“Do CEO duality and firm size influence earnings management practices? Evidence from Indonesian manufacturing listed firms”

AUTHORS	Daniel Jonathan Lindrianasari

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Daniel Jonathan (Indonesia), **Lindrianasari** (Indonesia)

DO CEO DUALITY AND FIRM SIZE INFLUENCE EARNINGS MANAGEMENT PRACTICES? EVIDENCE FROM INDONESIAN MANUFACTURING LISTED FIRMS

Abstract

This study provides empirical evidence on the influence of the corporate governance structure and firm characteristics on earnings management practices within Indonesia's manufacturing sector. Specifically, it examines whether firms with family-linked CEO duality and varying firm sizes influence the level of discretionary accruals in financial reporting. Adopting agency theory and positive accounting theory, the study explores how internal governance alignment and organizational scale relate to managers' earnings management practices. Using a quantitative research approach, the study analyzes 840 firm-year observations from 140 listed manufacturing companies on the Indonesia Stock Exchange (IDX) for the period 2018–2023, selected based on data completeness and analyzed using panel data regression. The manufacturing sector is chosen due to its economic significance and vulnerability to earnings management in emerging markets such as Indonesia. The findings reveal that CEO duality, defined as a familial relationship between the board of directors and commissioners, significantly reduces earnings management practices, suggesting improved internal monitoring and interest alignment. In contrast, larger-sized firms are associated with higher levels of earnings management, possibly due to greater financial complexity and performance pressure. Other governance mechanisms and financial indicators, such as board size, audit committee independence, and leverage, are included as control variables. Overall, the results suggest that targeted governance structures and firm attributes play a crucial role in shaping financial reporting quality, offering practical implications for investors, regulators, and corporate policymakers concerned with earnings transparency.

Keywords earnings management, corporate governance mechanism, CEO duality, firm size, leverage, manufacturing sector

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Daniel Jonathan, Master's Degree Student, Department of Accounting, School of Accounting – Master of Accounting, Bina Nusantara University, Indonesia. (Corresponding author)

Lindrianasari, Professor, Department of Accounting, School of Accounting – Master of Accounting, Bina Nusantara University, Indonesia.

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INTRODUCTION

Financial reporting is a fundamental mechanism for ensuring transparency and accountability in corporate decision-making; it also serves as a key tool for stakeholders to evaluate firm performance, maintain company value for its shareholders, and support a company's sustainability (Golochalova, 2019; Hall, 2024; Haraguchi et al., 2017; Venugopal et al., 2018). However, managers are frequently pushed to falsify accounting data to make the company's financial statement look better due to the evolving or fluctuating changes in the market and the tougher competition against competitors (Lopes, 2018). The existence of these actions is often referred to as earnings management.

Earnings management happens when managers misuse their discretion to influence transactions in the financial accounts, which is done to deceive stakeholders about the company's true performance or to influence contractual outcomes that are based on the information that

is disclosed (Nguyen et al., 2024; Healy & Wahlen, 1999). Although it is not classified as fraud but rather the implementation of flexibility in accounting standards using accrual, such practices have diminished investor confidence in the reliability of accounting information and raised questions regarding the governance effectiveness (Cho & Chung, 2022; Lazzem & Jilani, 2018).

Earnings management is one of the concerns in emerging markets, particularly in developing countries such as Indonesia, specifically in the manufacturing sector. This happens since manufacturing companies are one of the industrial sectors that play an important role in driving the economy in most developing countries (Attiah, 2019; Elahinia et al., 2019; Haraguchi et al., 2017). Based on the World Bank in 2022, the manufacturing sector has contributed 16% of the total global Gross Domestic Product (GDP), which makes it the second largest after the service sector. This shows a significant contribution of the manufacturing sector to the global economy (World Bank, 2023). At the same time, according to the Institute for Economic and Social Research in the University of Indonesia, the manufacturing industry remained the largest contributor to Indonesia's GDP in 2023, accounting for 19%, exceeding the contribution of other sectors. Earnings management undermines the quality and reliability of the data in financial statements of that sector, which could cause other possible risks for the development of companies in the future (Le et al., 2021).

