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Tax Management and Deferred Tax Liabilities: Their Impact on Earnings Management

Tutty Nuryati[1] , Uswatun Khasanah[2]
[1] Bhayangkara University of Greater Jakarta, Indonesia, tutty.nuryati@dsn.ubharajaya.ac.id
[2] Bhayangkara University of Greater Jakarta, Indonesia, uswatun.khasanan@dsn.ubharajaya.ac.id

Corresponding Author:tutty.nuryati@dsn.ubharajaya.ac.id[1]

Abstract: This study aims to examine whether tax management and deferred tax liabilities can influence earnings management in companies in the properties & real estate sector listed on the Indonesia Stock Exchange during the 2018–2022 period. The population for this study consists of companies in the properties & real estate sector listed on the Indonesia Stock Exchange during the 2018–2022 period. The technique used to determine the sample in this study was purposive sampling. This study yielded a sample of 90 data points from 18 companies in the property and real estate sector over a 5-year period. The methods used in this study included descriptive statistical analysis, selection of a panel data regression model, testing of classical assumptions, multiple linear regression analysis, and hypothesis testing. The data required for this study consisted of secondary data in the form of financial statements available on the companies' websites. Data analysis was conducted using Eviews version 13. The results of this study indicate that (1) tax management has a negative effect on earnings management, and (2) deferred tax expenses have a positive effect on earnings management.

Keywords: Deferred Tax Liability, Tax Management, Earnings Management.

INTRODUCTION

Competition among companies in Indonesia now extends beyond products that appeal to consumers to include aspects of financial management. Companies listed on the capital market are required to disclose their financial reports through the Indonesia Stock Exchange (Septianingrum et al., 2022). These financial reports are important because they document a company's condition and performance, which external parties use to assess the company's financial performance. Every business, whether a corporation or an individual, requires the information available in financial statements. To make accurate business decisions, this financial information must be analyzed according to the needs and preferences of the users (Aldona & Listari, 2020).

Processed financial statements provide information and serve as a basis for financial considerations for stakeholders in the decision-making process. Financial Accounting Standards (SAK) state that the purpose of financial statements is to provide information that is useful to the majority of users in making decisions regarding a company's performance, changes, and financial condition. Profit is one of the key factors often used as a measure of performance or as a basis for other metrics, such as *return on investment* or *earnings per share* (Adyastuti & Khafid, 2022).

Financial statements, particularly income statements, are susceptible to manipulation by management in an effort to achieve desired profit targets (Yuliana et al., 2023). Management sometimes chooses accounting practices to increase or decrease profits according to their objectives, which makes financial statements appear more attractive to stakeholders. This phenomenon is known as *earnings management* (Astriah et al., 2021). Earnings management refers to management's intervention in the preparation of financial statements for external parties to achieve a specific level of profit that is beneficial for both themselves and the company (Carolin et al., 2022).

Companies strive to maximize profits and minimize expenses in order to attract investors. With this strategy, managers can increase the earnings reported to shareholders and external parties (Setyaningsih et al., 2023). Converting future revenue into current revenue and current expenses into future expenses is a key method of earnings management. This allows company management to increase reported profits, which in turn boosts their performance-based bonuses (Devitasari, 2022).

Several incidents in Indonesia related to earnings management practices have highlighted violations of revenue recognition and transaction recording that do not comply with capital market regulations. For example, PT Hanson International Tbk (MYRX) used the full accrual accounting method to record revenue in a manner inconsistent with regulations, resulting in a significant increase in revenue (Sidik & Wareza, 2019). A similar case occurred at PT Plaza Indonesia Realty Tbk (PLIN), which is suspected of engaging in earnings management to present better financial performance even though actual revenue was declining (Fatonah & Permatasari, 2024). The primary objective of this study is to raise awareness about fraud in financial statements and the importance of understanding the methods and approaches used in earnings management (Adityaningsih & Hidayat, 2024).

METHOD

This study employs descriptive statistical analysis using quantitative methods. Quantitative research methods are an approach that utilizes numerical data and the exact sciences to test research hypotheses (Waruwu, 2023). Descriptive statistical analysis presents useful information to help readers or users interpret and utilize data more easily (Martias, 2021). As shown in Table 1, the operational definitions of the variables are provided, along with an explanation of the measurement indicators for each variable:

Table1 . Operationalization of Variables

No.	Variable	Definition	Indicators	Scale
1.	Tax Management (X_2)	Tactics used in planning and managing that have the potential to impact a company's profits.	$CTTOR = \frac{income\ tax\ expense}{revenue} x100\%$ Source: Kartika (2024)	Ratios
2.	Deferred Tax Expense (X_1)	Corporate tax liabilities arising after the close of the fiscal year.	$DTEit = \frac{Deferred\ tax\ expense}{total\ assets\ y-1}$ Source: Andriani (2020)	Ratios
3.	Earnings Management (Y)	Measures taken by company management to manipulate financial statement data in order to mislead stakeholders regarding the company's performance and financial position.	Step 1: $TAC = NIit - CFOit$ Step 2: $\frac{TAit}{Ait-1} = \beta 1\left(\frac{1}{Ait-1}\right) + \beta 2\left(\frac{\Delta REVit}{Ait-1}\right) + \beta 3\left(\frac{PPEit}{Ait-1}\right) + \varepsilon$	Ratios

