



To cite this article: Timothy Kalume Kahindi, Dr. Isaac Otiende Ojung'a, Prof. Wahida Mahmud Bana and Dr. Gladys Micere Wamiori (2026). FINANCIAL DETERMINANTS OF AGGRESSIVE ACCOUNTING PRACTICES: EVIDENCE FROM FIRMS LISTED ON THE NAIROBI SECURITIES EXCHANGE, KENYA, International Journal of Research in Commerce and Management Studies (IJRCMS) 8 (4): 278-303 Article No. 820 Sub Id 1373

FINANCIAL DETERMINANTS OF AGGRESSIVE ACCOUNTING PRACTICES: EVIDENCE FROM FIRMS LISTED ON THE NAIROBI SECURITIES EXCHANGE, KENYA

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DOI: <https://doi.org/10.38193/IJRCMS.2026.8423>

ABSTRACT

In emerging markets, where businesses frequently have low financial resources and relatively weak institutional supervision, aggressive accounting techniques continue to undermine the credibility of financial reporting. This study examined firm-specific determinants of income smoothing practices among firms listed at NSE, Kenya. The study looked specifically at the effect that it had on profitability, financial leverage, liquidity and operational efficiency on earning management behavior. The research was reliant on the Positive Accounting Theory, Trade-off Theory, Credit Risk Theory, Pecking Order Theory and Risk and Return Theory. The study employed a mixed-source quantitative design. 279 finance professionals from 55 listed companies provided primary data, and audited financial statements from 2019 to 2023 provided secondary data. Descriptive statistical techniques were employed to analyze the data as well as Pearson correlation, multiple regression, fixed effects panel regression and diagnostic tests. The findings indicated that financial leverage ($\beta = 0.270$, $p < .001$) and profitability ($\beta = 0.472$, $p < .001$) were the most significant determinants of income smoothing practices, and liquidity had a positive but less significant effect ($\beta = 0.173$, $p < .001$). Operational efficiency did not significantly affect earning management ($\beta = 0.014$, $p = .670$). The regression model explained 64.1% of the variation in aggressive accounting practices ($R^2 = 0.641$), which is a substantial explanatory power. The results imply that financing pressures and falling profitability are the main incentives for managers to use aggressive accounting in emerging capital markets. In addition to adding to the existing body of knowledge, regarding the quality of financial reporting by offering empirical data from a developing African economy. The results indicate that in order to enhance the early detection of earning management practices, authorities should include financial distress indicators into risk-based surveillance systems.

KEYWORDS: Aggressive Accounting, Earnings Management, Financial Leverage, Liquidity, Profitability, Operational Efficiency, Emerging Markets, Nairobi Securities Exchange, Kenya.

1. INTRODUCTION

Producing truthful, dependable, and verifiable accounting data is necessary for capital markets to operate effectively. It reduces information asymmetry, encourages wise investment decisions, and builds confidence among creditors, regulators, investors, and other stakeholders. Businesses use financial statements as the key mechanism by which they communicate with stakeholders regarding their respective financial performance, status, and prospects. Therefore, a crucial factor in determining market efficiency, corporate responsibility, and robust economic growth is the dependability of these reports. However, the increasing financial pressure, more competition in the market and higher expectations of shareholders have provided more incentives for managers to alter accounting information and earning management methods have grown common in both emerging and developed nations.

Aggressive accounting refers to the deliberate application of accounting discretion, estimates, and judgment, adhering to GAAP or IFRS, to portray a more advantageous representation of a company's financial status than what the actual economic conditions suggest. These actions, while not inherently violating accounting principles, frequently undermine the relevance, trustworthiness, and openness of financial reporting by means of hastened income recognition, postponed expense recognition, manipulation of provisions, or the establishment of discretionary reserves. Earning management results in substandard profits quality, misrepresents company valuation, deceives investors, and diminishes trust in financial markets (Almutairi, 2021; Amalia et al., 2024).

According to Martínez-Sola et al., (2024) the volatile global economy, stringent monetary policies, persistent inflation and growing geopolitical instability have caused companies to a substantial surge in adopting income smoothing practices. Such circumstances have put financial pressure to firms increasing the desire for management to meet financial commitments, maintain investor confidence, secure external financing, and achieve expected earnings targets. Evidence from research indicates that firms experiencing liquidity constraints, reduced profits, high debt levels, and weak operational activities. firms tend to practice aggressive accounting to hide underlying financial difficulties. Academics, accounting standard developers, regulators, investors, and business boards are becoming more concerned on the comprehension of earning management components to enhance the caliber of financial disclosures.