Earnings management in this study focuses on two determinants: CEO duality as a part of the governance mechanism and firm size. CEO duality refers to a situation in which an individual serves as both the CEO (board of directors) and the board of commissioners (Firdiansjah et al., 2020). While many countries have started to adopt the CEO separation, such as Indonesia, which includes the use of a two-board structure that separates the functions between the board of directors and the board of commissioners. According to the structure, the uniqueness of CEO duality in Indonesia can be measured based on the listed companies that have a family relationship between members of the board of directors and the board of commissioners. Moreover, the context of such a CEO duality in Indonesia remains underexplored regarding the influence on earnings management practices. Regarding firm size, it relates to the scale of a company and is associated with a company having a better internal control mechanism and audit quality than companies with a smaller scale to minimize earnings management (El Deeb & Ramadan, 2020). Conversely, Gozali et al. (2021) stated that larger firms engage in earnings management practices to meet the expectations of investors and shareholders. It happens because larger firms typically possess more resources, complex operations, and greater visibility in capital markets, which may both enable and constrain earnings management depending on context.

The objective of this study is to provide empirical evidence regarding the effect of CEO duality and firm size on earnings management practices by managers on manufacturing sector companies in Indonesia from the period 2018–2023. The research gap from previous studies is that there is an inconsistency of results regarding every variable related to earnings management and whether the act of earnings management could really provide an actual performance of the company, or just a managerial discretionary tool to improve the perception of investors and other stakeholders.

1. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Earnings management has emerged as a crucial area of study in financial research due to its effects on investor confidence, market openness, accuracy, and the reliability of financial reporting. Knowing the factors that influence earnings management is becoming more and more important as business structures get more complex and regulatory oversight becomes more stringent. To investigate how one of the governance mechanisms and firm-specific features impact managerial decisions about earnings management, this literature review is based on agency theory and positive accounting theory.

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Agency theory explains the relationship between a principal (owner) and an agent (management) to carry out specific duties or responsibilities on the principal's behalf. This authority, given by the principal, usually leads to agency conflicts where agents may act in their own interest (Jensen & Meckling, 1976). This theory suggests that an agency problem will always exist because of a conflict of interest between the principal and the agent. Agency theory also recognizes that individuals such as managers will always act opportunistically, including managing income to increase their wealth (Boachie & Mensah, 2022). According to Man (2019), management seeks to influence corporate earnings (earnings management) for a few reasons, including maximizing their own compensation, avoiding violations of debt covenants, and avoiding political cost. However, shareholders (principals) tend to want their interests to be met, which includes aiming for the highest possible profits through rising share prices and consistent dividend payments. From that conflict of interest, there is a tendency that management to try to do earnings management as an alternative to provide good financial performance to show shareholders that they are performing well and want to receive large management bonuses, while the actual financial performance is not like that (Yimenu & Surur, 2019). One of the methods that is often used by management is accrual earnings management. Managers use accrual earnings management strategies to maximize a company's performance and strive to influence stakeholders' perceptions, which are based on financial reports, which are the main assessment tool used by stakeholders to assess a company's success (Al-Shouha et al., 2024).

Another theory related to earnings management is the positive accounting theory, which was first introduced by Watts and Zimmerman. This theory aims to forecast and explain how accounting procedures are implemented in practice (Patty et al., 2021). According to Watts and Zimmerman (1990), there are three hypotheses related to this positive accounting theory, namely, bonus plans, debt covenants, and political cost. According to Saksessia and Firmansyah (2020), the bonus plan hypothesis tends to encourage management to implement earnings management to meet predetermined profit benchmarks, since the bonus awarded to them is based on the target. According to the debt covenants hypothesis, businesses that borrow money for riskier initiatives must abide by specific requirements which often related to future profitability to maintain the financing. This case will incentivize managers to act opportunistically by selecting accounting procedures that do not violate debt covenants (Lazzem & Jilani, 2018). For the political cost hypothesis, company management tends to report low earnings of the company to evade political scrutiny from the government and other parties (Jananto & Firmansyah, 2019). Other than that, companies often lower their profits or engage in earnings management to obtain government subsidies or lower taxes (Danysh-Hashemi, 2023).

