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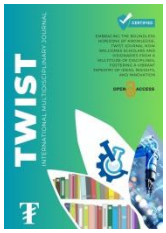

Earnings Management Unveiled: The Moderating Influence of Tax Planning on Deferred Tax Expense and Book Tax Differences

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Abstract
This study investigates the effect of Deferred Tax Expense (DTE) and Book-Tax Differences (BTD) on Earnings Management (EM), with a focus on the moderating role of Tax Planning. Using panel data from non-financial firms over a specified period, the research employs Panel Least Squares (PLS) regression analysis to test the hypothesized relationships. The results reveal that Deferred Tax Expense has a significant positive effect on Earnings Management, supporting the view that tax-related timing items offer discretionary space for managers to manipulate earnings. In contrast, Book-Tax Differences show only a marginally significant relationship, suggesting a weaker or context-dependent influence on earnings manipulation.

Further analysis demonstrates that Tax Planning significantly moderates the relationship between Deferred Tax Expense and Earnings Management, indicating that firms with more strategic tax planning are less likely to use deferred tax items for earnings manipulation. However, Tax Planning does not significantly moderate the effect of Book-Tax Differences on Earnings Management. These findings contribute to the literature on tax-related financial reporting behavior and highlight the importance of incorporating tax planning considerations into the assessment of earnings quality. The study also offers practical implications for regulators, auditors, and investors in monitoring financial transparency.

Keywords
earnings management, deferred tax expense, book-tax differences, tax planning

INTRODUCTION

Earnings management remains a pervasive and contentious topic in accounting and financial research, particularly as firms increasingly navigate the complexities of regulatory compliance and strategic financial reporting. The deliberate manipulation of financial outcomes to meet benchmarks or signal performance continues to raise concerns about the reliability of reported earnings and the overall transparency of corporate disclosures. Among the multifaceted tools available to managers, the exploitation of deferred tax expense (DTE) and book-tax differences (BTD) has emerged as a subtle yet impactful avenue for earnings management practices (Toumeh et al., 2023) (Chakroun et al., 2022) (Abdelkarim & Zuriqi, 2020) (Bisogno & Donatella, 2022).

Deferred tax items, arising from temporary timing differences between taxable income and accounting profit, provide an opaque and flexible domain where earnings can be managed without immediately breaching accounting standards. Similarly, book-tax differences, which encapsulate discrepancies between accounting and taxable profits, have been consistently linked with aggressive tax strategies and opportunistic financial reporting ((Habib, 2024); (Gerged et

al., 2023)). However, despite the clear association between DTE/BTD and earnings management, the moderating role of tax planning in shaping this relationship remains insufficiently explored.

Tax planning, while traditionally viewed as a mechanism to legally minimize tax liabilities, also intersects with earnings management motives. Firms often employ sophisticated tax avoidance strategies that can simultaneously manipulate reported earnings by adjusting the timing and recognition of revenues and expenses (Nguyen et al., 2024). This dual role introduces the possibility that tax planning may either exacerbate or mitigate the propensity for earnings management through deferred tax mechanisms, depending on the governance context, managerial intent, and external scrutiny ((Zalata et al., 2022); (Ramalingegowda et al., 2021); (Sánchez-Ballesta & Yagüe, 2021)).

Furthermore, prior literature has highlighted the impact of internal and external governance mechanisms, including audit committee independence, ownership concentration, and regulatory oversight, on the effectiveness of earnings management techniques ((Li et al., 2020); (Boachie & Mensah, 2022)). Still, empirical clarity is lacking regarding how these mechanisms interact with tax strategies, particularly in the context of developing economies or jurisdictions with evolving financial reporting standards ((Saona et al., 2020); (Bouaziz et al., 2020); (Grimaldi dkk., 2020); (Owusu et al., 2022)).

This study aims to unveil the nuanced relationship between deferred tax expense, book-tax differences, and earnings management, with a focus on how tax planning moderates these dynamics. By integrating insights from tax policy, accounting discretion, and corporate governance, this research provides a timely contribution to the literature, addressing a critical blind spot in earnings management studies. The findings are anticipated to yield implications for regulators, auditors, and investors by illuminating how tax planning can alter the financial reporting landscape and signal potential managerial opportunism.

