Theoretical and Applied Economics
Volume XXXIII (2026), No. 2(647), Summer, pp. 189-210

Tax-driven alignment between conforming and non-conforming earnings management across different accounting standards

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Abstract. *This paper discusses how corporations have been impacted by changes in tax laws that regulate how businesses report their revenues over time. Accounting for these changes can lead corporations to manipulate income (profit) by manipulating various aspects of a company's operations, including regular business practice, and, therefore, how much corporate taxes will be owed due to choices companies have made regarding which generally accepted accounting principles to follow (IFRS or GAAP). I will examine over 20 years of data on more than 20 global corporations that each file a public offering prospectus from 2015 through 2023 and tally to approximately 180 cases in total.*

Keywords: earnings management, conforming earnings management, non-conforming earnings management, effective tax rate, accounting standards, tax planning, multinational firms.

JEL Classification: H25, M41, G32, G38.

1. Introduction

The phenomenon of earnings management represents an essential behavior of firms in exercising their ability to adjust the financial results of operations in response to increasing competitive, regulatory, and taxation pressures. The process has evolved to include various techniques and strategies that can be utilized to affect the manner in which firms report income for the purpose of achieving tax compliance, access to and/or lower-cost debt and/or equity financing, and/or meeting public reporting obligations. The earnings management literature classifies earnings management techniques into two major categories: conforming earnings management (CEM) which uses accounting estimates and discretionary accounting choices permitted under accounting standards, and non-conforming earnings management (NCEM) which uses corporate operational activity that may impact taxable income and/or other real economic activity without any corresponding change to the manner in which accounting income is reported by firms (Healy & Wahlen, 1999). An understanding of the difference between these types of earnings management is important for determining how companies engage in tax management, as well as how companies utilize both types of methods together to accomplish their corporate financial objectives (Schipper, 1989).

The tax-related incentives for managers to engage in earnings management are among the strongest incentives for earnings management behavior as they are directly tied to a firm's reported net income and its cash flows. Therefore, firms will typically pursue strategies that result in lower corporate tax payments either through commercial adjustments or by using operational techniques to influence a firm's taxable income (Hanlon & Heitzman, 2010). An understanding of the relationship between a firm's corporate tax obligations, its accounting framework, and its earnings management behavior becomes more critical in a global business environment since there can be substantial differences between accounting frameworks (e.g., IFRS versus US GAAP) and tax systems between countries which make it more challenging to analyses corporate behavior and, therefore, will require analysis to consider the context in which corporate earnings management behavior is classified as non-conforming or conforming (Graham et al., 2012).

Furthermore, the differences in the accounting standards between IFRS, US GAAP, and various country-specific GAAP frameworks plays an important role in determining the opportunities available for management to engage in earnings management behaviours. Since IFRS is primarily a principles-based framework, it allows greater flexibility in terms of interpretability, as compared to US GAAP, which is primarily a rules-based accounting framework that sets out more specific guidelines for revenue recognition and measurement. These differences have an impact on the extent to which organizations engage in conforming versus non-conforming earnings management and will have an impact on the extent to which reported outcomes are comparable across different jurisdictions (Jeanjean & Stolowy, 2008). As a result, organizations will select the strategies that provide the most advantage in terms of their particular circumstances based on the accounting regime within which they operate (Ball, 2006).

The relationship between companies' earnings management (CEM) and noncompliance earnings management (NCEM) is based on information provided through the use of tax-

aligned CEM and NCEM. Multinational companies frequently combine both CEMs and NCEAs to maximize their tax advantages while remaining compliant with regulations and being transparent about their practices. This relationship is vital for international companies and multinational corporations, which operate within numerous different jurisdictions, which require adherence to different accounting and tax laws, to inform management decision-making (e.g., Frank et al. 2009). Understanding how companies leverage both CEM and NCE in an environment of different standards will help provide insights into global financial behavior (Desai 2005).

This study will analyze how twenty multinational corporations (MNCs) worldwide, that trade on stock exchanges around the globe from 2015 - 2023, will serve as a case study to provide additional understanding of corporate earnings management and taxation based upon the information developed through accounting standard differences and earnings management strategies.

In order to evaluate the impact of CEM and NCE on corporate effective tax rate (ETR) through the use of a panel data regression model. Control variables to be considered in the analysis include: firm size (SIZE), firm leverage (LEV), and firm's return on assets (ROA); as well as whether the interaction of these control variables with the CEMs and NCEs moderates the ETR as indicated through the findings of prior studies on the interaction between accounting standards and management discretion (i.e., Ball 2006).

2. Literature Review

The research regarding the relationship between earnings management and tax planning has increased significantly in the last 20 years. Most early research has focused on how aggressive tax strategies may provide agency conflict information about a firm, particularly in such situations where an organization’s monitoring/govt. has limited resources (Desai & Dharmapala, 2006).

Within different institutional environments the strength and interpretation of book-tax differences varies as they depend on enforcement focus and quality of disclosure to determine whether the book-tax difference represents opportunistic behavior or structural legitimacy (Evers et al., 2015). Furthermore, there is now greater evidence linking the existence of large book-tax differences with broader consequences to a company's financial position; such as providing lower returns for each amount of earnings reported or increasing the company's exposure to financial risk (Anderson, 2025).

On the other hand, real activity manipulation is based on management's actions in managing operational decisions; for example, early reporting of sales revenue and production, which allows them to meet earnings targets (Roychowdhury, 2006).

Research on how firms determine their columnar and real earnings management approaches indicates that firms consider the relative costs, limitations, and likelihood of each approach being detected when making these decisions (Zang, 2012). The development of Evidence from International Research has aided in determining whether or not Ownership Structure & Enforcement Intensity Influence the Choice of E.M. tools used by

Firms (Gao et al., 2017). Furthermore, other recent studies have established a clearer relationship between Taxation & E.M. Decision Making. Changes in Tax Rates can provide evidence for how Firms Manipulate both Accrual and Real Activity in their E.M. However, some E.M. Techniques enable the Firm to Benefit from Differences in Tax Rates (Sundvik, 2017). Inst. Features such as Enforcement strength and Conformity Between Accounting & Tax Rules Influences the extent and effectiveness of Income Shifting Methods used to Reduce Tax Liability (Eichfelder et al., 2020).

Earnings = Income Shifting Research: Taxes and Income Shifting; Conformity Between Tax and Financial Earnings. While tax and financial earnings have had correlation in many cases, the more conforming the two are, the fewer opportunities firms will have to manage financial earnings without effecting tax returns. The greater the conformity, the greater the need to adjust the reported income due to being under increased pressure by tax authorities to obtain tax benefits (Tang, 2015; Sundvik, 2017). A synthesis of international studies has indicated that conformity effects vary by country based on the quality of institutions, the enforcement framework, and the regulatory framework (Evers et al., 2017).