There are some factors that are identified to be influencing earnings management, such as corporate governance mechanisms that consist of board size, audit committee independence, and CEO duality, along with firm size and leverage. However, the focus of this study is on the CEO duality and firm size. Then, there is a situation known as CEO duality that occurs when a member of the board of directors simultaneously serves as both the CEO (Chief Executive Officer) and a member of the board of commissioners (Alves, 2023). This board structure alludes to Indonesia's two-tier board structure and the separation of responsibilities between the board of directors and the board of commissioners. In a two-tier board structure, the board structure is divided into two tiers, with the board of commissioners as the supervisor of the board of directors, along with the board of directors, which acts as an executive (Astami et al., 2024). The CEO duality needs to be questioned to determine whether it would affect the performance and the quality of reporting of a company. Additionally, it is indispensable that the board of commissioners and the board of directors have distinct responsibilities, with the board of commissioners being responsible for overseeing the board of directors, while the board of directors (CEO) is responsible for strategic planning and policy decisions (Alhmood et al., 2020). However, the existence of CEO duality would undermine the board of commissioners' responsibilities to monitor and regulate the actions and performance of the board of directors, which would have an impact on the company's financial reporting and performance.

In this study, the CEO duality is adjusted with the condition of Indonesia, where the same person cannot serve in both capacities. The term "CEO duality" refers to the family relationship between members of the board of directors and the board of commissioners within the firms. According to Kitiwong et al. (2025), family control relationships within a company are frequently seen as their legacy, reputation, and social standing. This might be seen as an incentive for family members to uphold the company's reputation and the caliber of its goods and services. This is why CEO duality in the context of family relationships on the board of directors and board of commissioners is seen as less prone to earnings management practices aimed at protecting their legacy and continuing the business. The studies by Sehrawat et al. (2019) and Oussii and Klibi (2023) have shown a positive significant relationship between CEO duality and earnings management. Other than that, Alhmood et al. (2020) and Firdiansjah et al. (2020) have shown a significant negative relationship between CEO duality and earnings management.

The next factor is related to firm size. Firm size is one of the metrics that investors can use to evaluate the performance and assets of a company (Wulandari et al., 2022). The size of a firm could influence the action of earnings management since large-sized companies are able to establish better corporate governance mechanisms, more qualified internal auditors, and more effective internal control structures than small companies, which will lead to better quality of corporate financial disclosures (El Deeb & Ramadan, 2020). Through this mechanism, large companies are less likely to engage in earnings management. According to Prihartono (2018), there are two primary perspectives on the size of companies: Small businesses typically engage in more earnings management to gain more investors, while large businesses typically do earnings management to lower political expenses (political cost). Also, some large-sized companies are often involved in earnings management practices to fulfill the expectations of investors and shareholders (Ruwanti et al., 2019). Ghani et al. (2019) and Ruwanti et al. (2019) have shown a positive and significant relationship between firm size and earnings management, while El Deeb and Ramadan (2020) have shown a positive and insignificant relationship between both. On the other side, research by Hendra et al. (2018) and Gozali et al. (2021) has shown a negative significant relationship.

In conclusion, the literature presents conflicting results about the ways in which business characteristics and one of the key governance mechanisms affect earnings management, underscoring the need for more study, particularly in developing nations like Indonesia. This study aims to investigate the effect of CEO duality and company size on earnings management for manufacturing companies listed in Indonesia Stock Exchange. In line with the literature review and research objectives, the research hypotheses are formulated as follows:

H1: *CEO duality has a negative significant effect on earnings management.*

H2: *Firm size has a positive significant effect on earnings management.*

2. DATA AND METHODS

The study uses a quantitative approach to analyzing the data. The source of data used for this study is secondary data. The secondary data are data that are not directly taken from the underlying study source. Thus, the secondary data used in this study are panel data, which is a combination of cross-sectional data from manufacturing companies listed on the Indonesia Stock Exchange and time series data compiled from 2018 to 2023. The quantitative data used in this study were obtained from annual financial statements of companies listed in the manufacturing industry of Indonesia that were published on the website address (https://www.idx.co.id/), websites of each company, and Refinitiv data to which BINUS has subscribed.