LITERATURE REVIEW

Agency Theory

This study is grounded in Agency Theory, which provides a robust theoretical framework for understanding earnings management behavior. As proposed by Jensen and Meckling (1976), Agency Theory posits that conflicts between principals (shareholders) and agents (managers) arise due to divergent interests and information asymmetry. In the corporate setting, managers may act opportunistically to pursue personal benefits such as bonuses, job security, or market reputation, often at the expense of shareholder value. One manifestation of such agency conflict is earnings management (EM), where managers manipulate reported earnings to achieve desired financial outcomes. Among the more opaque methods employed are adjustments through deferred tax expense (DTE) and book-tax differences (BTD), both of which involve technical accounting treatments that are difficult for external stakeholders to detect or scrutinize. The flexibility in recognizing deferred tax assets and liabilities enables managers to shift earnings across periods, while substantial book-tax gaps may signal aggressive tax strategies or accounting distortions (Sánchez-Ballesta & Yagüe, 202; (Li et al., 2020)). In this context, tax planning serves a dual role. On one hand, it can be an efficient tool for reducing tax liabilities and enhancing firm value aligned with shareholder interests. On the other hand, when complex or non-transparent, tax planning may become a vehicle for masking earnings manipulation, thereby exacerbating agency costs. This moderating role of tax planning remains underexplored in the extant literature. Prior studies have emphasized the importance of governance structures in mitigating such agency-driven behaviors. For instance, Toumeh et al., (2023) found that independent audit committees play a crucial role in constraining EM, while Nguyen et al., (2024) confirmed that strong corporate governance significantly reduces earnings manipulation in emerging markets. Similarly, Boachie & Mensah, (2022) and Gerged et al., (2023) demonstrated that the interaction between governance quality and disclosure transparency can influence the degree of EM. Thus, this study leverages Agency Theory to investigate how tax planning moderates the relationship between deferred tax mechanisms (DTE and BTD) and earnings management, particularly within governance-sensitive environments. By integrating tax planning into the EM framework, this research contributes to a deeper understanding of how agency conflicts manifest through financial reporting strategies and the extent to which these behaviors can be controlled or exacerbated.

Table 1 Summary of Key Literature

Study	Focus	Key Findings
Habib et al., (2022)	Review of real earnings management	Real EM is prevalent and varies with governance and market conditions
Zalata et al., (2022)	Gender diversity and EM	Female directors with financial backgrounds reduce EM
Nguyen et al., (2024)	Corporate governance and EM	Strong governance mitigates earnings manipulation
Ramalingegowda et al., (2024)	Institutional ownership	Common ownership restricts opportunistic earnings behavior
Boachie & Mensah (2022)	Governance quality	High-quality governance moderates EM's effect on performance
Li et al., (2020)	Financial distress and internal controls	Financial distress promotes EM through deferred tax mechanisms
Toumeh et al., (2023)	Audit committee effectiveness	Independent audit committees reduce EM practices
Gerged et al., (2023)	Environmental disclosure & EM	Disclosure transparency interacts with governance in influencing EM

Source: Synthesized from various peer-reviewed journals, 2025

Deferred Tax Expense on Earnings Management

Deferred tax expense (DTE) arises from temporary differences between accounting profit and taxable income, representing the future tax impact of current financial decisions. Due to its technical and complex nature, DTE provides a discretionary area where managers may apply subjective judgment in recognizing deferred tax assets and liabilities. This flexibility opens the door for earnings management by shifting income recognition between periods without altering the firm's underlying economic performance. Research indicates that DTE is not only a reflection of legitimate timing differences but also a proxy for aggressive accounting behavior ((Li et al., 2020); Sánchez-Ballesta & Yagüe, 2021). Managers under pressure to meet earnings benchmarks or satisfy investor expectations may overstate or understate DTE to smooth income, reduce volatility, or manipulate the effective tax rate presented in financial reports. This practice can obscure a firm's true financial position, thereby weakening the transparency and reliability of earnings information provided to external stakeholders.

The association between DTE and earnings management has been supported in various contexts, particularly where corporate governance is weak or external monitoring is limited. For example, Zalata et al., (2022) found that deferred tax items were significantly linked to EM in firms with low board independence. Furthermore, Boachie & Mensah, (2022) suggest that higher DTE variability may signal intentional income manipulation. Thus, DTE serves as a convenient channel for managers to implement accrual-based earnings management strategies while avoiding direct regulatory scrutiny. Despite its importance, the role of DTE in enabling EM is often underexamined in emerging markets where accounting regulations are still evolving. This study aims to address this gap by empirically investigating the influence of DTE on earnings management behaviors. Based on the literature and theoretical perspectives, this study proposes the following hypothesis:

H1: *Deferred Tax Expense has a significant positive effect on Earnings Management*

Book Tax Differences on Earnings Management

Book-Tax Differences (BTD) represent the discrepancies between the income reported for financial accounting purposes and the taxable income submitted to tax authorities. These differences may arise due to legitimate accounting rules or strategic managerial decisions aimed at reducing tax liabilities or manipulating reported earnings. Prior research suggests that large or abnormal BTDs are often associated with earnings management practices, as they may reflect temporary or permanent adjustments used to distort the financial performance presented to investors (Sánchez-Ballesta & Yagüe, 2021; (Dyreng et al., 2022)). The complexity and opacity of BTDs provide a hidden channel through which managers can achieve reporting objectives while avoiding immediate detection by regulators or auditors. As such, BTD has emerged as a reliable proxy for identifying the existence and extent of aggressive accounting behavior.

