2022) found ROA to have a negative and significant effect on earnings management. Furthermore, Afrizal & Wahyudi (2020) Aldona & Listari (2020), Sari & Khafid (2020), and Sihombing et al. (2020) found that profitability, as proxied by ROA, had no effect on earnings management.

Furthermore, leverage is another instrument used to indicate earnings management by a business entity. Leverage serves as an indicator of a firm's ability to settle its financial obligations to lenders. It considers both current and long-term debts and provides insight into whether the company would be able to cover these obligations if its assets were liquidated (Kasmir, 2019). Increasing leverage also increases the risk a company faces in meeting its debts, which can impact financial stability and the potential for financial statement manipulation to achieve specific goals (Afrizal & Wahyudi, 2020). According to studies by Ayudia & Hapsari (2021), Sari & Khafid (2020), and Yannizar et al. (2020), the debt-to-equity ratio (DER), which is used to measure leverage, has a substantial and detrimental impact on

earnings management. However, DER had little impact on earnings management, according to Afrizal & Wahyudi (2020) and Juita (2020) found that DER had no effect on earnings management.

In today's modern economic era, many scientists have raised various environmental issues. Growing awareness of global environmental issues has led to a demand for companies to not only disclose compliance indexes but also adopt accounting approaches to measure their direct and indirect impacts on the environment. The increasing impact of a company's production activities on environmental issues has made accounting a crucial role in environmental conservation (e.g., waste costs and emission reduction costs). The economic term associated with environmental management is green accounting. Green accounting is an accounting system that integrates environmental costs, producing social, environmental, financial, and accounting information that can be used as a decision-making tool for economic and non-economic management (Lako, 2018). By implementing green accounting, companies can assess how their operational activities impact the environment, increase operational effectiveness, improve public perception of the company, and reduce costs. Research by Sinuhaji et al. (2026) found that green accounting negatively impacted earnings management. Meanwhile, according to Azizah & Fujianti (2024), green accounting had no impact on earnings management either before or after the COVID-19 pandemic.

Due to the inconsistencies related to the results of previous studies, namely Aldona & Listari (2020), Ayudia & Hapsari (2021), Azizah & Fujianti (2024), Hardirmaningrum et al. (2021), Hardiyanti (2022), Juita (2020), Pratika & Nurhayati (2022), Sari & Khafid (2020). In addition, the novelty of this study compared to previous relevant studies lies in the research period, namely 2019-2023, for research with the same topic and variables has not been studied before. Thus, researchers are motivated to examine determinants such as profitability, leverage, and green accounting on earnings management in manufacturing companies in Indonesia. Therefore, this research is entitled "The Effect of Profitability, Leverage, and Green Accounting on Profit Management in Manufacturing Companies in Indonesia".

LITERATURE REVIEW

Definition of Green Accounting

Agency Theory

The researcher employed agency theory in this theoretical investigation. Agency theory is a design that describes the contentual connection between a principle and an agent, specifically between two or more individuals, a group, or an organization (Meckling & Jensen, 1976). The principle is the person who assigns responsibility to another party and has the authority to make choices on the company's destiny. Adiwibowo (2018) explains, that agency theory is based on the assumption that both principals and agents seek to maximize their respective interests. This divergence of interests can create agency conflicts, particularly when management has incentives to select accounting methods that present a more favorable picture of corporate performance in order to secure compensation or performance-based rewards from the principal. From the perspective of agency theory, the delegation of managerial responsibilities from principals to agents does not always guarantee alignment of interests. Since each party tends to pursue its own goals, potential conflicts can arise. In certain situations, managers may be encouraged to present financial performance in a more favorable manner through the selection of specific accounting practices, particularly when such outcomes are linked to bonuses or other personal incentives.

Triple Bottom Line Theory

The triple bottom line was formulated by Elkington et al. (2004), which essentially emphasizes that corporations or business entities have three basic pillars: the planet, society or

stakeholders (people), and profit. Previous empirical studies by Sinuhaji et al. (2026) and Azizah & Fujianti (2024) demonstrate that green accounting practices contribute to limiting earnings management behavior. Their results reveal a significant negative relationship between earnings management and green accounting indicators, including environmental management costs, product recycling expenditures, and environmental research and development investments. This means that a higher green accounting score reduces the likelihood of a company practicing earnings management.

