



BOOK-TAX CONFORMITY INFLUENCE ON EARNING MANAGEMENT BEHAVIOUR: MITIGATING ROLES OF TAX CONSULTANTS AND AUDIT OVERSIGHT IN NIGERIA

Achu Felix Adie

Department of Accountancy,
University of Cross River State, Calabar, Nigeria.
felix_achu@yahoo.com

Ejoh, Ndifon Ojong

Department of Accountancy,
University of Cross River State, Calabar, Nigeria.
ndifonejoh@unicross.edu.ng, ndifon.ejoh@yahoo.com.

Abstract: This study investigates the influence of Book-Tax Differences (BTD) on earnings management practices among manufacturing firms listed on the Nigerian Exchange Group over the period 2010–2024. Using an unbalanced panel data of 26 firms with 510 firm-year observations, the study employs Ordinary Least Squares (OLS) regression to examine both Discretionary Accruals-based Earnings Management (DAC_EM) and Real Earnings Management (REAL_EM). The results reveal that higher BTD, particularly when positive, significantly increases both discretionary accrual and real earnings management, confirming that firms exploit BTD to manipulate reported earnings. Heterogeneity analysis show that low book-tax conformity drive earnings management while high book-tax conformity curbs earnings management. Furthermore, the study examines the moderating effects of external tax consultants and audit oversight. Findings indicate that both mechanisms mitigate the association between BTD and discretionary accrual-based earnings management, as interaction terms are statistically insignificant. These results highlight the critical role of BTD in shaping earnings management strategies and underscore the importance of professional and regulatory oversight in curbing aggressive accounting practices in emerging markets.

Keywords: *Earnings management, book-tax differences, engagement of tax consultants, Audit oversight.*

1. Introduction

Earnings management has long been a central concern in accounting research, as it represents a key mechanism through which managers can manipulate financial reports to meet personal, contractual, or market-driven objectives (Healy & Wahlen, 1999; Dechow et al., 2010). One prominent determinant of managerial discretion in earnings reporting is the book–tax relationship, often measured in terms of book–tax conformity or divergence. Book–Tax Differences (BTDs) arise when financial accounting income diverges from taxable income due



to differences in recognition rules, timing of expenses, or tax planning strategies (Desai, 2005; Hanlon & Heitzman, 2010). While some divergence reflects legitimate operational or regulatory factors, these differences also create opportunities for earnings management, enabling managers to exploit gaps between accounting and tax reporting to achieve favourable financial outcomes without immediate detection.

The prevalence of BTDs has been linked to increased accrual-based and real earnings management, particularly in contexts where corporate governance and external monitoring are weak (Graham et al., 2005; Desai & Dharmapala, 2006). Despite the extensive literature on book–tax differences, prior studies have largely focused on the direct relationship between BTDs and earnings management, often overlooking the mitigating mechanisms that may constrain managerial opportunism. Specifically, the role of external expertise and oversight, such as tax consultants and audit monitoring, remains underexplored in moderating the influence of BTDs on earnings management behaviours. Tax consultants bring specialized knowledge and procedural guidance that can limit aggressive reporting, while audit oversight functions as an independent control, ensuring compliance with accounting standards and reinforcing transparency. The potential for these mechanisms to curtail the opportunistic exploitation of book–tax differences present a critical area for investigation.

The research problem addressed in this study is the tension between managerial discretion afforded by BTDs and the effectiveness of institutional mechanisms in mitigating earnings management. Existing studies provide inconclusive evidence on whether external interventions, such as professional tax advice or audit scrutiny, meaningfully constrain earnings management arising from book–tax divergences, particularly in emerging market contexts characterized by high information asymmetry and regulatory complexity. This gap leaves both academics and policymakers with limited guidance on the effectiveness of these mechanisms in promoting high-quality financial reporting.

To address these gaps, this study examines the relationship between book–tax conformity and earnings management opportunism, moderating effects of tax consultant engagement and audit oversight.



6. Literature review and hypotheses development

This study contributes to the literature in several significant ways. First, it advances the understanding of how book–tax differences influence earnings management behaviour, offering nuanced insights into the contextual factors that shape managerial discretion. Second, it provides practical implications for firms, regulators, and policymakers, highlighting the importance of leveraging professional tax expertise and robust audit oversight to enhance financial transparency and reduce opportunistic reporting. Third, by focusing on emerging market contexts, the study addresses a critical empirical gap, offering evidence from settings where corporate governance structures and external monitoring mechanisms may differ substantially from developed markets.

Book tax conformity and earnings management

Book–tax differences (BTDs) occur when there is a divergence between accounting income reported in financial statements and taxable income reported to tax authorities. These differences can arise from timing differences, temporary or permanent deductions, or variations in the recognition of revenues and expenses between accounting and tax rules (Desai, 2005; Hanlon & Heitzman, 2010). While BTDs are often driven by legitimate differences in regulatory frameworks, they also provide managers with opportunities for opportunistic behavior in financial reporting.

From an agency theory perspective, managers may exploit BTDs to pursue personal objectives, such as meeting earnings targets, maximizing performance-based bonuses, or influencing stock prices, at the expense of shareholders (Watts & Zimmerman, 1986). Because BTDs create a gap between book and taxable income, they allow managers to manipulate reported earnings without immediate detection by external stakeholders. For example, managers may accelerate or defer expenses, overstate or understate provisions, or engage in discretionary accruals, all of which contribute to earnings management.

BTDs are particularly attractive for earnings management because they provide plausible deniability. Since differences between accounting and tax reporting are common and often complex, managers can mask manipulative activities under the guise of legitimate tax or accounting treatment. This creates an environment where financial reporting is less transparent, and managerial discretion is expanded (Hanlon & Heitzman, 2010; Chen et al., 2010).