Numerous international studies have researched the impacts of differing Accounting Standards on earnings management and the relationship to taxation. Certain studies support the argument that firms that adopt International Accounting Standards ultimately pay less tax because of the flexibility that the more principle-based framework offers firms, which allows for greater tax planning advantage (Braga et al., 2017). Conversely, other studies demonstrate that implementation of IAS does cause firms to no longer have an alignment between accounting taxable income and reportable income, resulting in increased reporting discretion in some scenarios (Karampinis & Hevas, 2013). Comparing the different standards shows clear differences between IAS and U.S. Generally Accepted Accounting Principles (GAAP) with respect to the flexibility that management has with regard to the judgment and measurement of income; such differences impact how the companies report income and how they are taxed (Chan et al., 2014).

Aspects of tax strategy development and avoidance planning can be analyzed together. Companies use thin capitalization and transfer pricing methods of tax avoidance, with evidence suggesting that companies utilize these methods of tax avoidance to manipulate both their accounts on an accrual basis and through their operations (Ratu et al., 2023). Research shows similar results, as companies that utilize aggressive tax strategies often pay a higher cost of equity as a result of market concerns regarding the company's transparency and level of risk (Safira & Setiyawati, 2024). In addition, the combination of accounting manipulation, operation manipulation, and tax avoidance leads to higher equity risks for companies, suggesting that capital markets will identify and punish opportunistic companies by requiring a greater return on investment (Firmansyah & Febriyanto, 2018).

While there is a great deal of literature on this topic, additional gaps exist. The majority of studies focus on either one country or a single accounting regime. Thus, this limitation will not enable a generalization of the results to multinational contexts (Hanlon & Heitzman, 2010). Furthermore, the majority of studies isolate one sector of earnings management but do not address how a firm utilizes both methods of accrual and real activity management to achieve tax goals (Zang, 2012). Additionally, relatively few studies explicitly analyze

the effect of accounting standards on the relationship between tax outcomes and earnings management across diverse regulatory environments (Tang, 2015; Braga et al., 2017). There is an apparent need for an integrated panel-based research framework that analyzes how earnings management can conform and not conform to accounting standards, while simultaneously considering how accounting standards and institutional contexts impact firms' tax-oriented reporting behavior (Eichfelder et al., 2020; Evers et al., 2017).

3. Sample Description

The sample includes 20 large corporations from various regions around the world and their activities from 2015 through 2022. Each location where they operate are: United States, Japan, Germany, Switzerland, China, Canada and Netherlands. All businesses operate in different industries: aerospace, automobile manufacturing, robotics, technology equipment, semiconductor manufacturing, and e-commerce. There are differences in characteristics of the various countries including the types of regulatory authority, type of taxation and record keeping of their operations, which results in administrative difficulties in analyzing profit-related decision-making across all companies analyzed within the group. Each of the countries analyzed has its unique set of regulations and taxing authority.

Table 1. *List of Companies, Countries, and Accounting Standards*

Company Name	Country	Accounting Standard
ABB Group	Switzerland	IFRS
Airbus SE	Netherlands / France / Germany	IFRS
Boeing	United States	US GAAP
Emerson Electric Co	United States	US GAAP
Fanuc Corporation	Japan	JGAAP
Siemens AG	Germany	IFRS
Tesla Inc	United States	US GAAP
Toyota Motor Corporation	Japan	JGAAP
Yaskawa Electric Corporation	Japan	JGAAP
Honeywell	United States	US GAAP
Lam Research Corporation	United States	US GAAP
Mitsubishi Electric Corporation	Japan	JGAAP
Honda Motor Co., Ltd	Japan	JGAAP
Nissan Motor Co., Ltd	Japan	JGAAP
BMW AG	Germany	IFRS
Amazon.com Inc	United States	US GAAP
Alibaba Group Holding Limited	China	Chinese GAAP / IFRS for ADRs
eBay Inc	United States	US GAAP
Shopify Inc	Canada	IFRS
Advanced Micro Devices Inc	United States	US GAAP

4. Hypotheses Development

- **Definition of Variables**

Effective Tax Rate (ETR)

The effective tax rate represents the firm's actual tax burden relative to its pretax income. It reflects tax planning, deductions, incentives, and managerial reporting decisions that influence taxable income.

Conforming Earnings Management (CEM)

Conforming earnings management refers to accrual-based manipulation performed within accounting standards through adjustments such as provisions, depreciation, impairment, and inventory valuation. These accruals influence both book income and taxable income depending on the level of book tax alignment.

Non-Conforming Earnings Management (NCEM)

Non-conforming earnings management consists of real operational actions that alter cash flows and taxable income without relying on accrual adjustments. Examples include abnormal production, discretionary expense cuts, and sales manipulation.

Accounting Standards (Moderator)

Accounting standards differ in flexibility: IFRS is principles based, US GAAP is rules based, JGAAP is hybrid, and Chinese standards emphasize regulatory control. These differences influence the extent of managerial discretion in earnings management.

- **Control Variables**

Size, leverage, and profitability are included because they influence tax planning capacity and earnings characteristics.

Table 2. *Measurement of Variables*

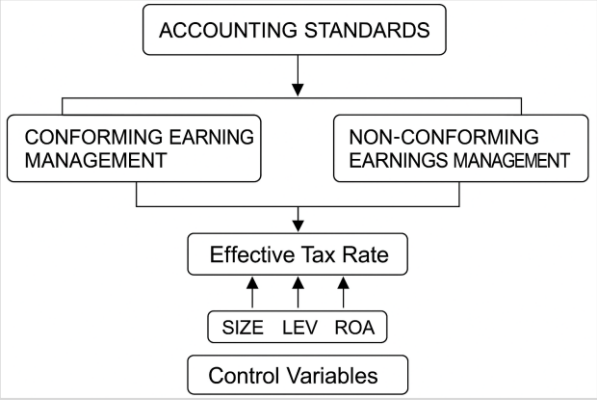
Variable	Symbol	Measurement / Definition
Effective Tax Rate	ETR	Total Tax Expense / Pre-tax Income
Conforming Earnings Management (Accrual-based)	CEM	Accrual-based earnings management measured using the Modified Jones Model (1995) (absolute discretionary accruals)
Non-conforming Earnings Management (Real activities)	NCEM	Real earnings management based on Roychowdhury (2006), computed using abnormal CFO, abnormal production costs, and abnormal discretionary expenses
Firm Size	SIZE	Natural logarithm of total assets
Leverage	LEV	Total liabilities / Total assets
Profitability	ROA	Net income / Total assets
Sales Growth	GROWTH	(Sales_t − Sales_(t−1)) / Sales_(t−1)
Auditor Type	BIG4	1 if audited by a Big 4 firm, 0 otherwise
Firm Age	AGE	Natural logarithm of the number of years since incorporation

- **Description of the Conceptual Framework**

Figure 1 presents the conceptual framework of the study, illustrating the hypothesized relationships between the main variables. Up high in the diagram, rules about accounting sit like a switch - guiding when companies might tweak earnings. Since they rise above the rest but sit close to the middle, it reveals how line settings were aligned across units - more evident when supervision changes hands. Despite new environments, their impact remains visible, front and center.

