SIMBA

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THE EFFECT OF LEVERAGE, FREE CASH FLOW, AND FIRM SIZE ON EARNINGS MANAGEMENT

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Abstrak

Penelitian ini bertujuan untuk menguji pengaruh *leverage*, *free cash flow*, dan ukuran perusahaan terhadap manajemen laba. Penelitian ini menggunakan pendekatan kuantitatif dengan data sekunder yang diperoleh dari laporan keuangan perusahaan. Populasi dalam penelitian ini adalah seluruh perusahaan sektor *property* dan *real estate* yang terdaftar di Bursa Efek Indonesia (BEI) periode 2020–2024 dengan jumlah 93 perusahaan. Teknik pengambilan sampel menggunakan metode *purposive sampling* sehingga diperoleh data sebanyak 250 sampel penelitian. Teknik analisis data yang digunakan adalah regresi linier berganda dengan alat analisis SPSS versi 25. Hasil penelitian menunjukkan bahwa *leverage* berpengaruh positif signifikan terhadap manajemen laba, *free cash flow* berpengaruh positif signifikan terhadap manajemen laba, dan ukuran perusahaan berpengaruh positif signifikan terhadap manajemen laba.

Keywords: *Leverage, Free Cash Flow,* Ukuran Perusahaan, Manajemen Laba

Abstract

This research was conducted to analyze the influence of leverage, free cash flow, and firm size on earnings management. The study applied a quantitative approach by utilizing secondary data derived from company financial reports. The population consisted of all property and real estate companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period, with a total of 93 companies. Sampling was carried out using a purposive sampling method, which resulted in 250 research samples. The data were analyzed through multiple linear regression using SPSS version 25 as the analytical tool. The results showed that leverage had a significant positive effect on earnings management, free cash flow had a significant positive effect on earnings management, and firm size had a significant positive effect on earnings management.

Keywords: *Leverage, Free Cash Flow, Firm Size, Earnings Management*

A. INTRODUCTION

The emergence of the Covid-19 pandemic in early 2020 triggered an economic crisis in various countries, including Indonesia. This condition made it difficult for businesses to make profits due to the impact of the pandemic and government policies to prevent the spread of the virus. As a result, many companies, including management, were compelled to engage in earnings management practices in their financial reports (Supriyanto, 2023).

One important element in financial statements is the income statement, which describes the financial performance of a business in a given period. Due to its crucial role, income statements are often subject to manipulation by management. To meet certain profit targets, management may choose accounting policies that allow the company to increase or decrease profits according to its interests, so that the financial statements look better in the eyes of investors. This practice is known as earnings management (Astriah et al., 2021).

The widespread occurrence of earnings management shows that such practices are still commonly present in numerous companies, particularly within the property and real estate industries. This sector is considered one of the largest because it has the capacity to absorb a significant number of workers while simultaneously creating multiplier effects on other economic areas. It is also evident that property and real estate have a substantial role in driving the progress of related economic sectors, especially financial instruments. Therefore, understanding earnings management within this sector becomes crucial since its influence extends far beyond the industry itself (Yuliana et al., 2022).

One example of earnings management was carried out by PT Plaza Indonesia Realty Tbk (PLIN) in 2021, which recorded a decline in revenue but maintained profits through operational cost efficiency, indicating earnings management practices. Another case is PT Hanson Internasional Tbk (MYRX), which was sanctioned by the OJK for overstating its revenue by Rp 613 billion in its 2016 report. These cases emphasise the importance of vigilance against earnings management practices (Amelia & Purnama, 2023).

Various factors that play a role in shaping earnings management within companies consist of leverage, free cash flow, and firm size. However, findings from previous studies still reveal inconsistencies across different contexts. Research conducted by Hakim *et al.* (2023), Rahmawati & Fajri (2021), as well as Setyoputri & Mardijuwono (2020), indicate that leverage exerts a significant positive impact on earnings management. On the other hand, Joe & Ginting (2022), conclude that leverage has no influence on such practices. Similarly, studies by Shiyammurti (2020), Maryati *et al.* (2023), and Watriani & Serly (2021), demonstrate that free cash flow positively affects earnings management, whereas findings from Putriquitha & Vivianti (2023), and Santoso (2023), suggest the opposite, showing a negative effect. In addition, research by Fadhilah & Kartika (2022), and Setiowati *et al.* (2023), reveals that firm size contributes positively to earnings management, while Tsaqif *et al.* (2021), discover a negative relationship between firm size and earnings management. Considering these conflicting findings, the researchers aim to re-examine the issue and provide a deeper and more comprehensive explanation of the determinants influencing earnings management practices.