In collecting research samples, researchers used a purposive sampling method. The purposive sampling method can be defined as a non-random sampling method where the researcher ensures illustrative quotations by determining a suitable special frame (Lenaini, 2021). The criteria are shown in Table 1. Other than that, researchers also use documentation techniques by collecting data about related companies through a compa-

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ny's own website, and also through the website. The dataset used in this study has been published through Zenodo and can be accessed through this repository link: https://doi.org/10.5281/zenodo.16539414.

In conducting data analysis and answering research problems, STATA 14 software was used to predict the relationship between independent and dependent variables (Table 2). The data in the study are panel data, which is a combination

Table 1. Sample selection

Sample Selection Process	Number of Samples
Manufacturing companies listed on the Indonesia Stock Exchange (IDX)	264
Manufacturing companies that do not publish their complete financial statements during the 2018-2023 period	(111)
Manufacturing companies that were sanctioned for stock trading between 2018-2023	(13)
Total Samples	140

Table 2. Measurement of variables

Variable	Calculation
Independent Variables	
CEO Duality (CD)	In its measurement, this CEO duality variable uses a dummy variable. In this case, a value of 1 is indicated when board of directors has a family relationship with the board of commissioners and a value of 0 when there is no board of directors has a family relationship with the board of commissioners.
Firm Size (FS)	Firm Size: Ln Total Asset
Control Variables	
Board Size (BS)	$Board\ Size = \frac{Number\ of\ Board\ of\ Commissioners}{Number\ of\ Board\ of\ Commissioners + Number\ of\ Board\ of\ Directors} \cdot 100\%$
Audit Committee Independence (ACI)	Audit Committee Independence: Number of Audit Committees
Leverage (LEV)	$Debt\ to\ Asset\ Ratio = \frac{Total\ Liabilities}{Total\ asset} \cdot 100\%$
Dependent Variable	
Earnings Management (EM) divided into four stages of calculations	4 stages of the modified Jones Model: Stage 1: 1. Calculating total accruals using the cash flow approach: $TA_{it} = NI_{it} - CFO_{it}$ Explanation: TAC_{it} – Total Accruals, NI_{it} – Net income, CFO_{it} – Cash Flow from Operations
	Stage 2 of the modified Jones Model: 2. Calculating the coefficients for β1, β2, and β3 from the regression on total accruals: $\frac{TAC_{it}}{TA_{it-1}} = \beta_1\left(\frac{1}{TA_{it-1}}\right) + \beta_2\left(\frac{\Delta REV_{it}}{TA_{it-1}}\right) + \beta_3\left(\frac{PPE_{it}}{TA_{it-1}}\right) + \varepsilon_{it}$ Explanation: TAC_{it} – (Total Accruals), TA_{it-1} – (Total Assets for the year before), ΔREV_{it} – Changes in Revenue, ΔREC_{it} – Changes in Receivable, PPE_{it} – Property, Plant and Equipment, ε_{it} – error term
	Stage 3 of the modified Jones Model: 3. Calculate non-discretionary accruals (NDA) with the equation: $NDTAC_{it} = \beta_1\left(\frac{1}{TA_{it-1}}\right) + \beta_2\left(\frac{\Delta REV_{it} - \Delta REC_{it}}{TA_{it-1}}\right) + \beta_3\left(\frac{PPE_{it}}{TA_{it-1}}\right) + \varepsilon_{it}$ Explanation: $NDTAC_{it}$ – Non-Discretionary Accruals, TA_{it-1} – Total Assets for the year before, β_1, β_2, β_3 – fitted coefficient from the regression, ΔREV_{it} – Changes in Revenue, ΔREC_{it} – Changes in Receivable, PPE_{it} – Property, Plant and Equipment, ε_{it} – error term
	Stage 4 of the modified Jones Model: Calculate discretionary accruals (DA) $DTAC_{it} = \left(TAC_{it} / TA_{it-1}\right) - NDTAC_{it}$ Explanation: $DATC_{it}$ – Discretionary Accruals