In Africa researches have demonstrated how financially troubled businesses employ creative accounting techniques to preserve market trust, prevent default, and remain solvent in order to obtain outside funding (Ozili, 2022; Oreshile et al., 2025). Similar evidence from other emerging markets

shows that after initially exaggerating reported earnings, companies typically use more conservative reporting during times of financial difficulty. These findings suggest that enterprises' adoption of financial manipulation methods is influenced by the institutional framework in which they operate (Mlawu et al., 2026).

Despite the existence of IFRS- International financial reporting standards, reporting requirements and oversight of the Capital Markets Authority (CMA), the Nairobi Securities Exchange (NSE) has experienced several high-profile cases of financial distress, corporate restructuring and business failure, making Kenya a critical context for the analysis of these relationships. Major examples of firms in Kenya include the collapse of companies such as Kenya Airways, Uchumi Supermarkets, Mumias Sugar Company, Nakumatt Holdings, Tuskys Supermarkets and Athi River Mining. This event has raised questions about the truthfulness of published financial statements and the extent to which creative accounting practices may have disguised deteriorating financial conditions prior to business failure. The recent events have increased the significance of recognizing firm-specific characteristics that encourage managers to misrepresent financial data and influence the precision of financial reporting.

The literature from accounting and finance highlights a variety of financial traits as potential causes of earning management. In order to overcome liquidity restrictions, managers may be persuaded to alter reported results in order to give the impression of short-term financial stability and to reassure creditors. High financial leverage creates debt covenant pressure and incentives to obtain high credit ratings, both of which provide incentives for profits manipulation. The less profitable, the less resource internally created and the more dependent on other sources of financing. This could cause managers to report a more favourable financial position than actually exists. Similarly, low operational efficiency can create financial constraints through inefficient utilization of assets, receivables, inventories and working capital that increase incentives for accounting discretion. These determinants have received substantial scholarly attention but empirical evidence has been mixed across nations, industries and institutional settings.

The theoretical interpretations of aggressive accounting are equally diverse. Positive Accounting Theory posits that managers select accounting practices that enhance their personal benefit, contingent upon the existence of contractual incentives. From the perspective of the trade-off theory, entities that have a significant amount of leverage will intentionally mislead their performance reports in order to keep their capital structures in the optimal state and to prevent the costs that are connected with financial crises. According to Pecking Order Theory, a company's reliance on outside funding increases when its profitability declines. This puts pressure on management to increase reported profits in order to attract creditors and investors. While Risk and Return Theory look at the connection between financial risk exposure and managerial reporting methods, Credit Risk Theory suggests that

businesses with liquidity constraints and operational shortcomings could manipulate financial data to reduce perceived borrowing risk. Collectively, these concepts provide a persuasive theoretical structure for understanding the creative accounting methods employed by financially distressed firms.

However, although the literature on earnings management has grown, there remain important gaps. First, the majority of the extant research has concentrated on aggregate proxies for earnings management, discretionary accruals or financial reporting quality with limited focus on specific aggressive accounting practices like premature revenue recognition, deferral of expenses and the creation of cookie-jar reserves. Second, the previous studies have mostly focused on the liquidity, leverage, profitability or operational efficiency separately rather than considering their simultaneous effect in an integrated analytical framework. Third, empirical evidence from emerging African economies is still scarce and inconclusive especially on the relative importance of these financial determinants in explaining income smoothing behaviour. Finally, although Kenya has witnessed a number of high-profile corporate failures related to distressed financial firms, Limited research has comprehensively examined the financial characteristics that affect creative accounting behaviors in publicly traded firms. In contrast to earlier research, this study explains aggressive accounting practices in a nascent African capital market by concurrently examining four financial distress indicators using both perceptual and panel data.