LITERATURE REVIEW

Agency Theory

According to Jensen & Meckling (1976), agency theory is a relationship involving two parties, namely the agent and the principal. Agency theory can underpin earnings management practices because when owners cannot perfectly monitor management activities, management can potentially determine policies that lead to an increase in their compensation levels, thus opening up opportunities for management to engage in earnings management (Putri, 2020).

Earnings Management

Earnings management refers to the deliberate intervention of management in the preparation of financial statements, carried out with certain motivations before the reports are presented to external stakeholders. Such practices may undermine the reliability of financial reports since the information presented does not fully portray the true financial condition of the company.

Consequently, earnings management is often considered a practice that can mislead users of financial statements in making economic decisions (Aissyah *et al.*, 2020).

Leverage

Leverage can be understood as a financial ratio that illustrates how far a company relies on debt to fund its operations. A high level of indebtedness will expose the company to higher levels of risk and lead to greater uncertainty in the achievement of profits in the future. This condition makes leverage an important aspect to evaluate when analyzing the financial health and stability of a company (Aissyah *et al.*, 2020).

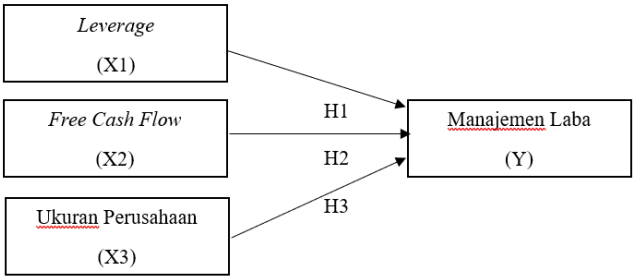
Free Cash Flow

Free cash flow refers to the amount of cash that remains available to be distributed to investors once the company has allocated funds for assets, new product development, and the working capital required to sustain its operational activities. In other words, this indicator reflects the real liquidity that can be utilized for rewarding investors after essential business needs are met (Thyas *et al.*, 2022).

Firm Size

Firm size can be described as a variable that reflects the overall magnitude of a company, which is generally measured through various aspects such as total assets, market value, sales, revenue, or capital. This indicator functions as a representation of the company's scale both financially and operationally, allowing researchers to compare organizational capacity across different firms. Therefore, firm size provides a clearer understanding of how large or small a company is when analyzed in relation to its financial strength (Sadewa *et al.*, 2024).

Conceptual Framework



Based on the conceptual framework above, the research hypotheses are as follows:

H1: Leverage has a positive and significant effect on earnings management.

H2: Free cash flow has a positive and significant effect on earnings management.

H3: Firm size has a positive and significant effect on earnings management.

B. METHOD

This research employed a quantitative approach, which was chosen to examine and verify the influence of leverage, free cash flow, and firm size on earnings management. The population of the study consisted of all property and real estate companies listed on the Indonesia Stock Exchange (IDX) during 2020–2024, amounting to 93 companies. The sampling technique applied was purposive sampling with specific criteria, namely: (1) 93 property and real estate companies listed on the IDX, (2) 14 property and real estate companies that were not consistently listed on the IDX from 2020 to 2024, (3) 17 companies that failed to submit financial reports for the 2020–2024 period, and (4) 12 companies that did not provide complete financial data required for each variable. After applying these criteria, a total of 250 research samples were obtained. This study relied on secondary data in the form of financial statements from property and real estate companies listed on the IDX for the 2020–2024 period, which were collected through both the official company websites and the IDX website at www.idx.co.id. Furthermore, this selection ensured that the data used were accurate and relevant to the research objectives.