of cross-sectional data and time series data. This study uses a panel data regression model with the following equation:

$$EM_{it} = \alpha + \beta_1 CD_{it} + \beta_2 FS_{it} + \beta_3 BS_{it} + \beta_4 ACI_{it} + \beta_5 LEV_{it} + \varepsilon_{it}, \quad (1)$$

where *EM* – earnings management, α – constant, β – coefficient of regression, *BS* – board size, *ACI* – Audit Committee Independence, *CD* – *CEO* Duality, *FS* – Firm Size, *LEV* – leverage, ε – error term, *i* – company, and *t* – time period (2018–2023).

3. RESULTS AND DISCUSSION

Descriptive statistical analysis in this study consisted of the mean, maximum, minimum, and standard deviation values (Table 3). Each variable's mean value indicates its average value, its maximum value indicates its highest value, its minimum value indicates its lowest value, and the standard deviation value indicates the degree of variation in the data from the variable's average value. An explanation of the variable under this test is aided by these values. The descriptive data on the table above shows that earnings management (discretionary accruals) using the absolute value mean is shown as the number 0.066 and standard deviation of 0.082 (relatively small), which suggests that most firms' earnings management practices are not extreme and prefer conservative financial reporting.

CEO duality shows a mean of 0.34 and a standard deviation of 0.47, which means that almost 34% of the companies in the samples have a CEO duality or the board of directors that is family related to the board of commissioners. The amount of standard deviation is higher than average, which means the variation of the data is not uniform. Firm size shows a mean of 0.0021 and a standard deviation of 0.0003 after data transformation (1/x^2) to avoid the multicollinearity problem. This also means that the firm size variable is less varied after the transformation of data, since the standard deviation is lower than the average (mean).

For the board size variable, it shows the mean of 13.76 and a standard deviation of 12.27, which means that suggests significant differences in the size of boards between different companies, with some firms having very small boards and others much larger. This amount of board size happens because the data are transformed by using this equation (1/x^3) to avoid the multicollinearity problem. For the audit committee independence variable, it shows a mean of 29.14 and a standard deviation of 12.38. This amount of mean happens because the data are transformed to (x^3) to avoid the multicollinearity problem, which is the number of audit committee members that is independent, ranging from 2-5 persons for every company. After the data transformation, the standard deviation also shows 12.19, indicating a variation of the audit committee independence number in the sample. Leverage shows a mean of 0.53 and a standard deviation of 0.516, which means that overall across all samples, it shows that the average of 54% of company assets is financed by debt, which is relatively common for the company. The standard deviation is lower than the average, which shows the leverage data is less varied.

3.1. Regression model selection test

The regression model selection test was used to determine the most appropriate panel data model by comparing the common effect model, fixed effect model, and random effect model. To determine the best model, the Chow test and the Hausman test were carried out through the process.

The Chow test is used to choose between the Common Effect Model and the Fixed Effect Model.

Table 3. Descriptive statistics

Variable	Observation	Minimum	Maximum	Mean	Standard Deviation
EM	840	0.0001255	1.181319	0.065808	0.0824725
CD	840	0	1	0.3380952	0.473343
FS	840	0.00139	0.0029529	0.0021465	0.000304
BS	840	2.744	125	13.76901	12.27886
ACI	840	0	125	29.14048	12.38061
LEV	840	0.0024803	5.522268	0.5286509	0.5166359

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If the value of $p < \alpha$, the model chosen to estimate panel data is the Fixed Effect Model, while if the value of $p > \alpha$, the model chosen to estimate panel data is the Common Effect Model (Table 4).