The present study seeks to fill these gaps by investigating the effect of liquidity, financial leverage, profitability and operational efficiency on earning practices among NSE firms. This study provides robust empirical evidence on the financial determinants of creative accounting in an emerging market context by using a mixed-source quantitative design that combines survey evidence from finance professionals with panel data extracted from audited financial statements. The results contribute to the body of knowledge on corporate governance, financial distress, and the quality of financial reporting by offering data from Sub-Saharan Africa, where there are currently comparatively few empirical research. By identifying the financial traits that require increased regulatory scrutiny and governance monitoring, the study also has practical consequences for regulators, business boards, investors, auditors, and legislators. Finally, a better understanding of such determinants could improve the transparency of financial reporting, enhance the protection of investors and contribute to the long-term integrity and efficiency of emerging capital markets.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Theoretical Review

Several complementary theoretical perspectives have been widely used to explain the determinants of earning management practices. The study is based on Pecking Order Theory, Positive Accounting Theory, Trade-off Theory, Credit Risk Theory and Risk and Return Theory which jointly explain why managers manipulate accounting information when firms face financial pressures.

Watts and Zimmerman (1986) developed Positive Accounting Theory (PAT) which assumes that managers choose accounting methods to maximize their personal utility in the face of contractual incentives and organizational pressures. Three primary hypotheses are proposed by the theory: the political cost hypothesis, the debt covenant hypothesis, and the bonus plan hypothesis. These hypotheses explain incentives for managers to manipulate accounting information. During times of financial distress managers are likely to employ accounting techniques that increase reported income in an effort to satisfy debt covenants, realize compensation goals or maintain investor confidence. Thus, PAT forecasts that financial constraints are positively related to creative accounting.

Trade-off Theory is an explanation of the corporate financing behaviour. It suggests that firms seek to find an optimal balance between costs of debt financing and the benefits accrued. Debt confers tax benefits and enhances the ability to invest, but high leverage raises costs of financial distress and the chance of violating lending covenants. As such, managers of highly leveraged firms are under more pressure to report favourable financial performance that increases the incentives to engage in earnings manipulation and other creative accounting techniques.

Pecking Order Theory, which contends that businesses should choose internal funding over external capital, lends credence to this notion. Decreasing profitability reduces the retained earnings thus forcing businesses to raise funds through debt or equity. Since access to external financing is largely dependent on reported financial performance, managers may be tempted to manipulate accounting data to show greater profitability and improve financing opportunities.

In Credit Risk Theory it is also argued that deteriorating liquidity and operational inefficiency increase the perceived default risk for lenders. To maintain their borrowing capacity, managers may resort to earning management practices to hide financial problems and maintain favourable credit ratings.

Finally, Risk and Return Theory argues that the increase of financial risk has an impact on managerial behaviour and corporate decision-making. Organizations facing growing financial uncertainty commonly use risk-mitigating strategies to ensure organizational survival, such as discretionary financial reporting. These theories together offer a complete explanation for why financial characteristics impact aggressive accounting behaviour

Figure 2.1
Conceptual Framework

Independent Variables Dependent Variable

Determinants of Aggressive Accounting

Liquidity Signals

- Current Ratio
- Quick Ratio
- Cash Ratio



Financial Leverage Signals

- Debt Ratio
- Debt-to-Equity Ratio
- Long-term Debt Ratio



Profitability Signals

- Return on Assets
- EBIT Margin
- Gross Profit Margin



Operational Efficiency Signals

- Inventory Turnover
- Accounts Receivable Turnover
- Accounts Payable Turnover



Aggressive Accounting Practices

- Revenue Recognition
- Expense Deferral
- Cookie Jar Reserves

2.2 Empirical Literature Review

Liquidity and Aggressive Accounting

The potential of a business to satisfy its immediate financial commitments using its current assets is known as liquidity. Liquidity shortages increase the possibility of financial distress. Liquidity is sufficient to reduce financial pressure and to increase operational flexibility. Companies in financial distress often face pressure from creditors, suppliers and investors, which can create incentives to manage reported earnings to signal financial health.

Empirical data regarding the relationship between liquidity and creative accounting is mixed. Studies in Indonesia and Malaysia indicate that firms with greater liquidity tend to do less earnings management, as sufficient cash flow reduces the need to manipulate financial performance (Abdullah et al., 2023; Dwiantari & Artini, 2021). Similar results have been reported in European markets where financially healthy firms tend to produce higher quality financial reports.