Earnings Management

Earnings management, according to Scott (2015), is a manager's decision regarding accounting policies or activities that can impact earnings in order to accomplish particular goals in earnings reporting. According to Hasriani et al. (2021), earnings management is an action when managers use judgment in financial statements and transaction preparation to alter financial statements, to provide a false picture of the company's financial condition by manipulating the amount of profit generated, referred to as earnings management. As stated by Izzati et al. (2024), earnings management can be understood as a practice whereby managers intentionally affect the presentation of accounting information to create a certain impression of the firm's performance and financial position among stakeholders. Therefore, earnings management may be viewed as the deliberate use of accounting choices and transaction structuring to influence reported earnings in pursuit of specific managerial goals.. In conclusion, earnings management is a managerial action in determining accounting policies or structuring transactions to influence financial statements for specific purposes.

Profitability

Profitability is commonly defined as a measure of a firm's capability to generate returns from its operational activities, assets, and shareholders' equity (Aldona & Listari, 2020). As a key financial performance indicator, profitability reflects the efficiency with which management converts available resources into earnings. Syafiqoh & Rochmatullah (2024) further explain that profitability ratios are designed to evaluate a company's ability to produce profits at particular levels of sales, assets, and capital. Consequently, these ratios play a crucial role in financial analysis by providing insights into both organizational performance and management effectiveness in achieving sustainable profitability.

Leverage

The leverage ratio is a ratio used to calculate a business entity's ability to meet its total obligations and the extent to which its resources are financed by liabilities or debt (Hardiyanti, 2022). A high leverage ratio increases the risk of default for the business entity but creates opportunities for significant profits. Conversely, a low leverage ratio lowers the risk but also reduces the opportunity for profit. Therefore, management's role in managing this ratio is crucial in addressing the risks posed by decisions.

Green Accounting

Lako (2018) states, that green accounting refers to accounting procedures that combine summarization, recording, recognition, measurement, and reporting of environmental, social, and financial information. Ikhsan (2008) explains, that green accounting represents the application of accounting principles that accommodate environmental costs, thereby enabling companies and government institutions to account for the environmental impacts of their activities. Environmental costs refer to the financial and non-financial consequences associated with actions that impact environmental quality. Green accounting is not solely oriented toward

corporate profits but also applies concepts that refer to accounting methods that take into account economic and environmental impacts.

Research Hypothesis

1. Profitability and Earnings Management

Empirical evidence shows that the higher a business entity's profitability, the greater its potential for earnings management. This is demonstrated in research by Hardirmaningrum et al. (2021) and Pratika & Nurhayati (2022), which found that Return on Assets (ROA) has a positive effect on earnings management. From an agency theory perspective, management, as agents, naturally wants to meet the expectations of their principals, so they are sometimes motivated to manage financial statements to make them appear better. Under certain conditions, the pressure to maintain high profitability can encourage more aggressive earnings management practices, particularly when facing economic uncertainty or industry competition.

H1: Profitability has a significant positive effect on earnings management.

2. Leverage and Earnings Management

The higher the leverage level, the greater the risk a business entity faces in fulfilling its obligations. This can impact financial stability and the potential for financial reporting manipulation to achieve specific goals. Research by Ayudia & Hapsari (2021), Sari & Khafid (2020), and Yannizar et al. (2020) suggests that leverage has a significant negative effect on earnings management. Based on agency theory, principals (investors and creditors) and company management, acting as agents, are motivated to reduce leverage by manipulating earnings to fulfill debt covenants and avoid pressure from creditors. Therefore, strict creditor oversight can reduce earnings management in highly leveraged businesses.

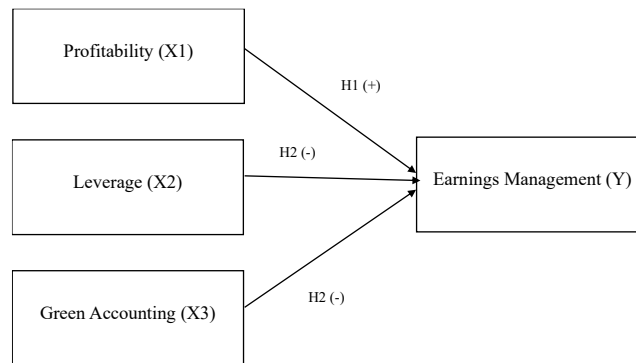
H2: Leverage has a significant negative effect on earnings management.