Furthermore, the opportunistic use of BTD becomes more pronounced in firms facing earnings pressure or operating in environments with limited regulatory enforcement. For example, studies by Gerged et al., (2023) and (Toumeh et al., (2023) highlight that firms with weaker governance structures are more likely to exploit tax-accounting differences to manage earnings. Managers may underreport taxable income to reduce tax payments while simultaneously overstating accounting profits to enhance investor perception, creating a misalignment that inflates BTD and signals potential manipulation. Thus, BTD not only captures tax avoidance behaviors but also indicates the broader strategic use of financial reporting to achieve non-tax-related managerial goals. Given these dynamics, examining the effect of BTD on earnings management provides valuable insights into the quality of financial reporting and the ethical behavior of firms. Based on the literature and theoretical perspectives, this study proposes the following hypothesis:

H2: *Book-Tax Differences have a significant positive effect on Earnings Management*

Deferred Tax Expense on Earnings Management With Tax Planning as a Moderator Variable

Deferred Tax Expense (DTE) is one of the most flexible components in financial statements, often derived from timing differences between financial reporting and tax regulations. This flexibility allows management to influence reported earnings without directly violating accounting standards. When under pressure to meet market expectations or smooth earnings, managers may adjust DTE to inflate or defer income, making it a convenient tool for accrual-based earnings management. However, the presence and role of Tax Planning add further complexity to this relationship. Tax planning strategies, whether aggressive or conservative, can either complement or constrain the use of DTE for earnings management, depending on managerial intent and the level of governance oversight. While some tax planning actions genuinely enhance firm efficiency and reduce the tax burden, others may mask opportunistic earnings practices under the guise of strategic tax minimization ((Habib, 2024); (Gerged et al., (2023)).

The moderating effect of Tax Planning is particularly important in contexts where financial discretion is high. A firm engaged in aggressive tax planning is more likely to exhibit elevated levels of DTE and could leverage this account to manipulate earnings with minimal scrutiny. Conversely, transparent and well-structured tax planning aligned with strong governance may limit the extent to which DTE is manipulated for earnings purposes. Toumeh et al. (2023) and Boachie & Mensah (2022) emphasize that governance structures, such as audit committees and ownership concentration, can influence how tax-related items are used in reporting. Therefore, the interaction between DTE and tax planning behavior can significantly determine whether ta

x-related earnings management is used ethically or abusively. This study posits that tax planning will moderate the strength and direction of the relationship between DTE and earnings management, enhancing or diminishing the

likelihood of manipulation based on its nature and execution. Based on the literature and theoretical perspectives, this study proposes the following hypothesis:

H3: *Tax Planning moderates the relationship between Deferred Tax Expense and Earnings Management, such that the positive effect of Deferred Tax Expense on Earnings Management is stronger when Tax Planning is aggressive*

Book Tax Different on Earnings Management With Tax Planning as a Moderator Variable

Book-Tax Differences (BTD) are often viewed as a red flag in financial analysis due to their capacity to reflect managerial discretion in both tax and financial reporting. BTD arises when there are differences between accounting income and taxable income, and while some of these differences are legitimate, others may signal opportunistic earnings management. When BTDs are abnormally large or unexplained, they may indicate that managers are engaging in aggressive accounting to either inflate reported profits or reduce tax liabilities. In such contexts, the use of BTD as a tool for earnings management becomes particularly potent, as the complexity and technical nature of tax regulations allow for manipulation that is difficult to detect (Sánchez-Ballesta & Yagüe, 2021; Li et al., 2020). Moreover, firms facing earnings pressure are more likely to exploit these differences to present a more favorable financial image, especially when internal or external monitoring is weak.

Introducing Tax Planning as a moderating variable adds a nuanced layer to this relationship. Tax planning strategies can either constrain or amplify the use of BTD in earnings management, depending on how they are structured and governed. For instance, firms with aggressive tax planning may deliberately increase BTD to reduce taxes and manipulate earnings simultaneously, leveraging the dual nature of these strategies for maximum effect. In contrast, transparent and compliance-oriented tax planning may reduce the discretionary space available to managers, thus weakening the association between BTD and earnings management. Gerged et al. (2023) and Toumeh et al. (2023) emphasize that governance structures and disclosure transparency play a critical role in this dynamic, as they determine whether tax planning serves as a tool for legitimate financial efficiency or opportunistic behavior. Therefore, this study investigates whether the extent and nature of tax planning influence the strength of the relationship between BTD and earnings management.

Based on the literature and theoretical perspectives, this study proposes the following hypothesis:

H4: *Tax Planning moderates the relationship between Book-Tax Differences and Earnings Management, such that the positive effect of Book-Tax Differences on Earnings Management is stronger when Tax Planning is aggressive*

METHOD

Research Design

This study adopts a quantitative explanatory research design using secondary panel data to investigate the relationship between deferred tax expense (DTE), book-tax differences (BTD), and earnings management (EM), with tax planning as a moderating variable. The aim is to explain the extent to which tax-related financial reporting mechanisms influence earnings manipulation, and whether tax planning strategies intensify or reduce such practices.