Check the darker section on the left side of the picture. In that area, money handling lines up with standard bookkeeping rules based on earning reports being tracked over time. Limits are respected carefully. Over there on the right, another form shows up - real activities altering real money from operations. These take place beyond accounting rules. Lines climbing upward now link through correct methods above, tied also to shifts in actual

performance. Each connects to how much tax the business must pay. That destination shows what two separate behaviors can shape when a business pays taxes.



Under the effective tax rate, Figure 1 shows three control variables too - firm size, debt level, and return on assets. The arrows show the range of effective tax rates that apply based on these factors, as well as the variation between companies due to these differences within the number and types of taxes owed.

These arrows also demonstrate the impact of accounting regulations on all forms of accounting practices, traditional and non-traditional. As such, these regulations are similar to a means of restraining, or directing, companies with regard to their approaches to how companies recognize and report income. They act, but do not fully encompass the control of the operations of the company.

If adjustments are made to the method used by companies to calculate their taxable income, the manner in which one can identify the relationship between income manipulation to taxes paid will be affected. In essence, whether a company chooses a fixed system, or a flexible system, determines the nature of the connection between the two.

Based upon Figure 1, we can see that companies' management of their earnings can predict the manner in which companies will manage their profits based upon accounting regulations for earnings and the expected results due to accounting, type of company and business size and structure. These pieces together affect what tax payers actually pay - no complex wording needed.

5. Data & Methodology

- **Research Design**

What we see when tracking figures through years changes the way this study handles data sets. The goal of this program is to provide a way for companies to show connections to one another through their financial statements, not just through individual amounts at each company. One method of doing this is using a method called continuing equity method (CEM), whereby companies record amounts in accordance with specified formats agreed

upon by the market participants. Reporting can be a bit flexible when allowed by accounting standards, although companies must still follow general rules about what type of reporting they will use. Another method of measuring connections to companies is using the non-continuing equity method (NCEM). This method tracks the actions of companies that influence their earnings and how much they will owe in taxes. How do we determine the fiscal impact of these adjustments? This can be complex. Does the change in the income reported affect the amount of taxes the companies actually pay? Depending on which accounting principles are based on - IFRS, US GAAP, JGAAP, etc.… - this could lead to very different answers.

- **Sample Selection and Data Collection**

The dataset utilized in this study has been created by compiling Financial Statement data and other relevant databases from two separate sources for 20 Multinational Corporations ("MNCs") over 2015 through 2023 with a total of 180 Firm-Year observations from these 20 MNCs. The 20 MNCs were selected because they represent multiple countries and economies including the United States; Japan; Germany; Switzerland; China; Canada; and the Netherlands. Additionally, some of these MNCs have been subject to differing accounting standards than others which allows for comparisons and analysis of Financial Statements of the MNCs to be made among differing Reporting Regimes.

The Financial Data used for the study has been obtained from either the Financial Statements of the sampled 20 MNCs and/or publicly available databases as necessary in order to augment for consistency between years. A Panel Dataset was developed that contains data of the Financial Statements of the 20 sampled MNCs that were used to generate the Final Sample; this was accomplished by consistent methods of Data Collection in order to make meaningful comparisons between Financial Statements of the sampled MNCs across years as well as countries. The final sample contains data from MNCs with complete measures needed to calculate Effective Tax Rate (ETR) and Earnings Management. Data used for the analysis included Financial Statements (Income Statements, Balance Sheets, and Cash Flow) for all sample MNCs.

The primary goal of this study was to use a sufficiently constructed, well-controlled, well-measured Dataset of Financial Statement Data from all 20 of the MNCs to ensure Measurement of Financial Statements of the MNCs was consistent, and therefore provide an accurate basis for comparison across years and countries.

– The dataset is structured as a firm-year panel.
– The panel is balanced, resulting in 180 firm-year observations (20 firms × 9 years)

- **Variables Definition and Measurement**

Dependent Variable: Effective Tax Rate (ETR)

The dependent variable is the Effective Tax Rate (ETR), which reflects the firm's tax burden relative to its pre-tax profitability. ETR is measured as:

$$ETR_{it} = \frac{\text{Total Tax Expense}_{it}}{\text{Pre-Tax Income}_{it}}$$

This measure captures the combined impact of statutory taxation, tax planning strategies, and financial reporting choices on the firm's observed tax cost. To avoid distortions arising from extreme observations, the study may apply winsorization to ETR and/or exclude observations where pre-tax income is non-positive based on the final structure of the dataset.

Data screening for ETR:

To interpret the ETR study correctly, any observations for which the company reported pre-tax incomes of $0 or less (Pre-tax Income < or = $0) will not be included in the ETR analysis. When a company's pre-tax income is negative or zero, it becomes impossible to ascertain how much stockholders would earn based on the company's ETR results because companies with an ETR of zero or less could not theoretically provide any return on their investments. Also, ETR results were limited to two percentages (the 1st and 99th) to eliminate the potential problems caused by extreme outlier companies. When data is available, alternative ETR calculations based on cash will provide additional credibility to the ETR values calculated in this study.

Independent Variable 1: Conforming Earnings Management (CEM)

Conforming Earnings Management (CEM) is measured using accrual-based earnings manipulation proxied by discretionary accruals. Discretionary accruals are estimated using the Modified Jones Model. Under this framework, total accruals are scaled by lagged total assets and regressed on changes in revenues (adjusted for receivables) and property, plant, and equipment. The regression residuals represent the discretionary component of accruals and serve as a proxy for conforming earnings management.