C. RESULTS AND DISCUSSIONS

Descriptive Statistic Test

Descriptive statistic test needs to be conducted to obtain an overview of the data, such as the mean, standard deviation, maximum value, and minimum value (Ghozali, 2021).

Table 1. Descriptive Statistics Test Results

Descriptive Statistics

	N	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
Leverage	250	.01	1.54	.3824	.22666
Free Cash Flow	250	-.50	.61	.0336	.08811
Ukuran Perusahaan	250	24.62	31.96	28.9018	1.62917
Manajemen Laba	250	-.01	.03	.0002	.00192
Valid N *(listwise)*	250				

Source: Output SPSS 25

1. The leverage variable shows an average value of 0.3824 with a standard deviation of 0.2266, while the minimum recorded value is 0.1 and the maximum value reaches 1.54.
2. The free cash flow variable indicates an average value of 0.0336 with a standard deviation of 0.08811, with the minimum observed value being –0.50 and the maximum value noted at 0.61.
3. The firm size variable demonstrates an average value of 28.9018 accompanied by a standard deviation of 1.62917, with the minimum value obtained at 24.62 and the maximum value observed at 31.96.
4. The earnings management variable records an average value of 0.0002 with a standard deviation of 0.00192, while the lowest value is –0.01 and the highest value reaches 0.03.

Classical Assumption Test

Normality Test

Table 2. Normality Test Results

One-Sample Kolmogorov-Smirnov Test			
			Unstandardized Residual
N			217
Normal Parameters[a,b]	*Mean*		.0000000
	Std. Deviation		.00035729
Most Extreme Differences	*Absolute*		.054
	Positive		.047
	Negative		-.054
Test Statistic			.054
Asymp. Sig. (2-tailed)[c]			.200[d]
Monte Carlo Sig. (2-tailed)[e]	*Sig.*		.131
	99% Confidence Interval	*Lower Bound*	.122
		Upper Bound	.139

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.
e. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 545132007.

Source: Output SPSS 25

Based on the results presented above, the Asymp Sig (2-tailed) value obtained is 0.200. This outcome shows that the significance value (Sig) for both dependent and independent variables in the Kolmogorov-Smirnov test is higher than the predetermined alpha level of 0.05 at a 95% confidence level, indicating that the data sample follows a normal distribution. Hence, the assumption of normality is fulfilled, and the dataset can be further analyzed using parametric statistical tests.

Multicollinearity Test

Table 3. Multicollinearity Test Results

Coefficients[a]

Model		*Collinearity Statistics*	
		Tolerance	VIF
1	(Constant)		
	Leverage	.908	1.101
	Free Cash Flow	.999	1.000
	Ukuran Perusahaan	.908	1.101

a. Dependent Variable: Manajemen Laba

Source: Output SPSS 25

Based on the results above, the Tolerance value obtained is consistently above 0.1 and the Variance Inflation Factor (VIF) value is clearly below 10. This condition indicates that there is no serious multicollinearity problem among the independent variables included in the regression model.

Heteroscedasticity Test

Table 4. Heteroscedasticity Test Results

Coefficients[a]

Model		*Unstandardized Coefficients*		*Standardized Coefficients*		
		B	Std. Error	Beta	t	Sig.
1	*(Constant)*	.000	.000		-.873	.384
	Leverage	-9.553E-5	.000	-.078	-1.087	.278
	Free Cash Flow	.000	.000	.049	.679	.498
	Ukuran Perusahaan	1.936E-5	.000	.139	1.843	.067

a. Dependent Variable: ABS_RES

Source: Output SPSS 25

The heteroscedasticity test results obtained through the Glejser method, which uses the absolute residual value (ABS_RES) as the dependent variable, reveal that the significance value (sig) for leverage is 0.278, for free cash flow is 0.498, and for firm size is 0.067. Based on the Glejser test rules, the significance values for all independent variables are above the threshold of 0.05. With reference to the decision-making guidelines in the Glejser test, these outcomes confirm

that the regression model does not experience heteroscedasticity. Therefore, the regression equation can be regarded as meeting the assumption of homoscedasticity and is appropriate for subsequent testing.