Empirical studies support this mechanism. For instance, Graham et al. (2005) and Desai and Dharmapala (2006) find that firms with larger book–tax differences exhibit higher levels of accrual-based earnings management and real earnings management. The presence of BTDs allows managers to adjust either accruals or real operational decisions, such as discretionary expenses, production levels, or sales timing, to achieve desired financial outcomes.

Moreover, the effect of BTDs on earnings management may be more pronounced in firms with weaker corporate governance or less effective monitoring mechanisms. In such settings, managers face fewer constraints, and the informational asymmetry between managers and shareholders is higher, amplifying the potential for earnings manipulation (Dechow et al., 2010).

This paper hypothesizes that higher book-tax conformity may be associated with lower levels of earnings management for two main reasons. First, as proponents argue, high book-tax conformity can reduce incentives to manage earnings by linking accounting outcomes more closely to tax consequences. Upward earnings management triggers higher taxes, while downward management to reduce reported earnings simultaneously lowers taxable income. As a result, managers face weaker incentives to manipulate earnings in environments with high book-tax conformity, all else being equal.

Second, in a highly conformed system, tax rules often serve as the basis for reported income due to political and regulatory pressures, as noted by Hanlon and Shevlin (2005). Tax rules generally provide less managerial discretion than accounting rules because their objectives differ. Accrual accounting recognizes revenues when earned and matches expenses to the associated revenues, requiring significant estimation for items such as warranties, bad debts, and contingent liabilities. In contrast, tax law more closely resembles cash-basis accounting and typically demands verifiable evidence for deductions, such as proof of uncollectible debts or costs incurred to repair defective items. Tax authorities prioritize the taxpayer's ability to pay and the collection of sufficient revenues, rather than measuring economic performance. Therefore, as book income aligns more closely with taxable income, managers' discretion is constrained, reducing their ability to manipulate earnings, even if their incentives remain unchanged. Consequently, higher book-tax conformity is expected to be associated with lower levels of accrual-based earnings management.



Thus, the divergence between accounting and taxable income provides managers with the flexibility to manipulate reported earnings, potentially misleading investors and other stakeholders. In other words, higher book–tax differences create both the opportunity and motivation for earnings management.

Hypothesis 1 (H1): Book–tax difference is positively associated with earnings management.

The moderating role of tax consultants

Book–tax differences arise when the accounting income reported to shareholders diverges from taxable income reported to tax authorities. Managers can exploit these differences to manipulate earnings, either by smoothing income across periods, accelerating or deferring expenses, or engaging in other forms of discretionary reporting (Desai, 2005; Hanlon & Heitzman, 2010). Such manipulations can mislead investors, reduce transparency, and increase agency conflicts between managers and shareholders.

However, the engagement of professional tax consultants can mitigate these opportunistic behaviors. Tax consultants bring specialized knowledge of tax codes, regulatory frameworks, and compliance practices, which equips firms with the ability to optimize tax positions without resorting to aggressive accounting maneuvers (Blaylock et al., 2015). Unlike internal staff, external consultants have reputational incentives to provide accurate guidance and ensure that tax planning adheres to both statutory requirements and generally accepted accounting principles. Their involvement acts as a deterrent to managerial discretion, as deviating from professional advice can carry legal, reputational, and financial risks for the firm.

From an agency theory perspective, managers may pursue personal or short-term organizational objectives that conflict with shareholder interests by exploiting book–tax differences. Tax consultants function as an external monitoring mechanism that aligns managerial actions with shareholder goals. By providing independent oversight and professional judgment, consultants reduce information asymmetry between managers, regulators, and investors, making it more difficult for managers to manipulate earnings without detection (Armstrong et al., 2015).

Additionally, resource-based theory suggests that tax consultants represent a form of specialized human capital that enhances a firm’s internal capabilities in tax planning and



compliance. Firms that leverage these external resources are better equipped to implement complex tax strategies responsibly, integrate tax planning with corporate governance, and maintain high-quality financial reporting standards (Huse & Gabrielsson, 2004). Their involvement allows firms to navigate increasingly complex regulatory environments while reducing reliance on internal discretion that could lead to earnings manipulation.

Empirical evidence supports this reasoning. Chyz et al. (2013) find that firms engaging professional tax advisors exhibit lower levels of aggressive tax avoidance and earnings management. Similarly, evidence from cross-country studies suggests that advisory oversight from tax consultants strengthens the credibility of financial statements and reduces the likelihood of accounting distortions associated with book–tax differences (Johannesen et al., 2018).

Taken together, these arguments suggest that the engagement of tax consultants weakens the positive relationship between book–tax differences and earnings management. By constraining managerial discretion, enhancing compliance, and providing professional oversight, tax consultants play a critical role in mitigating the opportunistic behavior that arises from the flexibility offered by book–tax differences.

Hypothesis 2 (H2): The engagement of tax consultants diminishes the positive relationship between book–tax difference and earnings management.

The moderating role of audit oversight

The exploitation of book–tax differences has been widely recognized as a channel through which firms can engage in earnings management, either by accelerating or deferring revenue and expenses for financial reporting purposes, while taking advantage of temporary differences for tax reporting (Desai & Dharmapala, 2006; Chen et al., 2010). Such opportunistic behavior allows managers to manipulate reported earnings, smooth income, or meet performance targets, often without immediate detection. However, the ability to engage in these strategies depends on the strength of internal and external monitoring mechanisms within the firm’s governance structure.