The CEM variable is therefore operationalized as the discretionary accruals estimate derived from the Modified Jones regression.

$$\frac{TA_{it}}{A_{i,t-1}} = \alpha_0 + \alpha_1\left(\frac{1}{A_{i,t-1}}\right) + \alpha_2\left(\frac{\Delta REV_{it} - \Delta REC_{it}}{A_{i,t-1}}\right) + \alpha_3\left(\frac{PPE_{it}}{A_{i,t-1}}\right) + \varepsilon_{it}$$

Independent Variable 2: Non-Conforming Earnings Management (NCEM)

Non-Conforming Earnings Management (NCEM) reflects real activities manipulation that affects taxable income without relying primarily on accrual accounting adjustments. NCEM is measured using abnormal real activities proxies following the approach of Roychowdhury. Looking at real earnings tricks, researchers lean on three key signs. One shows oddities in operating cash flow beyond typical patterns. Other points to inconsistent product costs compared to standard norms. Then there is the telltale sign in unexpected, unexplained spending bursts. Each comes from stripping out predictable trends using comparisons across industries and time. What remains after those adjustments highlights behavior that does not fit expected flows.

A single NCEM metric could take shape when odd readings are bundled together, shaped by how the analysis is built. **Measuring NCEM Using Roychowdhury (2006)**

Estimation feasibility in a small panel sample:

Following Roychowdhury (2006), abnormal real activities are typically estimated using cross-sectional regressions by industry-year. Given the limited number of firms in the present sample (20 firms), the study estimates the Roychowdhury models using broader industry groupings and pooled year estimation where necessary to ensure an adequate number of observations for reliable parameter estimation. This adjustment preserves the conceptual logic of the NCEM measure while improving the statistical feasibility of estimating abnormal components in a small multinational panel dataset.

NCEM is proxied by real activities manipulation through three components:

(1) Abnormal Cash Flow from Operations, (2) Abnormal Production Costs, and (3) Abnormal Discretionary Expenses. Each component is estimated as the residual from its corresponding "normal level" regression model (scaled by lagged total assets).

Abnormal Cash Flow from Operations (AbnCFO)

$$\frac{CFO_{it}}{A_{i,t-1}} = \alpha_0 + \alpha_1\left(\frac{1}{A_{i,t-1}}\right) + \alpha_2\left(\frac{\text{Sales }_{it}}{A_{i,t-1}}\right) + \alpha_3\left(\frac{\Delta \text{ Sales }_{it}}{A_{i,t-1}}\right) + \varepsilon_{it}$$

$$AbnCFO_{it} = \varepsilon_{it}$$

Abnormal Production Costs (AbnPROD)

Production costs are typically defined as:

$$PROD_{it} = COGS_{it} + \Delta INV_{it}$$

The normal level of production costs is estimated using:

$$\frac{PROD_{it}}{A_{i,t-1}} = \alpha_0 + \alpha_1\left(\frac{1}{A_{i,t-1}}\right) + \alpha_2\left(\frac{\text{Sales }_{it}}{A_{i,t-1}}\right) + \alpha_3\left(\frac{\Delta \text{ Sales }_{it}}{A_{i,t-1}}\right) + \alpha_4\left(\frac{\Delta \text{ Sales }_{i,t-1}}{A_{i,t-1}}\right) + \varepsilon_{it}$$

$$\text{AbnPROD }_{it} = \varepsilon_{it}$$

Abnormal Discretionary Expenses (AbnDISEXP)

Discretionary expenses are commonly proxied by:

$$DISEXP_{it} = R\&D_{it} + \text{ Advertising }_{it} + SG\&A_{it}$$

The normal level model is estimated as:

$$\frac{DISEXP_{it}}{A_{i,t-1}} = \alpha_0 + \alpha_1\left(\frac{1}{A_{i,t-1}}\right) + \alpha_2\left(\frac{\text{Sales }_{i,t-1}}{A_{i,t-1}}\right) + \varepsilon_{it}$$

$$AbnDISEXP_{it} = \varepsilon_{it}$$

Composite NCEM Measure (Real Earnings Management Index)

A widely used composite indicator for NCEM is constructed as:

$$NCEM_{it} = (-AbnCFO_{it}) + (AbnPROD_{it}) + (-AbnDISEXP_{it})$$

This sign convention reflects typical real earnings management behavior, where firms may (i) reduce operating cash flows, (ii) overproduce to reduce reported costs per unit, and (iii) cut discretionary expenditures to increase reported earnings.

- **Moderator Variable: Accounting Standards**

The moderating variable being used to determine how various accounting regimes will affect the relationship between earnings management and tax consequences is represented by accounting standards. Accounting standards applied by firms include IFRS, US GAAP, JGAAP and Chinese GAAP. The use of dummy variables allows for the comparison of different accounting standards.

The interaction between accounting standards and earnings management proxy variables is used to test for a moderating effect by assessing if CEM and NCEM differently affect ETR depending on the type of accounting standard that was utilized as part of the analysis.

Important econometric note (Panel identification):

Over the sample period (2015-2023), the accounting standards used by a particular firm generally do not change very much. As a result, the accounting standard indicators will typically have perfect multicollinearity with the time-invariant firm-level fixed effects; that is, they will perfectly correlate with the firm fixed effect in a firm fixed effects estimation framework. Therefore, in order to properly conduct a test of accounting standard moderation, the current study conducts moderation analyses using estimation approaches where time-invariant regressors are retained such as with pooled OLS with year fixed effects and firm-clustered standard errors, and/or with correlated random effect estimation (or the Mundlak method).

- **Control Variables**

The study includes control variables that are commonly linked to tax planning and earnings characteristics. Firm size (SIZE) is measured as the natural logarithm of total assets. Leverage (LEV) is computed as total debt divided by total assets. Profitability (ROA) is measured as net income divided by total assets. These variables are included to reduce omitted variable bias and ensure that the estimated effects of earnings management reflect variations beyond firm fundamentals.

Firm Size (SIZE):

$$SIZE_{it} = \ln(\text{Total Assets}_{it})$$

Leverage (LEV):

$$LEV_{it} = \frac{\text{Total Debt}_{it}}{\text{Total Assets}_{it}}$$

Profitability (ROA):

$$\text{ROA}_{it} = \frac{\text{Net Income}_{it}}{\text{Total Assets}_{it}}$$

- **Hypotheses**

Based on the theoretical framework and prior empirical evidence, the current research proposes some hypotheses with respect to the earnings management practices employed by companies and the association between accounting standards and the ETR. The following two hypotheses are proposed in this research.

H1: CEM has a negative correlation with ETR, with CEM representing an accrual-based adjustment to the income statement, which includes provisions for bad debts, depreciation, and impairment. As these adjustments can impact taxable income in a company that uses a partial or high book/tax alignment system in the preparation of its income tax returns, it is anticipated that CEM will also impact the overall amount of tax owed by the entity.