3. Green Accounting and Earnings Management

Based on research by Sinuhaji et al. (2026), green accounting as measured by product recycling costs, environmental costs, and environmental research and development costs, has a negative impact on earnings management. This means that a higher green accounting score reduces the likelihood of a company practicing earnings management. Based on the triple bottom line theory developed by Elkington et al. (2004), transparency in cost recording can restrict a company's ability to engage in earnings management (profit). Allocating resources to sustainability increases operational costs, which in the short term can reduce profits and limit the flexibility of financial reporting (planet). Environmental transparency may be appreciated by sustainability-conscious investors, but for companies focused on short-term profits, it can reduce the attractiveness of financial reports (people). Overall, although green accounting supports sustainability, in the short term, its implementation can depress profits and limit earnings management practices.

H3: Green accounting negatively impacts earnings management.

Thus, the framework of this research is:



Source: Processed by researchers, 2025

Figure 3. Thinking Framework

METHODOLOGY

In this study, a quantitative research design was employed. Purposive sampling was used to choose the study sample according to predefined standards. The Ministry of Environment and Forestry's PROPER performance evaluations for the 2019–2023 observation period and the yearly financial reports of industrial businesses listed on the Indonesia Stock Exchange were the sources of secondary data. The following criteria were used to include the sample:

1. Manufacturing companies listed on the Indonesia Stock Exchange for the 2019-2023 period.
2. Companies implementing green accounting and indexed by PROPER for the 2019-2023 period.
3. Companies that submitted annual reports for the 2019-2023 period using Rupiah.
4. Companies with complete data on the research variables.

The sample in this study was selected using a purposive sampling method. The sample selection criteria and results include:

Table 2. Sampling Criteria

Discription	Total
Manufacturing firms continuously listed on the IDX between 2019 and 2023.	181
Criteria:	
Business entities that do not implement green accounting practices and are PROPER indexed for the 2019-2023 period.	(133)
Business entities that do not report annual reports for the 2019-2023 period using the rupiah currency.	(12)
Business entities that have detailed data relating to research variables	(2)
Number of research institutions	34
Year of research	5
Amount of research data	170
Outlier data	(19)
Number of research samples	151

Source: Processed data, 2025

Measurement of Dependent Variable (Y) Profit Management

Earnings management, according to Hasriani et al. (2021), is the practice of managers manipulating financial reports and arranging certain transactions throughout the reporting process in order to depict a company's financial status that does not accurately reflect the circumstances. The modified Jones model was used in this study to assess earnings

management. The modified Jones model measurement in this study refers to research conducted by Azizah & Fujianti (2024). The modified Jones model formula is as follows:

1. Calculating total accruals, the formula is::

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

2. Calculate total accruals with multiple linear regression, the formula is:

$$\frac{Tait}{Ait} = \beta_1 \frac{1}{A_{it}} + \beta_2 \frac{\Delta Rev_{it}}{(A_{it} - 1)} + \beta_3 \frac{PPE_{it}}{(A_{it} - 1)}$$

3. Calculate the value of nondiscretionary accruals using the equation:

$$DA_{it} = \beta_1 \frac{1}{A_{it-1}} + \beta_2 \left(\frac{\Delta Rev_{it}}{A_{it-1}} - \frac{\Delta Rec_{it}}{A_{it-1}} \right) + \beta_3 \frac{PPE_{it}}{(A_{it} - 1)}$$

4. Calculate the value of discretionary accrual with the equation:

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

Description:

DA_{it}	= Discretionary accruals of business entity i in year t	ΔRev_{it}	= Revenue of business entity i in year t minus revenue of business entity i in the previous year
NDA_{it}	= Non-discretionary accruals of business entity i in year t	PPE_{it}	= Land, Buildings and Equipment of business entity i in year t
TA_{it}	= Total accruals of business entity i in year t	ΔRec_{it}	= <i>Receivable</i> badan usaha i pada tahun t dikurangi piutang badan usaha i tahun sebelumnya
NI_{it}	= Net profit of business entity i in year t		
CFO_{it}	= Operating cash flow of business entity i in period t		
A_{it-1}	= Total assets of business entity i in period t-1		