Audit oversight of taxation serves as a critical external monitoring mechanism that can effectively limit managerial discretion over tax-related reporting. Auditors are tasked with



reviewing tax provisions, deferred tax calculations, and the alignment between financial statements and tax filings. This oversight improves transparency and ensures that accounting treatments comply with both statutory tax rules and accounting standards (Bedard & Johnstone, 2004; Knechel et al., 2013). By scrutinizing management's tax-related decisions, auditors reduce the scope for using book–tax differences opportunistically, thereby lowering the potential for earnings manipulation.

Moreover, audit oversight imposes reputational, regulatory, and legal costs on managers who attempt aggressive tax planning or manipulative financial reporting. The presence of audit scrutiny increases the perceived likelihood of detection and penalty, thereby acting as a deterrent against earnings management. Strong audit oversight also reinforces internal control systems, ensuring consistent recording of transactions and improving the quality and reliability of financial reporting (Carcello et al., 2002). In addition, auditors' assessment of tax risk encourages firms to adopt more conservative and transparent reporting practices, which further constrains the use of book–tax differences for earnings management.

From an agency theory perspective, managers are prone to opportunistic behavior when monitoring is weak, particularly in areas like taxation where complexity and discretion provide room for manipulation. Audit oversight aligns managerial incentives with shareholder interests by limiting discretion and ensuring that reported earnings accurately reflect economic performance. It also enhances accountability, as auditors can signal discrepancies in reporting to the board or regulators, thereby reducing information asymmetry.

Taken together, these arguments suggest that the positive relationship between book–tax differences and earnings management is likely to be mitigated in firms with strong audit oversight of taxation. In other words, managerial opportunism is constrained both by the increased probability of detection and by the institutional mechanisms that promote transparency, compliance, and ethical reporting behavior.

Hypothesis 3 (H3): Audit oversight of taxation weakens the positive relationship between book–tax difference and earnings management.

7. Methodology

This study examines an emerging-market sample of manufacturing firms listed on the Nigerian Exchange Group over the period 2010 to 2024, covering 15 years. The initial population



consisted of 45 listed manufacturing firms; however, only 26 firms were included in the analysis due to the availability of data required for constructing the study variables (a complete list of these firms is provided in the appendix). The final sample consists of an unbalanced panel of 510 firm-year observations. Data for the study were extracted from the financial reports of the selected companies and it was analysed using multiple regression as a tool of analysis of the secondary data collected for the study.

Variable Measurement

Dependent Variable – Earnings Management

In this study, earnings management is proxied by Kothari et al. (2005) performance-based discretionary accruals and Rowchudry et al (2006) real earnings management models.

Discretionary accruals earnings management is estimated through the regression below:

$$\frac{TACC_{it}}{TA_{it-1}} = \alpha + \beta_1 \frac{1}{TA_{it-1}} + \beta_2 \frac{\Delta REV_{it}}{TA_{it-1}} + \beta_3 \frac{PPE_{it}}{TA_{it-1}} + \beta_4 ROA_{it} + \varepsilon_{it}$$

Where:

$TACC_{it}$ = Total accruals for firm I in year t (Given as net income minus operating cash flows)

TA_{t-1} = Total assets for firm i in year t-1 (lagged year)

ΔREV_{it} = Change in revenues for firm I in year t-1

PPE_{it} = Property, plant, and equipment for firm i in year t

ROA_{it} = Returns on assets for firm i in year t

Discretionary accruals earnings management (DAC_EM) is the residuals estimated from the model above. The larger the residuals, the more aggressive the discretionary accruals earnings management behaviour.

Real earnings management is estimated through three regressions – production cost manipulation (PRODX), discretionary expense manipulation (DISX), and sales manipulation (CFOX) below:

$$\frac{PROD_{it}}{TA_{it-1}} = \alpha + \beta_1 \frac{1}{TA_{it-1}} + \beta_2 \frac{REV_{it}}{TA_{it-1}} + \beta_3 \frac{\Delta REV_{it}}{TA_{it-1}} + \varepsilon_{it}$$

$$\frac{DISX_{it}}{TA_{it-1}} = \alpha + \beta_1 \frac{1}{TA_{it-1}} + \beta_2 \frac{REV_{it}}{TA_{it-1}} + \varepsilon_{it}$$

$$\frac{CFO_{it}}{TA_{it-1}} = \alpha + \beta_1 \frac{1}{TA_{it-1}} + \beta_2 \frac{REV_{it}}{TA_{it-1}} + \beta_3 \frac{\Delta REV_{it}}{TA_{it-1}} + \varepsilon_{it}$$

Where:



$PROD_{it}$ = total production costs = COGS + δ Inventory

$DISX_{it}$ = discretionary selling, general and distribution expenses

CFO_{it} = cash flow from operations

TA_{t-1} = Total assets for firm i in year t-1 (lagged year)

REV_{it} = Sales revenues for firm

ΔREV_{it} = Change in revenues for firm i in year t-1

Real earnings management (REAL_EM) is the residuals estimated from each of the three model above, representing abnormal production costs (AbnPROD), abnormal expenses (AbnDISX) and abnormal sales (AbnCFO). The composite REAL_EM is mathematically expressed as:

$$REAL_EM = AbnPROD + (- * AbnDISX) + (- * AbnCFO).$$

The larger the composite value, the more aggressive the real earnings management behaviour.