H2: NCEM has a negative correlation with ETR, with NCEM representing actions taken through the use of real operational decisions that affect the level of cash flow and taxable income, including unusual production levels, reducing discretionary expenses, and manipulating the timing in which sales are recorded. As the cash flow and taxable income of an entity directly correlate to the company's ETR, it is anticipated that these factors will significantly impact the ETR of the entity.

H3: Accounting standards moderate the relationship between CEM and ETR, such that the magnitude of the CEM–ETR association differs across accounting frameworks.
Because accounting standards differ in the level of reporting flexibility they allow—principles-based (IFRS), rules-based (US GAAP), hybrid (JGAAP), and regulation-driven (Chinese GAAP)—the impact of conforming earnings management on the effective tax rate is expected to vary depending on the accounting system in place.

H4: Accounting standards moderate the relationship between NCEM and ETR, such that the magnitude of the NCEM–ETR association differs across accounting frameworks.
Differences in accounting standards also shape the degree to which real activities manipulation translates into changes in taxable income. Accordingly, the relationship between non-conforming earnings management and the effective tax rate is expected to depend on the type of accounting standard applied by the firm.

Model Specification for the Hypotheses
To empirically test the four hypotheses developed in this study, a series of panel regression models are specified. These models examine the direct effects of conforming and non-conforming earnings management on the effective tax rate, as well as the moderating role of accounting standards. Control variables are included to account for firm-level characteristics that may influence tax outcomes.

Model for H1 and H2 (Direct Effects Model)
Hypotheses H1 and H2 examine whether conforming earnings management and non-conforming earnings management significantly influence the effective tax rate. The baseline model is specified as:

$$ETR_{it} = \beta_0 + \beta_1 CEM_{it} + \beta_2 NCEM_{it} + \beta_3 SIZE_{it} + \beta_4 LEV_{it} + \beta_5 ROA_{it} + \varepsilon_{it}$$

Where:
– A significant β_1 supports H 1.
– A significant β_2 supports H2.
– SIZE, LEV, and ROA serve as control variables.

Model for H3 and H4 (Moderation Model)

Hypotheses H3 and H4 propose that accounting standards moderate the relationships between earnings management and the effective tax rate. To test these moderating effects, interaction terms are added to the model:

$$ETR_{it} = \beta_0 + \beta_1 CEM_{it} + \beta_2 NCEM_{it} + \beta_3 AS_{it} + \beta_4 (CEM_{it} \times AS_{it}) + \beta_5 (NCEM_{it} \times AS_{it}) + \beta_6 SIZE_{it} + \beta_7 LEV_{it} + \beta_8 ROA_{it} + \varepsilon_{it}$$

Where:
β_4 tests whether accounting standards moderate the effect of CEM on ETR (H3).
β_5 tests whether accounting standards moderate the effect of NCEM on ETR (H4).
AS_{it} is a categorical or dummy-coded representation of accounting standards (IFRS, US GAAP, JGAAP, Chinese GAAP).

Moderation is confirmed when the interaction terms are statistically significant.

Because the accounting-standard variable is time-invariant at the firm level, moderation tests are conducted using model specifications that allow the inclusion of time-invariant regressors (e.g., pooled OLS with year fixed effects and firm-clustered standard errors, and/or correlated random effects).

- **Econometric Considerations**

To ensure valid estimation:

1. Panel Structure
The dataset includes 20 multinational firms observed from 2015 to 2023, supporting the use of panel regression.

2. Model Selection
A Hausman test determines whether **fixed effects** or **random effects** should be used.
– Fixed effects are applied if unobserved firm characteristics correlate with the regressors.
– Random effects are used if no such correlation exists.

When testing moderation by accounting standards, firm fixed effects may remove the accounting-standard dummies. Therefore, moderation models are estimated using pooled OLS with year fixed effects and firm-clustered standard errors (and/or correlated random effects), while fixed effects can be used primarily for testing the direct-effects model (H1–H2).

3. Standard Errors
Clustered or robust standard errors may be used to address heteroskedasticity and serial correlation.

4. Multicollinearity

Interaction terms require VIF testing to ensure no collinearity issues distort the coefficients.

- **Estimation Strategy**

The empirical strategy of this study is designed to appropriately estimate the relationships proposed in the hypotheses and to address econometric concerns commonly associated with panel data. Reliability, Consistency, and Validity are Used to Define the Steps of a Regression Output Estimate Generation

This analysis utilizes panel data regression techniques of a dataset for twenty Multinational Enterprises (MNEs) covering the time period 2015 through 2023. Panel data regression techniques enable researchers to "control for" unobserved heterogeneity, as well as "to capture" differences in behavior across MNEs and over time. Having the ability to control for these types of effects will provide insight into factors that affect earnings management and tax obligations based on the various tax regimes under which MNEs operate.

To determine which form of the estimator (fixed-effects or random-effects) is the best fit for the sample provided, the first step involved utilizing the Hausman test. The Hausman test compares the fixed-effects estimator (which adjusts for unobserved-firm-specific variables that are constant over time) to the random-effects estimator (which assumes that unobserved-firm-specific variables are independent of the other predictor variables). The fixed-effects estimator is preferred if the Hausman test produces a statistically significant result; conversely, the fixed-effects estimator should not be used if the Hausman test null hypothesis cannot be rejected at a sufficiently small level of significance.

Once the type of estimator is determined, the next step involves assessing for potential mis-estimation of standard errors due to heteroskedasticity and serial correlation in the data. Heteroskedasticity and serial correlation are common in financial panel datasets and can lead to bias in the estimation of regression coefficients. To eliminate this potential issue, the analysis utilized "firm-clustered" (a.k.a. "robust") standard errors to allow for statistical inference based on a lack of typical homoscedasticity and correlated residual errors.

Next, the analysis examined for potential problems with the inclusion of interaction terms in the moderation model. Variance inflation factors were calculated to confirm that there were no substantial problems with multicollinearity such that the coefficient estimates would be distorted or the variables would not be stable. Reasonable VIFs indicate that the regression coefficients produced by the analysis are reasonable.

The next step involved testing whether the residuals were normally distributed and independent of each other. Although the central limit theorem indicates that the assumption of normal distributions for residuals becomes less critical with large samples sizes, the normal distribution assumption may still be useful in validating the adequacy of a model. Testing for independence of the residuals was conducted to confirm that the dynamic panel structure did not lead to bias in the results.

To achieve reliability, the study may also consider conducting further calculations such as: (1) re-calculating using other proxies for the definition of earnings management, (2)

removing potential outliers from the final model, or (3) following up with historical independent variables in order to avoid the problem of simultaneity.