Table 4. Chow test

Model	Prob > F
Chow Test	0.0000

Based on the results of the Chow test, the probability value (Prob>F) is 0.0000, which indicates that this value is smaller than the significance value of 0.05, which also means that *H1* is accepted, meaning the better model is the fixed effect model. Henceforth, the Hausman test will be performed to determine the best model between the random effect model and the fixed effect model.

The Hausman test is used to choose between the Random Effect Model and the Fixed Effect Model. If the value of $p < \alpha$ (0.05), the model chosen to estimate panel data is a fixed effect model, while if the value of $p > \alpha$ (0.05), the model chosen to estimate panel data is a random effect model (Table 5).

Table 5. Hausman test

Model	Prob > Chi2
Hausman Test	0.1489

Based on the Hausman test results, the probability value (Prob>Chi2) is 0.1489, which indicates that this value is higher than the significance value of 0.05 (0.1489 > 0.05). Thus, it can be concluded that the best model, after conducting the Hausman test, is the random effect model. The next step is to conduct the LM test to determine the best model between the random effect model and the common effect model.

Table 6. Breusch and Pagan Lagrangian multiplier (LM test)

Model	Prob > Chi2
Lagrangian Multiplier Test	0.0000

Based on the results of the LM test, the probability value (Prob>Chi2) is 0.0000, which indicates this value is lower than the significance value of 0.05 (0.0000 < 0.05) and *H1* is accepted. So, it can be concluded that the best model by the LM test is the random effect model (Table 6).

3.2. Classical assumption test

The classic assumption test in this study consists of a normality test, a multicollinearity test, a heteroscedasticity test, and an autocorrelation test.

Table 7. Normality test

Model	Prob > Z
Shapiro-Wilk Test	0.0000

Based on the results of the normality test (Table 7) carried out using the Shapiro-Wilk test, it was found that the probability value was 0.0000 < 0.05, which means that *H1* is accepted, and the data are not normally distributed. However, since the sample size used for this study is 750, which is greater than 30, which is the same criterion used in the central limit theorem assumptions, this means the large sample size of this study could be categorized as normally distributed.

Table 8. Multicollinearity test

	CD	FS	BS	ACI	LEV
CD	1.0000				
FS	0.0041	1.0000			
BS	0.1737	−0.0138	1.0000		
ACI	−0.0876	−0.1132	−0.0493	1.0000	
LEV	−0.1091	0.0110	−0.0976	−0.0100	1.0000

This study also uses a correlation test between variables, as shown in Table 8. Based on the results of the multicollinearity test in Table 8, the correlation value of each of the two independent variables shows that there is no multicollinearity because the correlation value between all of them is not showing a value of >0.9 or <–0.9.

Table 9. VIF test

Variable	VIF	1/VIF
FS	8.09	0.123648
ACI	5.56	0.179839
BS	2.28	0.437782
LEV	2.04	0.489725
CD	1.56	0.639143

Apart from that, the study also used the VIF value to assess multicollinearity. The VIF value for the firm size is 8.09, the VIF value for the number of audit committee variables is 5.56, the VIF value for the board size variable is 2.28, the VIF value for the leverage is 2.04, and the VIF value for the CEO

Duality is 1.56. Based on the results of the VIF values, it can be concluded that there is no multicollinearity because the VIF value of each variable is < 10 (Table 9).

Table 10. Autocorrelation test

Model	Prob > F
Wooldridge Test	0.0170

Based on the Woolridge test results above, the probability value (Prob>F) shows a number lower than 0.05, or *H1* is accepted; it is concluded that there is an autocorrelation problem in the research model. This autocorrelation problem will be solved by using PCSE (Panel-Corrected Standard Errors) (Table 10). PCSE helps to address the autocorrelation problem by using a method that adjusts for temporal correlations among cross-sectional units, incorporating autocorrelation in the estimation of model coefficients with a weighted approach for the computation of standard errors (Moundigbaye et al., 2018).