Independent Variable – Book-tax difference

Book-tax difference is estimated as in Watrin et al. (2014) who develop an empirical and continuous measure that correctly reflects firm-specific characteristics. This approach allows for quantification of different degrees of conformity and changes in the degree of conformity during the period of analysis. Book-tax difference is measured as the gap between accounting income before tax and taxable income. It is expressed as follows:

$$BTD_{it} = PBT_{it} - \left(\frac{Taxation_{it}}{TaxRate_{kt}} \right)$$

Where:

BTD is book-tax difference; PBT is pre-tax book income (i.e. profit before taxes reported in the income statement); Taxation is total taxation from income statement; and Tax Rate is the statutory corporate income tax rate in Nigeria given each year. Since the corporate tax rate in Nigeria has remained at 30% from 2006, this paper uses the fixed rate of 30% across all the fifteen years (2010-2025).

The alternative measure of book-tax difference (Positive_BTD) is constructed as a binary indicator variable that equals one when profit before tax (PBT) exceeds taxable income, and zero otherwise. A positive value captures instances where firms report higher financial income (to impress investors and the market) and lower taxable income (in order to pay lower tax). This is consistent with either upward earnings management in financial reporting or aggressive



tax140inimizationn strategies in fiscal reporting. This measure is particularly useful as it isolates directional divergences in book–tax reporting, allowing us to distinguish cases of opportunistic income shifting and potential misalignment between tax and financial accounting incentives.

Moderator Variables

This paper employs two moderator variables: tax consultants and audit oversight of tax reporting.

First, tax consultants (TCON) are measured using a dummy variable that equals 1 if a firm discloses the engagement of external tax consultants or advisors for tax planning, compliance and reporting in a given year, and 0 otherwise. This coding reflects the presence of specialized tax expertise that may influence the extent to which managers exploit discretion in financial and tax reporting.

Second, audit oversight of tax reporting (AOTR) is measured using a dummy variable that equals 1 if the external auditor provides explicit oversight, assurance, or audit of tax reporting practices, such as tax provisioning or effective tax rate reconciliation, and 0 otherwise. This variable captures the monitoring role of auditors in constraining aggressive tax positions and limiting the scope for earnings management through book–tax differences.

Control Variables

Consistent with prior research, this study incorporates four control variables to account for firm-specific characteristics that may confound the relationship between book–tax conformity and earnings management.

First, firm size (Size) is measured as the natural logarithm of market capitalization, which controls for scale effects, visibility, and the likelihood of regulatory or stakeholder scrutiny. Larger firms are typically subject to greater monitoring and may have more resources to manage earnings and taxes strategically.

Second, firm leverage (Lev) is calculated as the ratio of total debt to total assets. Leverage captures the influence of debt covenants and creditor monitoring, as highly leveraged firms often face stronger incentives to manage earnings to avoid covenant violations.



Third, liquidity (Lqd) is measured as the ratio of current assets to current liabilities (current ratio). This variable reflects short-term financial flexibility, as firms with weaker liquidity positions may engage in earnings management to signal financial stability.

Finally, capital expenditure intensity (Capi) is measured as capital expenditures scaled by sales. Capi controls for investment activity and growth opportunities that may affect accruals, tax positions, and overall financial reporting practices.

Model of the study

To test the main hypothesis (H1) that book-tax difference influences earnings management behaviour, this paper adopts ordinary least square (OLS) regression, specified as follows:

$$DAC_EM = \alpha + \beta_1 BTD_{it} + \beta_2 Size_{it} + \beta_2 Lev_{it} + \beta_2 Lqd_{it} + \beta_2 Capexi_{it} + \varepsilon_{it}$$

$$REAL_EM = \alpha + \beta_1 BTD_{it} + \beta_2 Size_{it} + \beta_2 Lev_{it} + \beta_2 Lqd_{it} + \beta_2 Capexi_{it} + \varepsilon_{it}$$

To confirm H1, it is expected appriori that β_1 should be positive and significant.

To test the H2 and H3, this paper adopts an interaction model regression, focusing on the coefficient of the interaction between BTD and each moderator variable, as specified below:

$$DAC_{EM} = \alpha + \beta_1 (TCON \times BTD)_{it} + \beta_2 BTD_{it} + \beta_3 TCON_{it} + \gamma Controls_{it} + \varepsilon_{it}$$

$$DAC_{EM} = \alpha + \beta_1 (AOTR \times BTD)_{it} + \beta_2 BTD_{it} + \beta_3 AOTR_{it} + \gamma Controls_{it} + \varepsilon_{it}$$

To confirm H2 and H3, it is expected that the coefficients of interaction (β_1) would be insignificant, indicating that tax consultants and audit oversight diminish the association.

8. Results and Discussion

Summary Statistics

Table 1: Descriptive statistics

Variables	Obs	Mean	Std. Dev.	Min	Max
DAC_EM	254	-0.0031	0.197	-1.205	0.873
REAL_EM	246	-0.0049	0.502	-1.566	1.992
BTD	283	-0.0478	0.632	-5.384	2.687
Positive_BT D	283	0.636	0.482	0.000	1.000
TC ON	297	0.488	0.501	0.000	1.000
AOTR	297	0.492	0.501	0.000	1.000
Size	498	8.364	2.454	2.018	15.738
Lev	291	0.292	0.271	0.000	1.500



Lqd	297	1.253	0.742	0.010	7.515
Capi	276	284.022	4716.935	0.000	78,363.71

Source: STATA OUTPUT

Table 1 presents the descriptive statistics of the variables employed in the study. The discretionary accrual-based earnings management measure (DAC_EM) has a mean of -0.0031 , with values ranging between -1.205 and 0.873 , while real earnings management (REAL_EM) records a mean of -0.0049 , suggesting relatively balanced distribution around zero. The average book–tax difference (BTD) is -0.0478 , with considerable variation (Std. Dev. = 0.632), reflecting heterogeneity across firms. Approximately 64% of the observations report positive BTD values. Regarding moderating variables, about 49% of firms engage tax consultants (TCON), and 49% are subject to audit oversight of tax reporting (AOTR). Among controls, the mean firm size (log market capitalization) is 8.364 , leverage averages 0.292 , liquidity (current ratio) is 1.253 , while capital expenditure intensity (Capi) exhibits high dispersion, reflecting significant variation in investment strategies across firms.