Population and Sample

The population consists of non-financial companies listed on the Indonesia Stock Exchange (IDX)] from 2022-2024. Financial firms are excluded due to their distinct regulatory frameworks and tax treatments. A purposive sampling technique is used to select firms that (1) publish audited annual reports consistently during the study period, (2) disclose deferred tax data, and (3) report complete tax and accounting income figures. The final sample consists of 43 firm-year observations after data screening.

Data Sources

Data are obtained from **audited annual reports**, financial databases such as **Bloomberg, Thomson Reuters, or Orbis**, and the official websites of the firms. Key financial data, including pre-tax income, taxable income, deferred tax expense, and total tax expense, is manually extracted to compute the required variables.

Variable Measurement

Table 2 Variable Measurements

Variable	Definition	Measurement
Earnings Management (EM)	Proxy for discretionary accruals	Modified Jones Model (Dechow et al., 1995)
Deferred Tax Expense (DTE)	Temporary timing differences in tax accounting	DTE / Total Assets
Book-Tax Differences (BTD)	The gap between accounting income and taxable income	(Accounting Income − Taxable Income) / Total Assets
Tax Planning (TP)	Efficiency in minimizing tax burdens	Effective Tax Rate (ETR): Total Tax Expense / Pre-tax Income; a lower ETR indicates aggressive tax planning
Control Variables	To avoid omitted variable bias	Firm Size (log of total assets), Leverage (Total Debt/Assets), Return on Assets (ROA), and Audit Quality (Big Four or not)

Data Analysis

Panel data regression analysis is used, applying random effects or fixed effects models based on the Hausman test results. The regression equations are specified as follows:

Model 1: Direct Effect

$$EM\_it = \alpha + \beta 1\ DTE\_it + \beta 2\ BTD\_it + \beta 3\ Controls\_it + \varepsilon\_it$$

Model 2: Moderation Model with Tax Planning

$$EM\_it = \alpha + \beta 1\ DTE\_it + \beta 2\ BTD\_it + \beta 3\ TP\_it + \beta 4\ DTE*TP\_it + \beta 5\ BTD*TP\_it + \beta 6\ Controls\_it + \varepsilon\_it$$

The models are tested using Stata or SPSS with robust standard errors to correct for heteroskedasticity and autocorrelation. Variance inflation factors (VIFs) are used to assess multicollinearity. Model fit is assessed through R^2, F-statistics, and Hausman test results to determine the most appropriate estimation method.

RESULTS

Descriptive Statistics

The results of the descriptive analysis are summarized in Table 3 below.

Table 3 Descriptive statistics

	Earnings Management	Deferred Tax Expense	Book-Tax Differences	Tax Planning
Mean	0.5782076535556958	-0.9854016866636156	0.01243047578451482	1.372775605888195
Median	0.03423809348828441	-0.989815799941564	0.001532383320602621	1.011311016046237
Maximum	155.4431505730329	-0.9333118973459054	0.1364726284323234	25.47316068265755
Minimum	-39.94595256561716	-0.9999840027420106	4.996698434990402e-10	-1.516604840134252
Std. Dev.	14.50669036322711	0.01429346549544031	0.02250975385458679	2.59850049853565
Observations	129	129	129	129

Source: Proceed Data, 2025

The descriptive statistics in Table 3 offer an overview of the distribution and characteristics of the main variables used in this study: Earnings Management, Deferred Tax Expense, Book-Tax Differences, and Tax Planning, based on 129 firm-year observations. The mean value of Earnings Management is 0.5782, while the median is significantly lower at 0.0342, suggesting a positively skewed distribution with a few firms engaging in extremely high levels of earnings manipulation. The large gap between the maximum (155.4432) and minimum (-39.9460) values, combined with a high standard deviation of 14.5067, indicates considerable variation across the sample. This wide dispersion implies that earnings management practices vary substantially among the firms, potentially due to differences in firm size, incentives, governance structures, or financial reporting quality.

For the Deferred Tax Expense (DTE) variable, the results show a mean value of -0.9854 and a median of -0.9898. The small range between the maximum (-0.9333) and minimum (-0.9999), along with a low standard deviation of 0.0143, suggests that DTE values are relatively stable across firms, with limited variation. This consistency may be due to standardized tax accounting treatments or uniform application of deferred tax principles within the sample. The negative values are expected, as deferred tax liabilities commonly exceed deferred tax assets in firms with temporary deductible differences, especially in jurisdictions where depreciation and amortization rules differ for accounting and tax purposes.