Table 11. Heteroskedasticity test

Model	Prob > Chi2
Breusch-Pagan/Cook-Weisberg Test	0.0000

Based on the results of the heteroskedasticity test using the Modified Wald test, the probability value (Prob > Chi2) is 0.000. This means that *H0* is rejected and *H1* is accepted. Thus, it indicates a heteroskedasticity problem. The existence of autocorrelation will be fixed by using PCSE (Panel-Corrected Standard Errors) in hypothesis testing. According to Moundigbaye et al. (2018), the use of panel-corrected standard error allows groupwise heteroskedasticity, which helps generate better estimates of the standard error that accurately represent the heterogeneity within the data to solve the heteroskedasticity problem (Table 11).

3.3. Hypothesis testing

Table 12. Estimation results

Variable	Coefficient	Z-statistic	P > [Z]	Result
CD	–0.0113602	–4.24	0.000	*H1* is Supported
FS	46.89603	9.35	0.000	*H2* is Supported
BS	0.00000109	0.00	0.996	
ACI	–0.0002797	–1.56	0.118	
LEV	0.0133098	1.85	0.064	
Constant	–0.0299121	–2.63	0.009	

Based on the results of the t-test (Table 12) using Panel-Corrected Standard Error, the CEO duality coefficient value is negative. The CEO duality variable has a probability value of 0.000. This value is lower than the significance value of 0.05, which means it has significance for earnings management. Thus, the CEO duality variable has a negative and significant effect on earnings management, which means *H1* is supported. For the second variable, which is firm size, the coefficient is positive. The firm size variable has a probability value of 0.000. This value is lower than the significance value of 0.05, so *H2* is supported. Thus, the firm size variable has a positive and significant effect on earnings management.

Next, as for the control variables – board size, audit committee independence, and leverage – the board size coefficient value is positive. The probability value of the board size variable is 0.996. This value is higher than the significance value of 0.05, so it means board size has a positive but insignificant effect on earnings management. For the second control variable, which is audit committee independence, the coefficient is negative. The audit committee independence variable has a probability value of 0.118. This value is higher than the significance value of 0.05, so it means the number of audit committee variables has a negative and insignificant effect on earnings management. For the third control variable, which is leverage, the coefficient is positive. The leverage variable has a probability value of 0.064. This value is higher than the significance value of 0.05, so it means the leverage variable has a positive but insignificant effect on earnings management.

Table 13. F-test result

F-Test	
F-statistic	135.2
Prob (F-statistic)	0.0000

The F-test was conducted to determine the effect of the independent variables simultaneously on the dependent variable (Table 13). In this study, the F-test was used to determine the effect of all variables on earnings management. Based on the F-test results, the probability value (F-statistic) is 0.000, which is less than the significance value of 5% (0.000). These results indicate that all the in-

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dependent variables simultaneously affect the dependent variable, which is earnings management.

Table 14. Coefficient of determination

Coefficient of Determination	
R-Square	0.0455

Based on the result, the adjusted R-square value is 0.0455 (4.55%) (Table 14). These results indicate that independent variables, which consist of CEO duality, firm size, board size, audit committee independence, and leverage, affect the earnings management practices by 4.55%. Meanwhile, 95.45% earnings management is influenced by variables other than board size, audit committee independence, CEO duality, firm size, and leverage.

4. DISCUSSION

Based on the regression results, CEO duality has a negative and significant influence on earnings management practices, which supports the first hypothesis of the study. This finding suggests that the CEO duality, which is a firm that consists of a board of directors and a board of commissioners that is family related, tends to reduce earnings management practices since family control over both governance bodies may reduce the incentive for earnings manipulation due to stronger internal oversight and alignment of interests. The result of this study is consistent with those of Alhmood et al. (2020) and Firdiansjah et al. (2020), which also state that there is a negative and significant relationship between CEO duality and earnings management. The result also aligns with Kitiwong et al.'s (2025) statement regarding family relationships in the control of the company, often viewed as the legacy or reputation to be maintained. This happens by reducing the tendency of earnings management practices to protect a company's reputation and maintain a continuous business. The findings also support the positive accounting theory proposed by Watts and Zimmerman (1990) regarding the political cost hypothesis, where a CEO duality based on family relationship tends to protect company reputation and long-term value by avoiding confrontation with external parties such as regulators or tax authorities, thus opting for more conservative financial reporting.