Correlation analysis

Table 2: Correlation analysis

Variables	1	2	3	4	5	6	7	8	9	10
DAC_EM	1									
REAL_EM	0.693	1								
BTD	0.058	-	1							
		0.054								
Positive_BTD	0.187	0.133	0.313	1						
TCON	-	-	0.177	0.255	1					
	0.044	0.156								
AOTR	0.049	0.159	-	-	-0.96	1				
			0.178	0.238						
Size	-0.13	-	0.175	0.136	0.758	-	1			
		0.377				0.751				
Lev	0.115	0.319	-	0.057	-	0.093	-0.17	1		
			0.336		0.074					
Lqd	-	-	-	-	-	0.005	0.028	-	1	
	0.057	0.201	0.099	0.047	0.019			0.372		
Capi	0.118	0.034	0.065	0.103	-	0.065	-	-	0	1
					0.062		0.089	0.027		

Source: STATA output

Table 2 presents the pairwise correlations among the study variables. Consistent with expectations, accrual-based earnings management (EM) and real earnings management (REM)



are strongly and positively correlated ($r = 0.693$), reflecting that firms engaging in one form of manipulation often employ the other. Book-tax differences (BTD) exhibit a weak correlation with both EM ($r = 0.058$) and REM ($r = -0.054$), but are positively associated with positive_BTD ($r = 0.313$), indicating that upward differences in taxable versus reported income are prevalent in the sample.

Regarding moderating variables, tax consultant engagement (TCON) correlates negatively with REM ($r = -0.156$), suggesting that professional tax advice may discourage aggressive real activities manipulation. Audit oversight of tax reporting (AOTR) are negatively correlated with TCON ($r = -0.690$), as expected, given their substitutive role in governance structures, and both show strong associations with firm size ($r = 0.758$ and -0.751 respectively).

Among controls, leverage (Lev) is positively related to REM ($r = 0.319$) but negatively to BTD ($r = -0.336$), suggesting more leveraged firms are constrained in their tax-book divergence. Liquidity (Lqd) is negatively correlated with leverage ($r = -0.372$), consistent with financial flexibility arguments. Capital expenditure intensity (Capi) shows only weak correlations with the other variables, reflecting its idiosyncratic variation across firms.

Importantly, most correlations remain below conventional multicollinearity thresholds of 0.80, which indicates the absence of multicollinearity issues.

Regression analysis

This section provides the regression analyses results and the test of hypotheses.

- i. Book tax difference and earnings management behaviour.
- ii. Book-tax difference effect on Discretionary accruals earnings management

Table 3 reports the relationship between book-tax differences (BTD) and discretionary accruals (EM), using two alternative specifications of BTD. Column (1) presents the results for continuous BTD, while Column (2) restricts the sample to firms with positive BTD. In Column (1), the coefficient on BTD is positive and statistically significant ($\beta = 0.0481$, $p < 0.05$), indicating that higher book-tax differences are associated with greater earnings management. Similarly, in Column (2), Positive_BTD is positively related to EM ($\beta = 0.0828$, $p < 0.01$), confirming that firms with positive BTD tend to exhibit higher discretionary accruals. This shows that book tax difference significantly influences discretionary earnings management.



Among control variables, Size is negatively associated with discretionary accruals ($\beta = -0.0154$, $p < 0.01$; $\beta = 0.0167$, $p < 0.01$), suggesting that large firms do not engage in aggressive discretionary accruals. Leverage shows a positive and significant relationship with DAC_EM ($\beta = 0.1695$, $p < 0.01$; $\beta = 0.1081$, $p < 0.05$), indicating that more highly leveraged firms manage earnings more aggressively. Capex Intensity is also positively associated with EM ($\beta = 0.1724$, $p < 0.05$; $\beta = 0.1598$, $p < 0.05$), consistent with prior evidence that investment-intensive firms have greater incentives for earnings management. Liquidity is not significantly related to DAC_EM in either specification.

Both models are statistically significant overall ($F = 5.10$, $p < 0.01$; $F = 6.31$, $p < 0.01$), with R-squared values of 0.099 and 0.120, respectively. These results provide robust evidence that higher book-tax differences, particularly when positive, are associated with increased discretionary accrual-based earnings management, even after accounting for firm size, leverage, liquidity, and investment intensity.

Table 3: Book-tax difference and discretionary accruals EM

Variables	(1) EM – Continuous BTD	(2) EM – Positive BTD
BTD	0.0481** (0.0192)	
Positive_ BTD		0.0828*** (0.024)
Size	-0.0154*** (0.0054)	-0.0167*** (0.0054)
Leverage	0.1695*** (0.052)	0.1081** (0.0464)
Liquidity	0.0127 (0.0187)	0.003 (0.0176)
Capex Intensity	0.1724** (0.0707)	0.1598** (0.0701)
Constant	0.0695 (0.0621)	0.0596 (0.0615)
Observations	238	238
R-squared	0.099	0.1197
Adj. R-squared	0.0796	0.1007
F-statistic	5.10***	6.31***

Notes: Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Dependent variable = Discretionary accrual-based earnings management (DAC_EM).



Book-tax difference effect on real earnings management

Table 4 reports the relationship between book-tax differences (BTD) and real earnings management (REM), using two alternative specifications of BTD. Column (1) presents the results for continuous BTD, while Column (2) restricts the sample to firms with positive BTD.