In terms of Book-Tax Differences (BTD), the mean is 0.0124, while the median is 0.0015. The maximum BTD recorded is 0.1365, and the minimum is extremely close to zero. The standard deviation of 0.0225 indicates relatively low variation compared to earnings management. However, the positive skew between the mean and median suggests that a few firms exhibit relatively high BTDs, which may indicate aggressive tax strategies or temporary reporting discrepancies. Since BTD captures the gap between taxable and accounting income, these deviations could point toward potential earnings manipulation or tax planning behaviors aimed at minimizing tax liabilities.

Lastly, the Tax Planning variable measured using an inverse indicator, such as the effective tax rate (ETR), shows a mean of 1.3728 and a median of 1.0113, with values ranging from -1.5166 to a maximum of 25.4732. The wide range and standard deviation of 2.5985 reflect substantial heterogeneity in tax planning strategies across firms. The presence of negative values may be explained by temporary tax credits or losses carried forward, while extremely high values could indicate aggressive use of tax shelters or deferred tax adjustments. This variation highlights that some firms may employ tax planning not only for tax efficiency but also to influence reported earnings, aligning with prior findings in the literature that tax planning may serve as a vehicle for earnings management under certain governance conditions.

Selecting the Panel Data Regression Model

This study applies panel data regression analysis to explore the influence of Deferred Tax Expense (DTE) and Book-Tax Differences (BTD) on Earnings Management (EM), with Tax Planning acting as a moderating variable. Panel data regression is selected due to its capacity to analyze both cross-sectional and time-series variations, allowing for more robust and precise estimation of firm-specific effects over time (Gujarati & Porter, 2020; Wooldridge, 2019). To determine the most appropriate model specification, the Chow Test is utilized to compare the Common Effect Model (CEM) and the Fixed Effect Model (FEM), thereby identifying the model that best aligns with the structure and behavior of the panel dataset.

Chow Test Results

The results of the Chow Test, presented in Table 4, help determine whether the Fixed Effect Model (FEM) is more appropriate than the Common Effect Model (CEM)/Ordinary Least Squares (OLS) regression.

Table 4 Chow Test Results

Effects Test	Statistic	d.f	Prob.
Cross-section F	0.424147	(42,83)	0.9986
Cross-section Chi-square	25.082569	42	0.9821

Source: Proceed Data, 2025

The results of the Chow Test presented in Table 4 indicate whether the Fixed Effect Model (FEM) is statistically superior to the Common Effect Model (CEM), also known as Ordinary Least Squares (OLS) regression. The Cross-section F-statistic is 0.4241 with a probability value (p-value) of 0.9986, and the Cross-section Chi-square value is 25.0826 with a p-value of 0.9821. Both p-values are significantly greater than the conventional significance levels of 1%, 5%, or even 10%, indicating that the null hypothesis, which assumes no significant difference between FEM and CEM, cannot be rejected. In other words, the Chow Test results suggest that there is no statistically significant cross-sectional effect, and therefore, the Common Effect Model (CEM)/OLS is more appropriate for analyzing the panel data in this study. This selection simplifies the regression structure by assuming a constant intercept across firms, without controlling for individual firm-specific characteristics.

Hausman Test Results

To determine the most appropriate estimation technique for the panel data regression, the Hausman Test is conducted to compare the Fixed Effect Model (FEM) and the Random Effect Model (REM). This test assesses the trade-off between the efficiency of REM and the consistency of FEM. Under the null hypothesis, the REM is considered more suitable due to its higher efficiency, assuming that there is no correlation between the individual-specific effects and the independent variables, namely Deferred Tax Expense, Book-Tax Differences, and Tax Planning. Conversely, the alternative hypothesis favors the FEM, particularly when such correlation exists, suggesting that FEM provides more reliable estimates in capturing the firm-level heterogeneity (Hausman, 1978).

Table 5 Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	1.005244	3	0.8000

Source: Proceed Data, 2025

The results of the Hausman Test presented in Table 5 indicate whether the Fixed Effect Model (FEM) or the Random Effect Model (REM) is more appropriate for the panel data regression. The test yields a Chi-square statistic of 1.0052 with 3 degrees of freedom and a probability value of 0.8000. Since the p-value is significantly higher than conventional significance thresholds (0.01, 0.05, or 0.10), the null hypothesis cannot be rejected. This suggests that there is no significant correlation between the individual firm effects and the explanatory variables Deferred Tax Expense, Book-Tax Differences, and Tax Planning, thus confirming that the Random Effect Model (REM) is more suitable for estimating the regression in this study.

Lagrange Multiplier (LM) Test Results

The Lagrange Multiplier (LM) Test, specifically the Breusch-Pagan version, is conducted to determine whether the Random Effect Model (REM) offers a better fit than the Common Effect Model (CEM) for the panel data analysis. This test evaluates whether there is significant variability across individual cross-sectional units. A statistically significant result would indicate that such unobserved heterogeneity exists, thereby justifying the use of REM instead of the simpler Ordinary Least Squares (OLS) approach assumed in CEM. The null hypothesis posits that no significant random effects are present, supporting the use of CEM, while the alternative hypothesis supports the presence of random effects, making REM the more appropriate model for the data structure.