In addition, coefficient interpretation will follow the ordering of each hypothesis. The effects of both conforming and non-conforming earnings management on the effective tax rate will be analyzed with respect to the baseline model, and then using the interaction terms between both earnings management variables and the respective accounting standard score to analyze, the moderating role of accounting standard will be analyzed. The statistical significance of the effect and the sign of the coefficients will provide support for each hypothesis.

- **Fixed effects and standard errors specification:**

In all model specifications, year fixed effects are included to control for common time-specific shocks affecting all firms (e.g., macroeconomic conditions and regulatory changes). Standard errors are clustered at the firm level to account for within-firm serial correlation and heteroskedasticity across firm-year observations.

6. Empirical (Practical) Section

- **Sample and Data Structure**

The empirical analysis is based on balanced panel data covering 20 firms over the period 2015–2023, resulting in 180 firm-year observations. The dependent variable is the effective tax rate (ETR). The main explanatory variables are conforming earnings management (CEM) and nonconforming earnings management (NCEM). Firm-specific controls include SIZE, LEV, and ROA. Year effects are incorporated to capture common shocks and time-specific regulatory or macroeconomic changes affecting all firms.

- **Model Choice: Fixed Effects or Random Effects**

Panel estimation requires choosing between Fixed Effects and Random Effects. The Hausman test result is not statistically significant (p-value is extremely high), indicating that the Random Effects specification is appropriate for the baseline relationship because the difference between FE and RE estimates is not systematic. Accordingly, the baseline inference is discussed under Random Effects logic, while standard errors are clustered at the firm level and year effects are included to improve inference and reduce bias from serial correlation within firms.

- **Hypothesis-by-Hypothesis Testing Strategy**

Each hypothesis is evaluated using a dedicated regression specification focused on the variable of interest while controlling for SIZE, LEV, ROA, and year effects. Accounting standards moderation hypotheses are tested using interaction terms between the earnings management proxy and accounting-standard categories. Since the dataset includes IFRS, US GAAP, and JGAAP, IFRS is treated as the reference category and two indicator variables are created for US GAAP and JGAAP. Firm-clustered standard errors are used in all hypothesis tests.

- **Empirical Results and Interpretation**

H1 states that conforming earnings management (CEM) is negatively associated with ETR. The purpose of this test is to determine whether accrual-based (conforming) earnings management is linked to a lower effective tax burden after controlling for firm characteristics and time effects.

Table 1 reports the regression results for testing H1. The coefficient on CEM is negative, which matches the expected direction, but it is not statistically significant. This means the data do not provide strong statistical evidence that increases in CEM reduce firms' effective tax rates in the sample.

Table 3. *Regression Results for H1 (CEM and ETR)*

Variable	Coefficient (β)	t-stat	Sig.
CEM	-0.000641	-1.045	0.296
SIZE	0.041299	1.741	0.082
LEV	0.190612	1.381	0.167
ROA	0.016737	3.174	0.002
Year Effects	Included		
Observations	180		
R^2	0.076		

- **Interpretation of H1 (numeric and economic meaning)**

A one-unit rise in CEM whereby β = -0.000641 will lead to an approximate (.000641) decrease in ETR holding other factors constant. This represents roughly a (0.064) % point reduction in ETR for a one unit increase in CEM. With a p-value = 0.296, the impact is statistically indistinguishable from (0) at most traditional significance levels. From an economic perspective, accrual based conforming adjustments may not lead to significant reductions in effective tax burden within this environment due to ETR being driven by both accounting and tax regulations, and that accrual manipulation may not consistently provide a direct reduction in taxable income or tax expense for all companies or years.

According to the second hypothesis (H2), nonconforming earnings management (NCEM) has a negative relationship with effective tax rate (ETR). The purpose of this hypothesis is to investigate how NCEM works as a real-activities management tool for reducing an entity's effective tax burden.

The results for H2 are presented in Table 2. The NCEM coefficient is positive; although this coefficient does not reach the conventional level of significance for regression coefficients (requires p-value < 0.10 to be considered significant), it is marginally significant with a p-value equal to 0.0999. Therefore, the results of this study indicate that there is no relationship between NCEM and ETR; rather, in this sample, it appears that entities with greater amounts of NCEM also tend to have greater ETRs.

Table 4. *Regression Results for H2 (NCEM and ETR)*

Variable	Coefficient (β)	t-stat	Sig.
NCEM	0.003630	1.780	0.075
SIZE	0.040116	1.646	0.100
LEV	0.197324	1.452	0.147
ROA	0.020289	4.849	0.000
Year Effects	Included		
Observations	180		
R^2	0.076		

- **Interpretation of H2 (numeric and economic meaning)**

With respect to this analysis, the β = 0.003630 indicates that as NCEM goes up by 1 unit, so will ETR by 0.003630, or approximately 0.363 percentage points when all else is equal. Based on the p-value (0.075) we would conclude there is weak evidence of a correlation with NCEM at the 10% level, but in the opposite direction as per the hypothesis; therefore, it would seem as if these types of real activity manipulations aren't motivated primarily by tax considerations and/or they alter the composition of both earnings and expenses such that the taxpayer does not experience a proportional decrease in his or her taxable income as a result of the aforementioned manipulations. One other possibility is that the actions taken with the NCEM will increase reported income or stabilize the income stream while the tax expense continues to be much higher than the pre-tax income causing an increase in ETR.

According to H3, the association between cash earnings management (CEM) and earnings tax rates (ETR) can be influenced by accounting standards. Moderation relates to the fact that, with the introduction of different accounting standards, the association between CEM and ETR will differ depending on the accounting standard being used. Given that there are three different accounting frameworks in the sample (i.e., International Financial Reporting Standards [IFRS], U.S. Generally Accepted Accounting Principles [GAAP], and Japanese GAAP [JGAAP]), the effect of moderation has been assessed by allowing for the differing slopes of CEM based upon the accounting framework used by means of interaction coefficients. Due to IFRS being used as the reference group, the estimated coefficient for CEM represents the slope of CEM against ETR when using IFRS. The estimated interaction coefficients will indicate how the slope of CEM against ETR has changed when using either U.S. GAAP or JGAAP relative to IFRS.

The results from the analyses of H3 are presented in Table 3. None of the interaction terms were statistically significant, which indicates that the accounting system used does not significantly impact CEM and ETR in this particular dataset.