Other studies, however, present insignificant or inconsistent relationships between liquidity and earnings management, indicating that institutional quality, regulatory enforcement, and corporate governance may moderate the relationship (Negoro & Wakan, 2022). However, there is very scant information from developing African countries, despite increasing apprehensions with regard to the standard of the financial reporting among publicly traded companies. The variable results indicate that the influence of liquidity on earning management is contextually reliant and necessitates additional research in emerging economies like Kenya.

The available literature generally shows that liquidity influences managerial financial reporting choices through its impact on the ability of enterprises to satisfy short-term obligations. Most studies find that liquidity constraints increase incentives to engage in aggressive accounting as managers try to reassure investors and creditors. Others find weak or insignificant relationships among liquidity constraints, institutional quality, regulatory enforcement and corporate governance. These anomalies imply the contextual specificities of liquidity effect and there is need for more empirical inquiry in emerging capital markets like Kenya. Therefore, this study was designed to determine whether liquidity has a significant impact in aggressive accounting in the listed companies in the Nairobi Security Exchange.

Hypothesis

H₁: Firms' liquidity has a significant influence on aggressive accounting practices among NSE listed companies.

Financial Leverage and Aggressive Accounting

The amount of debt a business uses to finance its operations is measured by financial leverage. High repayment obligations and significant leverage make businesses vulnerable to covenant violations, refinancing issues, and declining credit ratings. These demands may force management to falsify financial reports in order to uphold credit arrangements and protect investor confidence.

According to Positive Accounting Theory's concept of debt promises, managers of highly indebted corporations are expected to select accounting practices that increase net income. The numerous studies that demonstrate leverage as a strong predictor of creative accounting methods support this claim. Companies with high amounts of debt were significantly more likely to fabricate their income in order to avoid breaking loan agreements, according to Black et al. (2021). According to Jain and Nissim's (2025) research, leverage reliably predicts discretionary accounting behavior in both developed and emerging economies.

Comparable studies from Africa indicate that firms experiencing financial distress due to excessive debt are more likely to manipulate financial reports to maintain access to external financing and avert negative market responses. A limited number of studies have comprehensively assessed leverage with other financial characteristics in the Kenyan capital market, although these persistent results.

The literature reviewed is unanimous in that financial leverage is one of the most potent financial incentives for aggressive accounting. High leveraged firms are under pressure from debt covenants, creditworthiness and external financing which increases the likelihood of earnings management. While this relationship has been largely supported in many countries, very few studies have examined its extent in the Kenyan capital market using several financial determinants simultaneously. More empirical data is therefore required to demonstrate the extent to which leverage affects aggressive accounting behavior in developing market contexts.

Hypothesis

H₂: Financial leverage has a significant positive influence on aggressive accounting practices among NSE listed entities.

Profitability and Aggressive Accounting

An entity's ability to make money from its daily activities and assets is reflected in its profitability. Reduced profitability raises managerial pressure to meet shareholders' performance expectations, reduces internal financing capability, and increases dependency on outside funding.

According to the Pecking Order Theory, businesses with diminishing earnings are becoming more reliant on debt and equity finance. As a result, managers might falsify accounting data to show better

financial results and make it easier to obtain outside funding. According to Positive Accounting Theory, managers may use creative accounting techniques to avoid disclosing reductions in earnings when faced with performance-related incentives or market expectations.

These theoretical claims are typically supported by empirical data. Research from Asia and Europe shows that companies that are losing money are far more prone to use discretionary accounting techniques and management of earnings (Mesrawati et al., 2022; Kebede et al., 2024). Similar results have been shown in a number of emerging economies, where managers are driven by profitability pressure to maintain investor confidence and smooth earnings. However, some research points to weak or statistically insignificant connections, suggesting that institutional features, ownership structure, and governance procedures may have different impacts on profitability. These differences call for more research in the Kenyan context.

The empirical literature generally suggests that falling profitability provides incentives for managers to manipulate reported earnings to meet the expectations of investors, lenders and other stakeholders. However, the literature still reports inconsistent results, with some studies documenting weak or insignificant relationships, due to differences in governance structures, ownership concentration, and institutional settings. This mixed evidence suggests that the influence of profitability may differ among jurisdictions, pointing to the need for further evidence from emerging economies. Hence, this study aims to evaluate if profitability significantly influences aggressive accounting practice among firms listed on the Nairobi Securities Exchange.