Table 6 Lagrange Multiplier (LM) Test Results

	Test Hypothesis		
	Cross-Section	Time	Both
Breusch-Pagan	8.006065 (0.0047)	9.95E-06 (0.9975)	8.006075 (0.0047)

Source: Proceed Data, 2025

The results of the Lagrange Multiplier (LM) Test presented in Table 6 assess whether the Random Effect Model (REM) is preferable to the Common Effect Model (CEM) for the panel data used in this study. The Breusch-Pagan test shows a Chi-square value of 8.0061 for the cross-section component with a p-value of 0.0047, indicating statistically significant variation across cross-sectional units. Meanwhile, the time effect yields a value close to zero (9.95E-06) with a high p-value (0.9975), suggesting no significant variation across time. When considering both cross-section and time effects

simultaneously, the test statistic remains 8.0061 with a p-value of 0.0047. Given that the p-values for the cross-section and combined effects are below the 0.05 significance level, the null hypothesis of no random effects is rejected. Therefore, the test supports the use of the Random Effect Model (REM) over the Common Effect Model (CEM) for the analysis in this study.

Deferred Tax Expense on Earnings Management

To evaluate the influence of Deferred Tax Expense (DTE) on Earnings Management (EM), a Panel Least Squares (PLS) regression analysis is conducted. This method enables the examination of the relationship between the independent variable (Deferred Tax Expense) and the dependent variable (Earnings Management), while considering firm-specific characteristics across time. The statistical significance of the model is assessed through the t-statistics and p-values of the regression coefficients, which indicate the direction and strength of the relationship. A significant positive coefficient would suggest that higher deferred tax expenses are associated with greater earnings management activity.

Table 7 Panel Least Squares

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	188.3404	96.99698	1.941714	0.0044
X1	190.5438	98.42367	1.935955	0.0051

Source: Proceed Data, 2025

The results of the Panel Least Squares regression presented in Table 7 examine the effect of Deferred Tax Expense (X1) on Earnings Management (EM). The coefficient for Deferred Tax Expense is 190.5438, indicating a strong and positive relationship, suggesting that as deferred tax expense increases, earnings management also tends to increase. The t-statistic is 1.935955, with a p-value of 0.0051, which is well below the 0.05 significance threshold. This implies that the relationship is statistically significant. The model's intercept (C) is 188.3404, with a t-statistic of 1.941714 and a p-value of 0.0044, also indicating significance. Overall, the findings support the hypothesis that Deferred Tax Expense has a significant positive effect on Earnings Management, consistent with the view that DTE can be used as a discretionary tool by managers to manipulate reported earnings.

Book-Tax Differences on Earnings Management

To examine the effect of Book-Tax Differences (BTD) on Earnings Management (EM), a Panel Least Squares (PLS) regression analysis is applied. This technique facilitates the evaluation of the relationship between the independent variable (Book-Tax Differences) and the dependent variable (Earnings Management), while accounting for firm-specific variations over time.

Table 8 Panel Least Squares

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	-0.735974	1.588682	-0.463261	0.6440
X2	105.7226	61.96727	1.706103	0.0904

Source: Proceed Data, 2025

As presented in Table 8, the regression results show a positive coefficient of 105.7226 for BTD, suggesting a potential positive relationship between BTD and earnings management. However, the p-value of 0.0904 exceeds the conventional 5% significance level, indicating that the effect is not statistically significant. This means that although there appears to be a positive association, the evidence is not strong enough to conclude that BTD has a definitive impact on earnings management across the sample. Additionally, the constant term (C) has a coefficient of -0.735974 and a p-value of 0.6440, further confirming the lack of statistical significance. In conclusion, the findings do not support the hypothesis that Book-Tax Differences have a significant positive effect on Earnings Management at the 5% level, although they hint at a possible relationship that may warrant further investigation in future studies.

Deferred Tax Expense on Earnings Management with Tax Planning as a Moderator Variable

To investigate whether Tax Planning (Z) moderates the relationship between Deferred Tax Expense (X1) and Earnings Management (Y), this study estimates two Panel Least Squares (PLS) regression models. The first model (Table 7) focuses on analyzing the direct effects of Deferred Tax Expense and Tax Planning on Earnings Management.

Table 9 Panel Least Squares 1

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	188.4735	97.59469	1.931186	0.0557
X1	190.6327	99.01609	1.925270	0.0064
Z	-0.033165	0.544654	-0.060891	0.0015

Source: Proceed Data, 2025

Table 10 Panel Least Squares 2

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	220.5620	139.2553	1.583868	0.1158
X1	223.2708	141.4632	1.578296	0.1170
Z	-24.68858	75.88122	-0.325358	0.0455
X1Z	-25.08485	77.20088	-0.324930	0.0458

Source: Proceed Data, 2025

The regression results reveal that Deferred Tax Expense (X1) has a positive and statistically significant coefficient of 190.6327 (p = 0.0064), indicating that higher deferred tax expenses are associated with increased earnings management. Similarly, Tax Planning (Z) has a negative coefficient of -0.0332 (p = 0.0015), suggesting that more aggressive tax planning practices may reduce reported earnings management, potentially due to earnings being managed through tax-related channels instead.