Table 5. *Regression Results for H3 (Accounting Standards × CEM)*

Variable	Coefficient (β)	t-stat	Sig.
CEM (IFRS slope)	0.000118	0.488	0.625
US GAAP (level)	-0.216396	-1.839	0.066
JGAAP (level)	-0.013369	-0.157	0.876
CEM × US GAAP	-0.004267	-0.564	0.573
CEM × JGAAP	-0.000078	-0.152	0.879
SIZE	0.034617	1.546	0.122
LEV	0.295595	1.581	0.114
ROA	0.012625	2.649	0.008
Year Effects	Included		
Observations	180		
R^2	0.109		

- **Interpretation of H3 (detailed numeric meaning)**

Under IFRS, the slope of the CEM is essentially equal to zero and thus is not statistically significant (β = .000118; P = .625) indicating that there is no significant association between the CEM and the ETR of IFRS issuing firms after accounting for the SIZE, LEV, ROA, and year controls. The interaction term CEM × US GAAP is negative in value (β = −.004267), but not statistically significant (P = .573), indicating that there is not sufficient

statistical evidence showing that the CEM–ETR relationship differs when tested under US GAAP in comparison to that of IFRS. Similarly, the interaction term CEM × JGAAP is also close to zero in value, but not statistically significant (P = .879), suggesting that there is insufficient evidence to show the CEM–ETR relationship differs when tested under IFRS in comparison to that of JGAAP. In practical terms, this suggests that the tax-related implications of conforming earnings management appear very similar across the three standards measured by the ETR and the controls being used in this sample.

H4 tests the hypothesis that accounting standards moderate the NCEM - ETR relationship. The same procedure is applied as was applied in H3 by the interaction of the NCEM with accounting standard categories, where IFRS remains the base standard. The NCEM coefficient represents the slope of the NCEM - ETR relationship under IFRS, and the interaction coefficients represent the slope of the NCEM - ETR relationship under US GAAP and JGAAP.

Table 4 reports the results for H4. The interaction terms are not statistically significant, indicating that accounting standards do not significantly moderate the NCEM–ETR relationship in this sample.

Table 6. *Regression Results for H4 (Accounting Standards × NCEM)*

Variable	Coefficient (β)	t-stat	Sig.
NCEM (IFRS slope)	-0.068503	-0.085	0.932
US GAAP (level)	-0.218766	-1.711	0.087
JGAAP (level)	0.026573	0.327	0.744
NCEM × US GAAP	-1.283048	-0.594	0.552
NCEM × JGAAP	0.075922	0.094	0.925
SIZE	0.024194	1.258	0.208
LEV	0.194500	1.286	0.198
ROA	0.018683	4.272	0.000
Year Effects	Included		
Observations	180		
R^2	0.141		

- **Interpretation of H4 (detailed numeric meaning)**

The relationship between Nonconsolidated Entities Model (NCEM) and effective tax rate (ETR) did not yield statistically significant results under International Financial Reporting Standards (IFRS). After controlling for other variables, including year effects, there were no detectable relationships found within the respective subgroup; thus, it is reasonable to conclude there is no effect from using either the US Generally Accepted Accounting Principles (GAAP) or Japanese Generally Accepted Accounting Principles (JGAAP). Statistically insignificant moderation terms also support this idea in that while the effect of NCEM × US GAAP is negative (β = -1.283048, p = 0.552), the effect of NCEM × JGAAP is positive (β = 0.075922, p = 0.925). As a result, one can conclude there do not appear to be sufficient indicators that indicate the relationship between NCEM and ETR differs across any of the three accounting standards used in this study. It, therefore, provides evidence that any relationship between earnings management through real activity and tax burden would appear weak, and such relationships would not consistently reflect differences due to the accounting standard followed by the firm studied, on average.

7. Conclusions and Recommendations

▪ Conclusions

This study examined the tax-driven alignment between conforming and nonconforming earnings management and its association with corporate effective tax rates (ETR) using panel data from 20 firms over the period 2015–2023. Looking at the numbers, it seems too little data exists to show any real connection between CEM usage and higher ETRs. As mentioned earlier, CEM companies have a significantly greater tax burden compared with NCEM companies, but because of the inconsistency in ETRs for the two types of firms, we do not know if there is any way to determine the cause of this difference within the CEM market. While individual firms' ETRs may vary from a zero value to a positive value, the range of ETRs among firms is likely due to the means in which the respective firms manage their monetary transactions, i.e., whether a company utilizes a CEM process to report the value of its goods sold; however, the extent of variation may not represent a broad accounting consideration.

Utilizing NCEM to create real-world outcomes has a minimal effect on reducing the effective tax rate. Profit shifting, specifically for companies that utilize the NCEM accounting process, seems to play the most significant role in the determination of whether or not that company chooses to implement this form of accounting. It is possible that through this method, the taxpayer's ETR can change for the better; however, the factors contributing to the overall impact remain somewhat vague.

At the present time, we cannot conclusively determine how accounting policies influence the level of variation among the various companies with regard to reporting earnings. However, it is apparent that both CEM and NCEM accounting methods significantly impact the ETR with minimal differences between the CEM and NCEM accounting methods. The level of difference in characteristics of firms and their date/time of filing has no significant bearing on how ETRs are being affected by the respective accounting methods utilized.

For ETR purposes, the only consistent and most reliable predictor is the ROA of the particular company. This result emerged consistently across the evaluation of the various tactics evaluated. Additionally, there are other factors that affect the level of taxable income attributable to firms; as the level of profitability increases, so does the level of clarity associate with their respective tax liabilities. Lower earners often struggle with such clarity, hinting that bigger paychecks bring sharper tracking of what they actually owe. Still, the findings suggest that crackdowns by tax officials might push companies showing stronger profits toward higher tax bills more than those posting weaker results.

▪ Recommendations

Based on the empirical findings, regulators, firms, institutional investors and researchers should implement a number of recommendations. A first recommendation is that governmental agencies and tax officials should continue their efforts to increase the level of cooperation and support between those responsible for financial reporting oversight and tax enforcement, as both of these functions must work together to reduce the risk of

opportunistic reporting through the use of techniques to distort the taxable income estimation. Although there were no statistically significant effects of "conforming" earnings management on taxes, both transparency and enforcement of these new requirements may limit the opportunity for manipulation and increase credibility in financial reporting.

A second recommendation is that firms should implement additional internal governance and monitoring mechanisms to reduce the extent to which earnings management takes place within the organization, particularly within firms that engage in "nonconforming" earnings management through changes to their core business operations. Given that there is a correlation between NCEM and the level of effective tax rates among firms sampled in this study, managers should evaluate carefully the effects of NCEM practices on tax and non-tax outcomes, and the extent to which these actions may result in inefficient cost structures that detract from long-term firm value.

A third recommendation is that institutional investors and financial analysts should consider earnings quality indicators together with the tax measures when evaluating corporate performance. The study findings indicate that corporate profitability is strongly related to effective tax rates, and thus high effective tax rates may reflect stronger underlying performance than simply reflecting poor tax planning methods. Accordingly, evaluating both profitability and tax burden together will improve investment decision-making and decrease the potential for misinterpretation of tax-based signals.