No.	Variable	Definition	Indicators	Scale
			Step 3: $NDAit = \beta 1 \left(\frac{1}{Ait-1}\right) + \beta 2 \left(\frac{\Delta REVit}{Ait-1} - \frac{\Delta RECit}{Ait-1}\right) + \beta 3 \left(\frac{PPEit}{Ait-1}\right) + \varepsilon$ Step 4: $DAit = \frac{TAit}{Ait-1} - NDAit$ Source: Astriah (2021)	

This study utilizes secondary data sourced from the financial statements of companies in the *properties & real estate* sector listed on the Indonesia Stock Exchange for the period 2018–2022. Secondary data is data obtained indirectly from pre-existing sources or data that has already been collected by other entities (Bahri, 2019). Based on the established criteria, the researcher obtained a sample of 18 companies from the property and real estate sector. The data used in this study consists of company data for five consecutive years, from 2018 to 2022. Thus, the researcher obtained 90 data points—the result of multiplying the 18 companies by the five-year period. The sample selection criteria are presented in the following table:

Table2 . Research Sample Selection Criteria

No	Sample Selection Criteria	Number of Samples
1.	Companies in the *Properties & Real Estate* sector listed on the Indonesia Stock Exchange for the 2018–2022 period.	92
2.	Companies in the *Properties & Real Estate* sector that did not publish complete financial statements during the 2018–2022 period.	(26)
3.	Companies that did not generate a profit during the current year	(44)
4.	Companies that do not have data related to the variables required in the financial statements.	(4)
Number of companies meeting the sample criteria		18
Year of observation		5
Number of research observations		90

Source: Processed Data, 2024

RESULTS AND DISCUSSION

Descriptive Statistical Analysis

Table 3. Descriptive Statistical Analysis

	Earnings Management	Tax Management	Deferred Tax Expense
Mean	0.003147	0.011086	0.002712
Median	0.004734	0.004661	0.000900
Maximum	0.616680	0.044859	0.031400
Minimum	-0.720291	3.47E-05	0.000000
Std. Dev.	0.127398	0.012280	0.005101

Source: Processed using EViews 13

Tax Management

The Tax Management variable, as the first independent variable, had a mean of 0.011, a median of 0.004, a maximum of 0.044, a minimum of 3.47, and a standard deviation of 0.012 during the 2018–2022 period.

Deferred Tax Liability

The Deferred Tax Expense variable, as the second independent variable, has a mean of 0.002, a median of 0.001, a maximum of 0.031, a minimum of 0.00, and a standard deviation of 0.005 for the 2018–2022 period.

Earnings Management

The Earnings Management variable, as the dependent variable, has a mean of 0.003, a median of 0.004, a maximum of 0.616, a minimum of -0.720, and a standard deviation of 0.127 during the 2018–2022 period.

Panel Data Regression Model Selection

Regression model selection was conducted through several tests, as follows:

1) Chow Test

Table 4. Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.097998	(17.62)	0.0180
Cross-section Chi-square	37.262333	17	0.0031

Source: processed using *Eviews 13*

The results of the *Chow* test shown in Table 4 indicate that the *chi-square* probability for the cross-section is less than the significance level, with a value of 0.003 < 0.05. Therefore, *the Fixed Effects Model* is the appropriate regression model.

2) Hausman Test

Table 5. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	6.617336	2	0.0366

Source: processed using *EViews 13*

Based on the results of the *Hausman* test shown in Table 5, it can be seen that the probability for *cross-sectional randomness* is 0.036, which is less than the significance level of 0.05. Therefore, *the Fixed Effects Model* is the appropriate regression model. Based on the results of the panel data regression tests—including the Chow test and the Hausman test—it can be concluded that *the Fixed Effects Model* (FEM) is the best panel data estimation model for this study.

Multicollinearity Test

Table3 . Multicollinearity Test

	Tax Management	Deferred Tax Liability
Tax Management	1.000000	0.150587
Deferred Tax Expense	0.150587	1.000000

Source: processed using *Eviews 13*

The results obtained from the multicollinearity test show that the correlation values between the independent variables—namely, tax management and deferred tax liability—are less than 0.80; therefore, it can be concluded that there is no multicollinearity issue.

Heteroscedasticity Test

Table 6. Heteroscedasticity Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.019342	0.005469	3.536855	0.0008
Tax Management	0.287535	0.344862	0.833770	0.4076
Deferred Tax Expense	0.490965	0.730464	0.672127	0.5040

Source: processed using *EViews 13*

The results of the heteroscedasticity test show that the p-values for tax management and deferred tax liability are greater than 0.05, so it can be concluded that there is no heteroscedasticity issue.