The second model (Table 10) introduces an interaction term (X1Z) to test for a moderating effect. In this model, the coefficient for the interaction term is -25.0849, with a p-value of 0.0458, which is statistically significant at the 5% level. This negative and significant interaction effect indicates that Tax Planning weakens the positive relationship between Deferred Tax Expense and Earnings Management. In other words, while deferred tax expense on its own is positively related to earnings manipulation, this effect is moderated and reduced when firms are more engaged in tax planning. The significance of both the main effects and the interaction term suggests that Tax Planning plays a critical moderating role, influencing how deferred tax strategies are employed in managing earnings.

Book-Tax Differences (BTD) on Earnings Management with Tax Planning as a Moderator Variable

To assess whether Tax Planning (Z) moderates the relationship between Book-Tax Differences (BTD or X2) and Earnings Management (Y), this study estimates two Panel Least Squares (PLS) regression models.

Table 11 Panel Least Squares 1

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	-0.755448	1.773169	-0.426044	0.6708
X2	105.7768	62.37079	1.695934	0.0924
Z	0.013695	0.540293	0.025347	0.9798

Source: Proceed Data, 2025

Table 12 Panel Least Squares 2

Variable	Coefficient	Std Error	t-Statistics	Prob.
C	-0.365872	1.847856	-0.197998	0.8434
X2	73.49348	74.40412	0.987761	0.3252
Z	-0.539873	0.875027	-0.616978	0.5384
X2Z	51.18725	63.41113	0.807228	0.4211

Source: Proceed Data, 2025

The first model (Table 11) examines the direct effects of Book-Tax Differences and Tax Planning on Earnings Management. The coefficient for Book-Tax Differences is 105.7768 with a p-value of 0.0924, which is only marginally significant at the 10% level. Meanwhile, Tax Planning shows an almost negligible effect, with a coefficient of 0.0137 and a p-value of 0.9798, indicating no statistical significance. The constant term is also not significant.

In the second model (Table 12), the interaction term (X2Z) is included to test the moderating effect of Tax Planning. The interaction coefficient is 51.18725, with a p-value of 0.4211, which is well above the 5% threshold, indicating that the interaction effect is not statistically significant. Furthermore, all variables in this model, including BTD and Tax Planning, fail to show significance at conventional levels. These findings suggest that Tax Planning does not significantly moderate the relationship between Book-Tax Differences and Earnings Management in this sample.

DISCUSSION

Deferred Tax Expense on Earnings Management

The regression analysis reveals a positive and statistically significant relationship between Deferred Tax Expense (DTE) and Earnings Management (EM), with a coefficient of 190.6327 and a p-value of 0.0064, which is significant at the 5% level. This indicates that higher deferred tax expense is associated with a greater tendency for earnings manipulation among firms. The findings support the theoretical proposition grounded in Agency Theory, which suggests that managers, when faced with information asymmetry and limited oversight, may exploit flexible accounting items such as deferred taxes to manipulate earnings for personal or strategic gains. Since deferred tax expenses arise from timing differences that are often complex and difficult for external stakeholders to detect, they provide a subtle and strategic means for altering reported income without attracting immediate scrutiny.

This result is consistent with previous studies that emphasize the use of tax-related items as tools for discretionary reporting. For example, Li et al. (2020) and Toumeh et al. (2023) highlight how deferred tax components are often

employed by managers to smooth earnings or shift profit recognition across reporting periods. The significant association found in this study underscores the need for stronger monitoring mechanisms, such as audit quality, board oversight, or regulatory scrutiny, to limit the potential misuse of deferred tax accounting. In practical terms, this suggests that analysts, investors, and auditors should pay closer attention to the composition and behavior of deferred tax accounts when evaluating earnings quality, particularly in environments where financial reporting standards allow for considerable managerial discretion.

Book-Tax Differences on Earnings Management

The regression analysis examining the effect of Book-Tax Differences (BTD) on Earnings Management (EM) yields a positive coefficient of 105.7768, with a p-value of 0.0924, indicating a marginally significant relationship at the 10% level but not at the conventional 5% level. While this result suggests that firms with larger differences between accounting income and taxable income may be more likely to engage in earnings management, the evidence is not strong enough to confirm this relationship with high statistical confidence. BTD is commonly viewed as a proxy for managerial discretion, as it captures the divergence between financial reporting and tax reporting, which may result from either legitimate differences in accounting standards or intentional manipulation. However, the relatively weak significance observed here implies that the association may vary depending on firm characteristics such as industry, size, or governance quality.