In Column (1), the coefficient on BTD is positive and statistically significant ($\beta = 0.0958$, $p < 0.01$), indicating that higher book-tax differences are associated with greater real earnings management. Similarly, in Column (2), Positive_ BTD is positively related to REM ($\beta = 0.1860$, $p < 0.01$), confirming that firms with positive BTD tend to engage more in real earnings management. This suggests that book-tax differences significantly influence real earnings management.

Among control variables, Size is negatively associated with REM ($\beta = -0.0873$, $p < 0.01$; $\beta = -0.0906$, $p < 0.01$), suggesting that larger firms engage less in real earnings management. Leverage shows a positive and significant relationship with REM ($\beta = 0.6404$, $p < 0.01$; $\beta = 0.5158$, $p < 0.01$), indicating that more highly leveraged firms manipulate real activities more aggressively. Liquidity is also positively associated with REM ($\beta = 0.3707$, $p < 0.05$; $\beta = 0.3416$, $p < 0.05$), consistent with prior evidence that investment-intensive firms have greater incentives for real earnings management. Capex Intensity is not significantly related to REM in either specification.

Both models are statistically significant overall ($F = 17.74$, $p < 0.01$; $F = 19.33$, $p < 0.01$), with R-squared values of 0.2783 and 0.2959, respectively. These results provide robust evidence that higher book-tax differences, particularly when positive, are associated with increased real earnings management, even after accounting for firm size, leverage, liquidity, and investment intensity.

Table 4: Book-tax difference and real EM

Variables	(1) EM – Continuous BTD	(2) EM – Positive BTD
BTD	0.0958*** (0.0466)	
Positive_ BTD		0.1860*** (0.0586)
Size	-0.0873***	-0.0906***



	(0.0132)	(0.0131)
Leverage	0.6403***	0.5158***
	(0.1266)	(0.1126)
Liquidity	-0.0266	-0.4337
	(0.0451)	(0.0425)
Capex Intensity	0.3707**	0.3416**
	(0.1721)	(0.1704)
Constant	0.6327***	0.6035***
	(0.1489)	(0.1476)
Observations	236	236
R-squared	0.2783	0.2959
Adj. R-squared	0.2626	0.2806
F-statistic	17.74***	19.33***

Notes: Robust standard errors in parentheses. ***p < 0.01, **p < 0.05, *p < 0.1.

Dependent variable = Real earnings management (REAL_EM).

Low book-tax conformity versus high book-tax conformity

Table 5 reports the heterogeneity analysis of the relationship between book-tax differences (BTD) and discretionary accruals (EM), by splitting firms into high-BTD (i.e., low conformity) and low-BTD (i.e., high conformity) groups. Column (1) presents the regression results for the low conformity group, while Column (2) presents the results for the high-conformity group.

In Column (1), low-conformity is positively and significantly associated with EM ($\beta = 0.0523$, $p < 0.05$), suggesting that firms with higher book-tax differences (i.e., low book-tax conformity) are more likely to engage in earnings management. By contrast, in Column (2), high-conformity is negatively and significantly related to EM ($\beta = -0.0597$, $p < 0.05$), indicating that firms with lower book-tax differences (i.e., high book-tax conformity) are less likely to manipulate earnings through accruals.

Overall, the results indicate that book-tax difference amplifies earnings management behaviour. H1 is accepted.



Table 5: Heterogeneity – Low versus high book-tax conformity

Variables	(1) EM – Continuous BTD	(2) EM – Positive BTD
BTD	0.0523** (0.0238)	-0.0597** (0.0238)
Size	-0.0157*** (-0.0055)	-0.0162*** (0.0055)
Leverage	0.1037** (0.0472)	0.1016** (0.0471)
Liquidity	0.0012 (0.0178)	0.0011 (0.0178)
Capex Intensity	0.1842** (0.0709)	0.1783** (0.0706)
Constant	0.0769 (0.0621)	0.1379* (0.0657)
Observations	238	238
R-squared	0.093	0.099
Adj. R-squared	0.074	0.0797
F-statistic	4.78***	5.10***

Notes: Robust standard errors in parentheses. ***p<0.01, **p<0.05, *p<0.1.

Dependent variable = Discretionary accrual-based earnings management (DAC_EM).

Mitigating mechanisms

The mitigating role of external tax consultants

Table 7 reports the relationship between book-tax differences (BTD), tax consultants, and discretionary accruals (EM). Column (1) presents the results using continuous BTD, while Column (2) restricts the sample to firms with positive BTD.

In Column (1), the coefficient on BTD is positive and statistically significant ($\beta = 0.0395$, $p < 0.05$), indicating that higher book-tax differences are associated with greater earnings management. However, the interaction term with tax consultants, TCON x BTD, is not significant ($\beta = 0.0924$, $p = 0.211$), suggesting that the presence of tax consultants diminishes the strength of the BTD–EM relationship. Similarly, in Column (2), Positive_BTD remains positively associated with EM ($\beta = 0.0894$, $p < 0.01$), while the interaction with tax consultants, TCON x BTD, is negative and insignificant ($\beta = -0.009$, $p = 0.811$). This result indicates that



when tax consultant is present, the positive effect of BTD on discretionary accruals diminishes and becomes statistically insignificant. Thus, H2 is accepted.