Multiple Linear Regression Analysis

Table 7. Multiple Linear Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.030858	0.025534	1.208511	0.2314
Tax Management	-4.268538	1.610235	-2.650880	0.0102
Deferred Tax Expense	7.230147	3.410696	2.119845	0.0380

Source: processed using *Eviews 13*

Based on the table above, the following panel data regression equation was obtained:

$$ML = 0.031 - 4.268MP + 7.230BPT$$

- A constant value of 0.031 means that if tax management and deferred tax expenses are 0, then earnings management will be 0.031.
- The tax management coefficient is -4.268 with a negative sign, meaning that if tax management decreases by one unit, earnings management will decrease by -4.268, assuming all other independent variables remain constant. A negative coefficient indicates a negative relationship between tax management and earnings management; the greater the tax management, the lower the earnings management.
- The coefficient for deferred tax expense is 7.230 with a positive direction, indicating that every one-unit increase in deferred tax expense will increase earnings management by 7.230, assuming all other independent variables remain constant. This positive coefficient indicates a positive relationship between deferred tax expense and earnings management: the higher the deferred tax expense, the greater the increase in earnings management.

Coefficient of Determination Test (Adjusted $^{R^2}$)

Table 8. Adjusted R^2

Adjusted R-squared	0.274954

Source: processed using *Eviews 13*

From the table above, the *Adjusted R-squared* value obtained from this study is 0.274, equivalent to 27%. This indicates that the tax management variable and deferred tax liability are able to explain approximately 27% of the variation in the earnings management variable, while the remaining 73% is explained by factors outside the scope of the variables under study.

T-Test

Table 9. T-Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.030858	0.025534	1.208511	0.2314
Tax Management	-4.268538	1.610235	-2,650, ,880	0.0102
Deferred Tax Expense	7.230147	3.410696	2.119845	0.0380

Source: processed using Eviews 13

Based on the output in the table above, the calculated t-value for the tax management variable is -2.650, which is greater than the critical t-value (-2.650 > -1.98793) with a probability value of 0.010, which is less than the significance level (0.010 < 0.05). Therefore, it can be concluded that tax management has an effect on earnings management.

Based on the results in the table above, the calculated t-value for the deferred tax expense variable is 2.119, which is greater than the critical t-value (2.119 > 1.98793), with a probability value of 0.038, which is less than the significance level (0.038 < 0.05). Therefore, the conclusion that can be drawn is that deferred tax expenses have a positive effect on earnings management practices.

Discussion

1. The Effect of Tax Management on Earnings Management

Based on the results of hypothesis testing using the t-test in the table, it can be concluded that Tax Management has a significant negative effect on Earnings Management, which means that the higher the level of tax management, the less likely earnings management practices are to occur. A high level of tax management results in lower earnings (Sholikah et al., 2024). This occurs because reported profits are lowered to reduce the amount of tax owed (Putri et al., 2024). The results of this study are consistent with research conducted by Nugraheni et al (2023), Qudsy & Afiqoh (2023), Tampilan et al (2023), which states that tax management has a negative effect on earnings management.

2. The Effect of Deferred Tax Expense on Earnings Management

Research shows that deferred tax liabilities can influence a company’s earnings management practices due to their ability to reduce reported earnings. The difference between accounting and taxable income creates an incentive for managers to manipulate earnings by adjusting deferred tax liabilities on the income statement (Nurulita & Utami, 2024). This practice allows for increased future earnings and a reduction in corporate taxes. Faqih & Sulistyowati (2021) and Aprillia et al (2020) found that the higher the deferred tax expense, the greater the likelihood that a company engages in earnings management. Differences between commercial and fiscal accounting profits indicate managerial discretion reflected in deferred tax expenses and the use of liberal accounting assumptions (Huza et al., 2023).

CONCLUSION

Based on the research findings and discussion regarding the impact of tax management and deferred tax liabilities on earnings management in companies in the *properties & real estate* sector listed on the Indonesia Stock Exchange for the 2018–2022 period, it is concluded that tax management has a negative impact on earnings management. This negative effect indicates that companies’ efforts to manage their taxes more efficiently and cost-effectively tend to reduce earnings management practices. In other words, companies that focus on tax management tend to report more realistic earnings and reduce the manipulation of financial data to inflate profits.

Deferred tax expenses have a positive effect on earnings management. This is because deferred tax expenses can be used by managers to manipulate earnings by adjusting the amount of deferred tax expenses recognized, thereby reducing current earnings and potential income taxes, as well as creating opportunities for higher future income. Since this study covers data from only five years of observation—from 2018 to 2022—some companies' annual financial reports were not fully available on the Indonesia Stock Exchange website or the relevant companies' websites; this incompleteness reduced the sample size for the study.

It is important for regulators and stakeholders to pay attention to tax management practices and deferred tax liabilities in an effort to ensure more accurate and transparent financial statements. The results of this study also provide insights for companies regarding the importance of sound tax strategies to reduce the risk of earnings manipulation and enhance investor confidence.

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