Hypothesis

H₃: Firm profitability exerts considerable impact on aggressive accounting practices among NSE listed entities.

Operational Efficiency and Aggressive Accounting

The efficacy with which businesses use their assets, inventories, receivables, and working capital to produce income is reflected in operational efficiency. Financial distress is increased, cash flows are weakened, and profitability is decreased due to poor operational performance.

According to Credit Risk Theory, companies with operational inefficiencies could falsify accounting data to hide declining performance and lower perceived borrowing risk. According to earlier research, ineffective inventory control, subpar receivables collection, and inadequate asset usage may promote earning management methods by raising managerial pressure to appease stakeholders.

However, empirical data continues to be contradictory. Several further research found either weak or statistically negligible connections between operational efficiency and accounting manipulation,

notwithstanding Setegn's (2021) conclusion that operational inefficiencies greatly increased earnings management. The need for more research is further highlighted by the comparatively small amount of empirical data from developing African capital markets.

Evidence from practice on operational efficiency – unlike liquidity, leverage and profitability – is far from conclusive. Some studies have shown that inefficiency in the use of assets, inventories and receivables leads to higher financial strain and encourages aggressive accounting. Other studies have found no or little direct relationship. The results are mixed and appear to indicate that operational efficiency may indirectly affect aggressive accounting through its impact on liquidity and profitability, rather than being an independent determinant. More empirical investigations are therefore needed to shed light on its role in emerging capital markets like Kenya.

Hypothesis

H₄: Operational efficiency exerts considerable effect on aggressive accounting practices among NSE quoted entities.

2.3 Research gap and synthesis of the literature

According to the examined literature, the primary drivers of creative accounting practices are financial pressures resulting from decreased profitability, excessive debt, insufficient liquidity and operational inefficiencies. Even though these indicators are carefully examined in developed nations, differences in corporate governance frameworks, institutional quality, accounting standards, and capital market development lead to disparate empirical conclusions in emerging nations.

There are serious deficiencies in a number of areas, according to the literature. Previous studies have mostly concentrated on discretionary accruals or general measures of profit manipulation, paying little attention to specific income smoothing practices such as early revenue recognition, expense deferral, and cookie-jar reserve generation. Second, rather than examining liquidity, financial leverage, profitability, and operational efficiency jointly under a single analytical framework, earlier research frequently examined particular financial characteristics separately. Third, despite growing apprehension regarding the caliber of financial disclosures by publicly traded companies, there is a paucity of empirical data from Sub-Saharan Africa, particularly Kenya. Ultimately, scant research has integrated objective panel data derived from audited financial statements with perception-based insights from finance professionals to yield a thorough understanding of earning management practices.

The gaps are filled in this study by using a mixed-source quantitative technique to evaluate the simultaneous effects of liquidity, financial leverage, profitability and operational efficiency on creative accounting practices among NSE quoted businesses. The study contributes to the knowledge

on the quality of financial reporting in developing nations, and provides context-specific statistics to support regulatory policy, investment decision-making and changes in corporate governance.

This research presents four significant contributions.

- Concurrently analyzes four determinants.
- Employs a combination of survey and panel data.
- Emphasizes Aggressive accounting instead of discretionary accruals.
- Furnishes proof from Sub-Saharan Africa.

3. RESEARCH METHODOLOGY

3.1 Research Philosophy and Design

The study employed a positivist research paradigm, asserting that social processes may be objectively assessed and elucidated by statistical analysis and empirical observation. The positivist paradigm was deemed appropriate because the study aimed to investigate causal relationships between firm-specific financial characteristics and aggressive accounting practices from observable and quantifiable data. A mixed-source quantitative design was used in the study combining primary survey data with secondary data from financial statements. These data sources were supplemented, which improved methodological triangulation, increased the robustness of the outcomes, and reduced the limitations of relying on a primary source of evidence.

The research design used is descriptive explanative. The descriptive component examined features of income smoothing practices and perception of respondents regarding financial distress indicators. The explanatory component examined the causal relationships between liquidity, financial leverage, profitability, operational efficiency and creative accounting practices. This was an appropriate design because it enabled the description of existing accounting behaviour as well as the statistical estimation of the effect of firm-specific financial characteristics on earning management.