Table 6: Tax consultants influence on Book-tax difference and discretionary accruals EM relations

Variables	(1) EM – Continuous BTD	(2) EM – Positive BTB
TCON x BTB	0.0924 [0.0676]	-0.009 [0.0497]
BTD	0.0395** [0.0202]	0.0894*** [0.0341]
TCON	0.0061 [0.0367]	-0.0094 [0.0471]
Size	-0.0170** [0.0082]	-0.0142* [0.0082]
Leverage	0.1589*** [0.0526]	0.1089** [0.0467]
Liquidity	0.0099 [0.0188]	0.0031 [0.0177]
Capex Intensity	0.1597** [0.0726]	0.1665** [0.0720]
Constant	0.0863 [0.0742]	0.0402 [0.0765]
Observations	238	238
R-squared	0.1065	0.1204
Adj. R-squared	0.0793	0.0937
F-statistic	3.92	4.50***

Notes: Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Dependent variable = Discretionary accrual-based earnings management (DAC_EM).

The mitigating role of audit oversight of tax reports

Table 7 reports the relationship between book-tax differences (BTD), auditor oversight, and discretionary accruals (EM). Column (1) presents the results using continuous BTD, while Column (2) restricts the sample to firms with positive BTD.

In Column (1), the coefficient on BTD is positive and statistically significant ($\beta = 0.1294$, $p < 0.05$), indicating that higher book-tax differences are associated with greater earnings management. However, the interaction term with auditor oversight, *AuditoverTax_BT*, is negative and not significant ($\beta = -0.0897$, $p = 0.185$), suggesting that the presence of audit oversight reduces the strength of the BTD–EM relationship. Similarly, in Column (2), *Positive_*



BTD remains positively associated with EM ($\beta = 0.0769$, $p < 0.05$), while the interaction with auditor oversight, *Auditover Tax_Positive BTD*, is close to zero and insignificant ($\beta = 0.0140$, $p = 0.777$). This pattern indicates that when audit oversight is present, the positive effect of BTD on discretionary accruals diminishes and becomes statistically insignificant. Thus, H3 is accepted.

Table 7: Audit oversight effect on Book-tax difference and discretionary accruals EM relations

Variables	(1) EM – Continuous BTD	(2) EM – Positive BTD
TCON x BTD	-0.0897 [0.0675]	0.0140 [0.0495]
BTD	0.1294* [0.0644]	0.0769* [0.0355]
TCON	-0.0079 [0.0358]	0.0016 [0.0454]
Size	-0.0174* [0.0080]	-0.015 [0.0079]
Leverage	0.1592** [0.0526]	0.1091* [0.0468]
Liquidity	0.0100 [0.0188]	0.0032 [0.0177]
Capex Intensity	0.1593* [0.0725]	0.1653* [0.0719]
Constant	0.0000 [0.0960]	0.0000 [0.0973]
Observations	238	238
R-squared	0.1062	0.1203
Adj. R-squared	0.079	0.093
F-statistic	3.90***	4.49***

Notes: Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Dependent variable = Discretionary accrual-based earnings management (DAC_EM).

Discussion of Results.

Influence of Book-Tax Conformity on Earnings Management

Earnings management is the use of accounting techniques and judgments to intentionally manipulate a company's reported earnings. Managers may do this to mislead stakeholders, meet performance targets, or increase their compensation.



Book-tax conformity refers to the degree to which a company's financial accounting (book) income, reported to investors and the public, aligns with its taxable income, reported to tax authorities.

A high level of conformity means that the rules for calculating book income and taxable income are very similar. The idea is that it's difficult for a company to report high profits to investors while simultaneously reporting low profits to the tax authorities. This "dual reporting" system is a primary driver of earnings management.

In Nigeria, there's often a significant book-tax gap, which is the difference between these two figures. This gap can be a red flag for regulators and investors, signaling potential earnings manipulation.

Mitigating Roles of Tax Consultants and Audit Oversight

Tax consultants and audit oversight play a crucial role in mitigating earnings management in Nigeria.

Tax Consultants: Tax consultants primarily focus on helping companies comply with tax laws and optimize their tax liabilities. Their role is to ensure businesses legally minimize their tax payments, not evade them.

Expertise in Tax Laws: They navigate Nigeria's complex and ever-changing tax regulations, ensuring accurate tax filings.

Tax Planning & Compliance: By providing expert advice, they help companies plan their finances to legally reduce their tax burden. This process should be transparent and align with the company's financial reporting.

Risk Management: They identify and mitigate tax-related risks, reducing the temptation for companies to engage in aggressive or illegal tax avoidance that could also involve earnings manipulation.

Audit Oversight: Independent audit oversight, primarily by the audit committee and external auditors, is a key corporate governance mechanism for monitoring and controlling financial reporting quality.



Audit Committees: These committees, composed of board members, are responsible for overseeing the financial reporting process and internal controls. An independent and financially knowledgeable audit committee is more effective at detecting and challenging management's attempts at earnings manipulation.

External Auditors: External auditors provide an independent review of a company's financial statements. Their role is to give an opinion on whether the statements are free from material misstatement. A high-quality audit can deter managers from manipulating earnings. In Nigeria, audit firm size and auditor independence have been shown to be significant in mitigating earnings management.

9. Conclusion and Recommendations

This study provides robust evidence that book-tax differences significantly drive earnings management behaviours among Nigerian manufacturing firms. Both discretionary accrual-based and real earnings management increase with higher BTD, particularly for firms with positive BTD, confirming that low book-tax conformity amplifies earnings manipulation. The analysis of firm characteristics reveals that larger firms tend to engage less in earnings management, while highly leveraged and capital-intensive firms exhibit stronger incentives to manipulate earnings. Importantly, the moderating analyses demonstrate that the involvement of external tax consultants and auditor oversight effectively diminishes the relationship between BTD and discretionary accrual-based earnings management, suggesting that professional and regulatory oversight serves as a mitigating mechanism. Overall, these findings contribute to the literature by emphasizing the dual role of BTD as both an indicator and a driver of earnings management in emerging markets, while highlighting practical implications for regulators, auditors, and corporate governance frameworks in enhancing financial reporting quality.