The next result is regarding the firm size, which shows a positive and significant influence on earnings management practice, which supports the second hypothesis of the study. This means that larger firms tend to have more complex operations and, under a greater market expectation, may provide the incentive to engage in earnings management practices in their financial reporting. The result of this study is aligned with Ghani et al. (2019) and Ruwanti et al. (2019), who also state that there is a positive and significant relationship between firm size and earnings management. This indicates that larger firms are more likely to engage in earnings management practices, possibly due to greater complexity in financial reporting and higher pressure to meet the performance expectations of stakeholders. The result also supports the political cost hypothesis under positive accounting theory, which states that large firms may reduce their reported profit to avoid public attention or regulatory scrutiny (Kimouche, 2022). Other governance and related control variables, such as board size, audit committee independence, and leverage, show an insignificant effect in constraining and promoting earnings management practices. This also implies that without robust institutional enforcement, formal structures of the company are insufficient to guarantee reporting quality.

Furthermore, this study contributes to the literature by showing how context greatly influences the effect of firm characteristics and governance mechanisms. The findings suggest that family engagement in two-tier board structures may improve accountability, challenging the widely held belief that CEO duality weakens oversight between company board members. Similarly, a larger company scale does not always guarantee better financial reporting quality; instead, it could create conflicting incentives that could lead to earnings management practices more likely. This study also expands the agency theory by Jensen and Meckling (1976) and positive accounting theory by Watts and Zimmerman (1990), which tackles the complication and highlights how contextual factors and corporate governance structures influence financial reporting practices.

CONCLUSION

This study aims to find empirical evidence about the effect of corporate governance mechanisms, which consist of board size, audit committee independence, and CEO duality, along with firm size and leverage, on the earnings management practices (accruals) in manufacturing companies listed on the Indonesia Stock Exchange (IDX) for 2018–2023. The total sample in this study is 840 observations consisting of 140 companies. Based on the results of the tests using panel data regression that have been carried out, it was found that CEO duality has a negative and significant effect on earnings management, which means the appearance of CEO duality would lower the act of earnings management since the conflict of interest is minimized because of a family-related relationship on the board of directors and commissioners. On the other hand, firm size shows a positive and significant effect on earnings management, which shows that larger firm size would increase the earnings management act, because of meeting stakeholder expectations and due to the complexity of financial reporting. The control variables – board size, audit committee independence, and leverage – do not show a significant effect on earnings management; these results indicate that these three variables would not affect the tendency of earnings management practices.

This paper is, however, subject to limitations. First, it focuses solely on Indonesian manufacturing firms listed on the stock exchange, limiting the generalizability of findings to other industries or regions. Second, financial data used for calculating discretionary accruals and other variables may contain incompleteness, inconsistencies, and erroneous reporting. Third, the independent variables explain only 4.55% of the variance, indicating the potential influence of other unexamined factors. Based on the results and the limitations of the study, it is advisable to conduct further research to gather a more comprehensive understanding regarding how earnings management affecti the quality of financial reporting in the Indonesia Stock Exchange. This could include increasing the number of research samples by increasing the number of companies or sectors and the study period, so that the research sample can provide a more representative picture regarding earnings management. It is also advisable to explore other factors that could affect earnings management practices, such as related party transactions, debt covenant violations, and financial distress, to find out their effect on financial reporting quality.

AUTHOR CONTRIBUTIONS

Conceptualization: Daniel Jonathan, Lindrianasari.
Data curation: Daniel Jonathan.
Investigation: Daniel Jonathan.
Methodology: Daniel Jonathan, Lindrianasari.
Project administration: Daniel Jonathan.
Software: Daniel Jonathan.
Supervision: Lindrianasari.
Validation: Lindrianasari.
Visualization: Daniel Jonathan.
Writing – original draft: Daniel Jonathan, Lindrianasari.
Writing – review & editing: Daniel Jonathan, Lindrianasari.

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