Independent Variable

Profitability

Profitability is a ratio used to calculate the level of return compared to sales, assets, and equity held by a business entity (Aldona & Listari, 2020). In this study, profitability is measured using Return on Assets (ROA). ROA is the ratio of shares owned by an institution divided by total shares outstanding. The formula for calculating ROA is (Kasmir, 2019):

$$(ROA) = \frac{\text{Earning after Interest and Tax}}{\text{Total Assets}}$$

Leverage

Hardiyanti (2022) explains that, leverage is a financial metric designed to evaluate an organization's solvency and to reflect the extent to which its assets and operations rely on debt as a source of financing. Leverage in this study is measured using the Debt to Equity Ratio (DER). The formula for calculating DER is (Kasmir, 2019):

$$DER = \frac{\text{Total Debt}}{\text{Total Equity}}$$

Green Accounting

Green accounting is an accounting procedure that combines summarization, recording, recognition, measurement, and reporting of environmental, social, and financial information (Lako, 2018). Green accounting is not merely focused on corporate profits but also applies concepts that refer to accounting methods that take into account economic and environmental impacts. In this study, green accounting is measured using environmental performance, namely by looking at the PROPER index from the Ministry of Environment and Forestry, which is assessed with the following scores:

Data Analysis Techniques

This analysis was conducted using statistical methods. The research findings were then analyzed using descriptive statistics, followed by classical assumption testing, which included normality, multicollinearity, heteroscedasticity, and autocorrelation. The next step is multiple linear regression testing using SPSS because it can facilitate the process of quantitative data types quickly, accurately, and comprehensively without having to use a programming language (Karunia, 2025). The multiple linear regression analysis calculations in this study were assisted by SPSS software. The following is the equation formula for multiple linear regression:

$$Y = \alpha + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Description:

Y : Earnings Management

α : Constant

$b_1b_2b_3$: Regression Coefficient

X1 : Profitability

X2 : Leverage

X3 : Green Accounting

e : Error

RESULTS AND DISCUSSION

Descriptive Statistical Analysis

Table 3. Descriptive Statistical Analysis

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
Profitabilitas (X1)	151	-0,20	0,37	0,0751	0,08175
Leverage (X2)	151	0,01	0,19	0,2845	0,25554
Green Accounting (X3)	151	2,00	4,00	0,9801	0,29372
Earnings Management (Y)	151	-1,44	1,32	-0,1109	0,60546
Valid N (listwise)	151				

Source: This data was processed with SPSS, 2025

Information:

- Return on Assets (ROA), a measure of profitability (X1), ranges from a minimum of -0.20 to a high of 0.37. Variable X1 has an average value of 0,0751 and a standard deviation of 0,08175.
- The Debt to Equity Ratio (DER), which represents Variable X2 (Leverage), ranges from a minimum of 0.01 to a high of 1.19. Variable X2 has an average of 0.2845 and a standard deviation of 0.25554.
- Environmental Performance, which represents Variable X3 (Green Accounting), has a minimum value of 2,00 and a maximum value of 4,00. Variable X3 (Green Accounting) has an average value of 2,9801 and a standard deviation of 0.29372.
- The minimum and maximum values of Variable Y (Earnings Management) are -1,44 and 1,32, respectively. Variable X1 has an average value of -0,1109 and a standard deviation of 0,60546.

Classical Assumption Test

Normality Test

Table 4. Normality Test Results

	Unstandarized Residual	Description
N	151	
Asymp. Sig.	0,860	normal data

Source: This data was processed with SPSS, 2025

The Kormogolov Smirnov method's normalcy test yielded an Asymp. Sig. (2-tailed) value of 0,860, indicating that the value was more than 0,050. Thus, it may be said that the study's data was regularly distributed and can proceed to the next phase.

Multicollinearity Test

Table 5. *Multicollinearity Test Results*

	Collinearity Statistics		Description
	Tolerance	VIF	
X1	0,923	1,083	absence of signs of multicollinearity
X2	0,953	1,050	absence of signs of multicollinearity
X3	0,951	1,051	absence of signs of multicollinearity

Source: This data was processed with SPSS, 2025

As reported in Table 7, the multicollinearity assessment indicates that each independent variable satisfies the tolerance criterion, with values exceeding 0.10. The tolerance values for profitability (X1), leverage (X2), and green accounting (X3) are 0.923, 0.953, and 0.951, respectively. In addition, the corresponding VIF values are 1.083, 1.050, and 1.051, all of which are substantially below the recommended threshold of 10. These results confirm that the independent variables do not exhibit problematic intercorrelations and that the regression model is not affected by multicollinearity.