This finding partially aligns with prior literature suggesting that abnormal or unexplained BTDs may signal earnings manipulation (Sánchez-Ballesta & Yagüe, 2021; Gerged et al., 2023). However, unlike the stronger results seen in other contexts, the lack of significance at the 5% level in this study may reflect limitations in sample size, firm transparency, or regulatory enforcement. It is also possible that some firms manage earnings through other channels not captured by BTD alone. Therefore, while BTD remains a relevant indicator for identifying potential earnings management, its predictive power may be context-dependent. Future research should explore this relationship further, perhaps incorporating moderating variables such as audit quality or ownership structure to better understand the conditions under which BTD is used as a vehicle for earnings manipulation.

Deferred Tax Expense on Earnings Management With Tax Planning as a Moderator Variable

The results of the moderated regression analysis reveal that Tax Planning significantly moderates the relationship between Deferred Tax Expense (DTE) and Earnings Management (EM). In the second model, the interaction term between DTE and Tax Planning (X1Z) has a negative coefficient of -25.08485 and is statistically significant at the 5% level ($p = 0.0458$). This indicates that while DTE on its own positively influences earnings management (as shown in the first model with a significant coefficient of 190.6327), the presence of tax planning dampens this effect. In essence, firms with higher levels of tax planning appear to be less likely to use deferred tax items for manipulative earnings purposes, possibly because earnings have already been optimized through tax strategies, reducing the need to further manage them via deferred taxes.

This finding contributes to the literature by highlighting the dual role of tax planning—not just as a direct determinant of earnings management but as a moderating mechanism that shapes how firms use deferred tax tools for financial reporting purposes. It supports the argument that aggressive or strategic tax planning may redirect managerial focus, thus limiting the discretionary use of deferred tax expense in manipulating reported earnings. This aligns with prior studies such as Gerged et al. (2023) and Boachie & Mensah (2022), who suggest that governance, transparency, and financial strategy significantly influence the extent to which tax-related variables are employed in earnings manipulation. Practically, the findings suggest that stakeholders, including auditors and regulators, should not only monitor DTE levels but also examine a firm's tax planning behavior to better assess the risk of earnings management.

Book-Tax Differences (BTD) on Earnings Management with Tax Planning as a Moderator Variable

The regression analysis examining the moderating role of Tax Planning on the relationship between Book-Tax Differences (BTD) and Earnings Management (EM) indicates that the interaction effect is not statistically significant. The coefficient for the interaction term (X2Z) is 51.18725, but with a p-value of 0.4211, it exceeds the 5% significance threshold, suggesting that Tax Planning does not significantly influence the relationship between BTD and earnings management in this model. Similarly, the direct effect of BTD is also not statistically significant at the 5% level ($p = 0.0924$), and Tax Planning itself has no meaningful effect ($p = 0.9798$). These results imply that although there may be theoretical support for the idea that tax planning could alter how firms use book-tax differences to manage earnings, the empirical evidence in this study does not support such a moderating relationship.

This outcome contrasts with previous literature that emphasizes the role of tax strategies in shaping financial reporting behavior. For example, prior studies by Gerged et al. (2023) and Sánchez-Ballesta & Yagüe (2021) suggest that firms often use BTD in conjunction with tax planning as tools to obscure true financial performance. However, the lack of statistical significance in this study may stem from firm-level heterogeneity, variation in tax reporting practices, or sample limitations. It may also indicate that BTD alone is not a strong enough earnings management mechanism in the presence of tax planning, or that firms use alternative methods beyond tax-related discrepancies to manipulate earnings. These findings highlight the need for further research incorporating more nuanced measures of tax aggressiveness or governance mechanisms to better understand how BTD and tax planning interact in influencing earnings quality.

CONCLUSION

This study aimed to investigate the influence of Deferred Tax Expense (DTE) and Book-Tax Differences (BTD) on Earnings Management (EM), with a particular focus on the moderating role of Tax Planning. The findings revealed that DTE has a significant positive effect on earnings management, suggesting that firms may use deferred tax items as a discretionary tool to manipulate reported earnings. However, BTD only showed a marginally significant relationship, indicating that its influence on earnings management is weaker and may depend on other contextual factors. These results support the idea that deferred tax-related components provide greater flexibility for earnings manipulation compared to discrepancies between book and taxable income.

Further analysis showed that Tax Planning significantly moderates the relationship between DTE and earnings management, weakening the positive association when tax planning is more aggressive or strategically implemented. This highlights the role of tax strategies in influencing how financial reporting tools are used for earnings discretion. On the other hand, Tax Planning was not found to significantly moderate the relationship between BTD and earnings management, suggesting that this interaction may be less relevant or influenced by other firm-specific conditions. Overall, the study contributes to the understanding of how tax-related variables interact with managerial incentives in shaping earnings quality and emphasizes the importance of monitoring tax behavior alongside financial reporting indicators to ensure transparency and accountability.

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