Autocorrelation Test

The autocorrelation test serves to identify whether the error term in period t has a correlation with the error term in period t-1 within a linear regression model. This test is important because the presence of autocorrelation can lead to biased or inefficient estimation results, thereby reducing the reliability of the regression analysis (Ghozali, 2021).

Table 5. Autocorrelation Test Results

Model Summary[b]

Model	R	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*	*Durbin-Watson*
1	.962[a]	.926	.925	.00036	2.065

a. Predictors: (Constant), Leverage, Free Cash Flow, Ukuran Perusahaan

b. Dependent Variable: Manajemen Laba

Source: Output SPSS 25

Based on the results of the autocorrelation test using the Durbin-Watson (DW) statistic, the value obtained is 2.065. In this test, the rule states that if du < dw < 4–du, then the hypothesis of no autocorrelation is accepted. Referring to the table with N = 250 and K = 3, the critical values are 1.8088 (du) and 2.1912 (4–du), so the condition 1.8088 < 2.065 < 2.1912 is fulfilled. From these results, it can be concluded that the regression model does not contain autocorrelation. This indicates that the data meet the classical assumption of independence, making the regression analysis more reliable.

Multiple Linear Regression Test

Table 6. Multiple Linear Regression Test Results

Coefficients[a]

Model		*Unstandardized Coefficients*		*Standardized Coefficients*		
		B	Std. Error	Beta	t	Sig.
1	*(Constant)*	-.016	.002		-10.335	.000
	Leverage	.002	.000	.308	15.702	.000
	Free Cash Flow	1.000	.021	.871	46.660	.000
	Ukuran Perusahaan	.005	.000	.192	9.817	.000

a. *Dependent Variable*: Manajemen Laba

Source: Output SPSS 25

Based on the above test results, the following multiple linear regression equation was obtained:

$$Y = \alpha + \beta 1\ X1 + \beta 2\ X2 + \beta 3\ X3 + e$$

$$Y = -0{,}016 + 0{,}002\ \text{Leverage} + 1{,}000\ \text{Free Cash Flow} + 0{,}005\ \text{Firm Size} + e$$

Partial Test (t-Test)

Table 7. Partial Test Results

Coefficients[a]

Model		*Unstandardized Coefficients*		*Standardized Coefficients*		
		B	Std. Error	Beta	t	Sig.
1	*(Constant)*	-.016	.002		-10.335	.000
	Leverage	.002	.000	.308	15.702	.000
	Free Cash Flow	1.000	.021	.871	46.660	.000
	Ukuran Perusahaan	.005	.000	.192	9.817	.000

a. *Dependent Variable*: Manajemen Laba

Source: Output SPSS 25

Based on the results presented in the table above, it is shown that the leverage has a positive and significant influence on earnings management, free cash flow demonstrates a has a positive and significant influence on earnings management, and the firm size also has a positive and significant influence on earnings management, These findings indicate that the three independent

variables play an important role in shaping earnings management practices within the observed companies.

Coefficient Test Determination (R^2)

Table 8. Coefficient Test Determination Results

Model Summary[b]

Model	R	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*	*Durbin-Watson*
1	.962[a]	.926	.925	.00036	2.065

a. Predictors: (Constant), Leverage, Free Cash Flow, Ukuran Perusahaan

b. Dependent Variable: Manajemen Laba
Source: Output SPSS 25

The results of the coefficient of determination test indicate that the R Square value obtained is 0.926, which means that 92.6% of the variation in the dependent variable, namely earnings management, can be explained by the independent variables consisting of leverage, free cash flow, and firm size. Meanwhile, the remaining 7.4% is influenced by other factors not included in the research model. This suggests that the independent variables used in this study have a very strong ability to explain fluctuations in earnings management.

D. CONCLUSIONS

Based on the results of the analysis and discussion, the conclusion of the study is that leverage, free cash flow, and firm size partially have a positive and significant effect on earnings management.

E. SUGGESTIONS

For future researchers are expected to use other variables and add moderating or intervening variables to expand the results and discussion in subsequent studies. They may also use different objects from those used by the researchers.

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