Heteroscedasticity Test

Table 6. *Heteroscedasticity Test Results (Park Test)*

	Sig.	Description
X1	0,641	no signs of heteroscedasticity
X2	0,254	no signs of heteroscedasticity
X3	0,242	no signs of heteroscedasticity

Source: This data was processed with SPSS, 2025

Variable X1 (Profitability) with a magnitude of 0,641, the Sig. value of variable X2 (Leverage) with a magnitude of 0,254, and the Sig. value of variable X3 (Green accounting) with a magnitude of 0,242, which means the Sig. value of the three independent variables exceeds the value of 0,05. Therefore, it can be concluded that the data is free from heteroscedasticity symptoms.

Autocorrelation Test

Table 7. *Autocorrelation Test Results*

Dw	1,829
Du	1,7747
4-du	2,2253
Description	no autocorrelation symptom

Source: This data was processed with SPSS, 2025

Based on the results of the autocorrelation test after being corrected with Chocharane Orcutt in Table 10, it produces a score of 1,829 where in the Durbin-Watson assessment criteria, namely the Durbin Watson score must be above the du score (1,7747) and below the 4-du score (2,2253), it can be stated that the Durbin Watson score does not show symptoms of autocorrelation and can be continued for multiple linear regression.

Hypothesis Testing

Table 8. *t-Test*

Variable	β	T	Sig.	Description
Constanta	-0,271	-0,790	0,431	-
X1	0,935	2,220	0,028	Significant positive effect (H1 is supported)

Variable	β	T	Sig.	Description
X2	-1,108	-12,764	0,000	Significant negative effect (H2 supported)
X3	0,136	1,168	0,245	Positive but not significant effect (H3 not supported)

Source: This data was processed with SPSS, 2025

The adjusted R square is 0.541, or 54.1%, based on the determination coefficient test results in Table 13. This indicates that the variables of profitability, leverage, and green accounting in Indonesian manufacturing companies for the 2019–2023 period can explain earnings management by 54.1%, while other independent variables outside of this research model have an impact on the 45.9% difference.

RESULTS AND DISCUSSION

The Effect of Profitability on Earnings Management

Return on Assets (ROA) serves as the proxy for profitability and reflects a firm's capacity to generate profits from its assets, sales activities, and equity base. The empirical findings indicate that the profitability variable has a p-value of 0.028, which is below the 5% significance level, along with a positive coefficient of 0.935. These results demonstrate that profitability positively and significantly influences earnings management behavior. Consequently, Hypothesis 1 is accepted.

This result supports the findings of Pratika & Nurhayati (2022) and Hardirmaningrum et al. (2021) which demonstrate that profitability (ROA) significantly and positively affects earnings management practices. The ROA ratio indicates the results or earnings of the total assets utilized by the business entity and can be used as a reflection of management's effectiveness in managing its investments. From an agency theory perspective, managers, as agents, naturally want to meet the expectations of their principals, so they are sometimes motivated to manipulate financial statements to make them appear better. Under certain conditions, pressure to maintain high profitability can encourage more aggressive earnings management practices, particularly when businesses face economic uncertainty and intense industry competition.

The empirical evidence obtained in this study contradicts the results of Hardiyanti, (2022), who demonstrated that an increase in ROA is associated with a significant reduction in earnings management. This means that business entities with high profitability (ROA) tend to manipulate earnings less because they typically focus more on healthy operational performance than earnings management. They generally experience less pressure to increase earnings, as their financial performance is already strong enough to attract investors and maintain market confidence. Furthermore, this research differs from research by Afrizal & Wahyudi (2020), Aldona & Listari (2020), Sari & Khafid (2020), and Sihombing et al. (2020), which found that profitability (ROA) had no impact on earnings management. ROA, although significantly related, has no impact on earnings management practices. This means that whether a business entity has high or low profits does not influence whether or not it engages in earnings management.