The findings of this study suggest that policymakers and regulatory bodies should enhance oversight to ensure firms with high book-tax differences are not engaging in aggressive earnings management. Strengthened monitoring, coupled with stricter enforcement of tax and accounting regulations, can reduce incentives for earnings manipulation. Firms are encouraged to engage external tax consultants, as professional guidance helps mitigate the impact of book-tax differences on discretionary accruals and promotes compliance. Similarly, audit committees



and auditors should intensify their oversight of tax reporting processes, particularly for firms with substantial BTDs, to ensure transparency and reduce opportunities for earnings management. Strengthening internal governance practices, especially in highly leveraged and capital-intensive firms, can further curb aggressive accounting behavior.

Future research could extend the analysis to other sectors and markets to examine whether the observed relationships hold in different contexts, including developed economies. Investigating the effects of regulatory changes or tax policy reforms over time may provide deeper insights into the dynamics between BTD and earnings management. Additionally, examining other potential moderators, such as corporate governance mechanisms, internal control quality, or institutional ownership, could enrich understanding of the factors that influence earnings management. Combining quantitative analysis with qualitative approaches, such as interviews or surveys with CFOs and auditors, may also shed light on the decision-making processes behind earnings management in firms with high book-tax differences.

References

- Armstrong, C. S., Blouin, J. L., Jagolinzer, A. D., & Larcker, D. F. (2015). Corporate governance, incentives, and tax avoidance. *Journal of Accounting and Economics*, 60(1), 1–17. <https://doi.org/10.1016/j.jacceco.2015.02.003>
- Bedard, J. C., & Johnstone, K. M. (2004). Earnings manipulation risk, corporate governance risk, and auditors' planning and pricing decisions. *The Accounting Review*, 79(2), 277–304. <https://doi.org/10.2308/accr.2004.79.2.277>
- Blaylock, B., Shevlin, T., & Wilson, R. J. (2015). Tax avoidance, large positive temporary book–tax differences, and earnings persistence. *The Accounting Review*, 87(1), 91–120. <https://doi.org/10.2308/accr-10158>
- Carcello, J. V., Hermanson, D. R., Neal, T. L., & Riley, R. A. (2002). Board characteristics and audit fees. *Contemporary Accounting Research*, 19(3), 365–384. <https://doi.org/10.1506/CHWK-GMQ0-MLKE-K03V>
- Chen, S., Chen, X., Cheng, Q., & Shevlin, T. (2010). Are family firms more tax aggressive than non-family firms? *Journal of Financial Economics*, 95(1), 41–61. <https://doi.org/10.1016/j.jfineco.2009.02.003>
- Chyz, J. A., Gaertner, F., Kausar, A., & Watson, L. (2013). Overconfidence and aggressive corporate tax policy. *The Accounting Review*, 88(6), 1993–2023. <https://doi.org/10.2308/accr-50585>



- Dechow, P. M., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, 50(2–3), 344–401. <https://doi.org/10.1016/j.jacceco.2010.09.001>
- Desai, M. A. (2005). The degradation of reported corporate profits. *Journal of Economic Perspectives*, 19(4), 171–192. <https://doi.org/10.1257/089533005775196705>
- Desai, M. A., & Dharmapala, D. (2006). Corporate tax avoidance and high-powered incentives. *Journal of Financial Economics*, 79(1), 145–179. <https://doi.org/10.1016/j.jfineco.2005.02.002>
- Graham, J. R., Harvey, C. R., & Rajgopal, S. (2005). The economic implications of corporate financial reporting. *Journal of Accounting and Economics*, 40(1–3), 3–73. <https://doi.org/10.1016/j.jacceco.2005.01.002>
- Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics*, 50(2–3), 127–178. <https://doi.org/10.1016/j.jacceco.2010.09.002>
- Hanlon, M., & Shevlin, T. (2005). Book–tax conformity for corporate income: An introduction to the issues. In J. Poterba (Ed.), *Tax policy and the economy* (Vol. 19, pp. 101–134). MIT Press. <https://doi.org/10.1086/tpe.19.20061837>
- Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13(4), 365–383. <https://doi.org/10.2308/acch.1999.13.4.365>
- Huse, M., & Gabrielsson, J. (2004). Boards, leadership and value creation: The human side of corporate governance. *International Studies of Management & Organization*, 34(2), 89–106. <https://doi.org/10.1080/00208825.2004.11043704>
- Johannesen, N., Langetieg, P., Reck, D., Risch, M., & Slemrod, J. (2018). Taxing hidden wealth: The consequences of U.S. enforcement initiatives on evasive foreign accounts. *American Economic Journal: Economic Policy*, 10(1), 1–46. <https://doi.org/10.1257/pol.20160253>
- Knechel, W. R., Vanstraelen, A., & Zerni, M. (2013). Does the identity of engagement partners matter? An analysis of audit partner reporting decisions. *Contemporary Accounting Research*, 30(4), 1443–1478. <https://doi.org/10.1111/1911-3846.12034>
- Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39(1), 163–197. <https://doi.org/10.1016/j.jacceco.2004.11.002>
- Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics*, 42(3), 335–370. <https://doi.org/10.1016/j.jacceco.2006.01.002>



Watrin, C., Ebert, N., & Thomsen, M. (2014). Book–tax conformity and earnings management: Insights from European one- and two-book systems. *The Journal of the American Taxation Association*, 36(2), 55–89. <https://doi.org/10.2308/atax-50717>

Watts, R. L., & Zimmerman, J. L. (1986). *Positive accounting theory*. Prentice Hall.