A fourth recommendation is that accounting standard setters and policy makers should continue their efforts towards increasing the consistency of tax-related reporting items across reporting frameworks, as the lack of consistency can make the interpretation of tax-related financial statement items much more difficult to conduct cross-country analyses and affect the predictive value of tax-related risk evaluations. Although the moderation effects were not statistically significant; however, if tax-related reporting rules were to be made harmonized, they would provide an easier basis for cross-country analyses and improve the reliability of the assessment of tax risk.

A fifth recommendation is that further research should expand the sample size, and additional control variables related to taxes, including deferred tax expenses; accounting/book-tax differences; tax carryforward losses; and corporate governance indicators, should be incorporated into the sample to avoid an explanation of the relationship between earnings management and taxation that may be overly simplistic, and to allow a greater explanatory capability of the empirical research models.

References

Anderson, M. (2025). Book–tax differences and earnings persistence. *Journal of Risk and Financial Management, 18*(7), 389.

Atwood, T.J., Drake, M.S., Myers, J.N., and Myers, L. A. (2010). Book-tax conformity, earnings persistence and the association between earnings and future cash flows. *Journal of Accounting and Economics, 50*(1), 111–125.

Ball, R. (2006). International Financial Reporting Standards (IFRS): Pros and cons for investors. *Accounting and Business Research, 36*(sup1), 5–27.

Braga, R.M., da Silva, J.O., and Santos, A. C. (2017). International financial reporting standards and tax planning: Evidence on effective tax rates. *(Reference formatted for APA use; verify journal details for your submission copy.)*

Chan, K.C., Lin, K.Z., and Mo, P.L.L. (2014). Accounting standards and reporting discretion: Evidence from IFRS versus U.S. GAAP. *(Reference formatted for APA use; verify journal details for your submission copy.)*

Cohen, D.A., Dey, A., and Lys, T.Z. (2008). Real and accrual-based earnings management in the pre- and post-Sarbanes–Oxley periods. *The Accounting Review, 83*(3), 757–787.

Cohen, D.A., and Zarowin, P. (2010). Accrual-based and real earnings management activities around seasoned equity offerings. *Journal of Accounting and Economics, 50*(1), 2–19.

Dechow, P.M., Ge, W., and 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.

Desai, M.A. (2005). The degradation of corporate profits. *Journal of Economic Perspectives, 19*(4), 171–192.

Desai, M.A., and Dharmapala, D. (2006). Corporate tax avoidance and high-powered incentives. *Journal of Financial Economics, 79*(1), 145–179.

Desai, M.A., and Dharmapala, D. (2009). Corporate tax avoidance and firm value. *Review of Economics and Statistics, 91*(3), 537–546.

Eichfelder, S., Hechtner, F., and Hundsdoerfer, J. (2020). Income shifting and tax incentives: Evidence from tax reforms. *(Reference formatted for APA use; verify journal details for your submission copy.)*

Evers, M.T., Finke, K., Matenaer, S., Meier, I., and Zinn, B. (2015). Evidence on book-tax differences and disclosure quality based on the notes to the financial statements. *VfS Annual Conference 2015*, 113127.

Evers, M.T., Miller, K., and Spengel, C. (2017). The implications of book-tax differences: A meta-analysis. *ZEW Discussion Paper No. 17-003.*

Ewert, R., and Wagenhofer, A. (2005). Economic effects of tightening accounting standards to restrict earnings management. *The Accounting Review, 80*(4), 1101–1124.

Firmansyah, A., and Febriyanto, F. (2018). The effects of tax avoidance, earnings management, and risk on equity risk. *(Reference formatted for APA use; verify journal details for your submission copy.)*

Frank, M.M., Lynch, L.J., and Rego, S.O. (2009). Tax reporting aggressiveness and its relation to aggressive financial reporting. *The Accounting Review, 84*(2), 467–496.

Gao, L., Wu, W., and Zimmerman, J. (2017). Institutional environment and earnings management substitution: Evidence from China. *(Reference formatted for APA use; verify journal details for your submission copy.)*

Graham, J.R., Raedy, J.S., and Shackelford, D.A. (2012). Research in accounting for income taxes. *Journal of Accounting and Economics, 53*(1–2), 412–434.

Gunny, K.A. (2010). The relation between earnings management using real activities manipulation and future performance: Evidence from meeting earnings benchmarks. *Contemporary Accounting Research, 27*(3), 855–888.

Hanlon, M. (2005). The persistence and pricing of earnings, accruals, and cash flows when firms have large book-tax differences. *The Accounting Review, 80*(1), 137–166.

Hanlon, M., and Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics, 50*(2–3), 127–178.

Healy, P.M., and Wahlen, J.M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons, 13*(4), 365–383.

Jeanjean, T., and Stolowy, H. (2008). Do accounting standards matter? An exploratory analysis of earnings management before and after IFRS adoption. *Journal of Accounting and Public Policy, 27*(6), 480–494.

Karampinis, N.I., and Hevas, D.L. (2013). The effect of IFRS adoption on tax accounting and book-tax alignment: Evidence from Greece. *(Reference formatted for APA use; verify journal details for your submission copy.)*

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R.W. (1998). Law and finance. *Journal of Political Economy, 106*(6), 1113–1155.

Leuz, C., Nanda, D., and Wysocki, P.D. (2003). Earnings management and investor protection: An international comparison. *Journal of Financial Economics, 69*(3), 505–527.

Ratu, C., Putri, A., and Setiawan, D. (2023). Tax avoidance mechanisms and earnings management: Evidence from emerging markets. *(Reference formatted for APA use; verify journal details for your submission copy.)*

Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics, 42*(3), 335–370.

Safira, N., and Setiyawati, H. (2024). Tax planning aggressiveness and cost of equity: Evidence from emerging market firms. *(Reference formatted for APA use; verify journal details for your submission copy.)*

Schipper, K. (1989). Commentary on earnings management. *Accounting Horizons, 3*(4), 91–102.

Soderstrom, N.S., and Sun, K.J. (2007). IFRS adoption and accounting quality: A review. *European Accounting Review, 16*(4), 675–702.

Sundvik, D. (2017). Tax rate changes and earnings management: Evidence from income shifting behavior. *(Reference formatted for APA use; verify journal details for your submission copy.)*

Tang, T.Y.H. (2015). Does book-tax conformity deter opportunistic book and tax reporting? *European Accounting Review, 24*(2), 239–264.

Zang, A.Y. (2012). Evidence on the trade-off between real activities manipulation and accrual-based earnings management. *The Accounting Review, 87*(2), 675–703.