The Effect of Leverage on Earnings Management

Leverage, calculated using the Debt-to-Equity Ratio (DER), is used by businesses to determine the extent of their equity as collateral for debt. Research results confirm that the leverage variable, proxied by the DER, has a significance score of 0.000. This score is less than 0.050, indicating a negative relationship of -1.108. It can be concluded that profitability has a significant negative effect on earnings management, thus supporting Hypothesis 2.

Similar research conducted by Ayudia & Hapsari (2021), Sari & Khafid (2020), Yannizar et al. (2020) found that leverage has a significant negative effect on earnings management. As the leverage ratio increases, the risk faced by businesses in servicing their debts also increases. This can impact financial stability and the potential for financial statement manipulation to achieve specific goals. Based on agency theory, principals (investors and creditors) and company management, acting as agents, are motivated to reduce leverage to manipulate earnings to meet debt covenants and avoid pressure from creditors. Therefore, strict creditor oversight and pressure to maintain compliance with debt covenants can discourage earnings management in highly leveraged business entities.

The findings of Afrizal & Wahyudi (2020) and Juita (2020) that leverage (DER) had no effect on earnings management are at odds with this study. This suggests that leverage levels are not a reliable indicator of earnings management. Although leverage can reflect a company's level of financial distress, the research findings indicate that business entities with both high and low debt ratios do not consistently engage in earnings management practices.

The Effect of Green Accounting on Earnings Management

Environmental Performance was used as a stand-in for green accounting using the PROPER index. The variable has a significance level of 0.245, which is higher than the recognized significance requirement of 0.05, according to the empirical findings. Although the impact is statistically insignificant, the positive coefficient of 0.136 indicates a favorable link. Thus, Hypothesis 3 is not supported and green accounting has no discernible impact on earnings management.

This study supports Azizah & Fujianti (2024) findings that green accounting has no discernible impact on earnings management. This suggests that a company's propensity to engage in earnings management is unaffected by its level of green accounting. This suggests that a company's decision to participate in earnings management is influenced by additional considerations. In contrast to the current study's findings, (Sinuhaji et al., 2026) discovered a statistically significant negative correlation between green accounting and earnings management, indicating that increased environmental responsibility may lessen profits management practices. Therefore, a corporation is less likely to engage in earnings management if it has a higher green accounting score. While green accounting promotes sustainability, its use may constrain earnings management and lower profits in the near run. Conversely, organizations that have a strong commitment to social responsibility benefit the organization, as seen by the rise in the company's worth (Diningsih & Karunia, 2025).

CONCLUSION AND RECOMMENDATIONS

The purpose of this study is to ascertain how profitability, leverage, and green accounting affect profits management in Indonesian manufacturing firms that are listed between 2019 and 2023 on the Indonesia Stock Exchange. Multiple linear regression is the information analysis method employed in this investigation. The research's findings allow for the following conclusions to be made:

1. Profitability (ROA) has a significant positive impact on earnings management. ROA is used to assess a business entity's ability to generate profits at specific levels of revenue, assets, and equity. The research test results show that profitability (ROA) has a significance score of 0,028. This score is lower than 0,050, which indicates a positive correlation of 0,935.

2. Leverage (DER) has a significant negative impact on earnings management. DER is used by businesses to determine how much equity is used as debt collateral. The research test results show that the leverage variable, proxied by DER, has a significance score of 0,000. This score is lower than 0,050, which indicates a negative correlation of -1,108.
3. Green Accounting, as proxied by Environmental Performance (PROPER), has no impact on earnings management. Based on the research test results, it can be confirmed that green accounting, as proxied by Environmental Performance (PROPER Index), has a significance score of 0,245. This score is greater than 0,050, and the direction of the relationship is positive at 0,136.

Based on the above conclusions, the following suggestions are provided:

1. The researcher recommends that further research be conducted beyond manufacturing companies and utilize projections from variables other than those already studied.
2. Businesses should pay attention to Return on Assets (ROA) and Debt to Equity (DER) as indicators of a business entity's performance to prevent earnings management practices and ensure they reflect the true situation, enabling stakeholders to make informed decisions for business sustainability.
3. Investors should consider calculations from financial statements and predictive models of earnings management practices to help them make informed decisions about investing in a company.

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