3.2 Target Population and Sampling Procedure

The study targeted all the sixty-four (64) NSE quoted entities across the various economic sectors as at December 2023. The reason for selecting listed companies is that they are within a regulated environment of financial reporting and are required to come up with audited financial accounts using International Financial Reporting Standards (IFRS), which offer accurate and comparable financial data.

The formula for determining the sample size that Yamane (1967) developed was utilized in order to compute the sample size which was fifty-five (55) NSE listed companies. Stratified random sampling was used to enhance the representativeness of the sample and diminish sector-specific bias, ensuring

proportional representation across various industry sectors.

The unit of observation for the primary survey were finance managers, accountants, internal auditors and chief finance officers in sampled firms. These respondents were purposively selected due to their direct involvement in financial reporting, accounting policy implementation and preparation of corporate financial statements. Their professional knowledge enabled them to provide knowledgeable responses with reference to income smoothing and the financial characteristics that inform such behaviour.

3.3 Measurement of Study Variables

The research variables were defined in accordance with recognized theoretical and empirical literature. Table 3.1 encapsulates the assessment of each variable, the relevant indicators, measurement scales, and type of variable.

Table 3.1
Operationalization of Study Variables

Type of Variable	Variable	Indicator	Measurement
Liquidity	Current Ratio	Higher values indicate stronger liquidity ($ROT \geq 2.0$).	evaluates one's ability to fulfill immediate commitments using current assets.
	Acid Test Ratio	Higher values indicate stronger liquidity ($ROT \geq 1.0$).	Assesses the ability to settle short-term liabilities without relying on inventory sales.
	Cash Ratio	Higher values indicate stronger liquidity ($ROT = 0.40-0.50$).	Evaluates the capacity to pay current liabilities using cash and cash equivalents only.
Financial Leverage	D/R	Higher values indicate greater financial risk.	Shows the proportion of assets financed through debt.
	D-E-R	Higher ratios indicate greater reliance on debt financing.	Measures the proportion of creditor financing relative to shareholders' equity.
	Debt-to-EBITDA Ratio	Lower ratios indicate stronger financial health.	Assesses leverage and debt repayment capacity using operating earnings.

Profitability	GPM	Higher margins indicate better cost control.	Shows the percentage of sales retained after covering cost of goods sold.
	NPM	Higher margins indicate improved profitability.	Measures profit generated from core business operations.
	ROA	Higher values indicate efficient asset utilization.	Evaluates the efficiency of assets in generating earnings.
Operating Efficiency	ART	Higher turnover indicates faster receivables collection.	Measures the efficiency of collecting receivables from customers.
	APT	Lower turnover indicates longer payment periods.	Measures the speed at which suppliers are paid.
	Assets Turnover Ratio	Higher turnover reflects efficient asset utilization.	Assesses the effectiveness of assets in generating revenue.

Source: Adapted from Financial Statement Analysis (FSA) ratio guidelines.

Note. ROT = rule of thumb; PG = peer group average; HA = historical average

Benchmark values vary by industry; therefore, ratios should be evaluated against peer group averages and the firm's historical trends rather than relying solely on rule-of-thumb thresholds.

3.4 Data Collection Procedures

A uniform self-completed survey developed using recognized indicators documented in previous accounting and corporate governance studies was utilized to collect main data. Scholars in accounting and experienced finance practitioners scrutinized the questionnaire prior to the primary survey to assess its content validity and ensure that the measurement items were lucid, relevant, and exhaustive.

Over the course of a period of five years (2019–2023), secondary data was collected from the audited annual reports of the businesses that were selected for observation. Financial statement data was obtained from corporate reports submitted to the CMA and the NSE. Combining primary and secondary data allowed for methodological triangulation, which enhanced the validity of the empirical findings.

3.5 Reliability and Validity Assessment

The dependable nature of the research instrument was evaluated using Cronbach's alpha coefficient. All research constructs demonstrated satisfactory internal consistency, above the recommended minimum threshold of 0.70. Cronbach's alpha coefficients indicated adequate reliability for empirical investigation: 0.746 for liquidity, 0.701 for financial leverage, 0.759 for profitability, 0.943 for operational efficiency, and 0.784 for aggressive accounting practices.

For the purpose of determining the construct validity, exploratory factor analysis (EFA) was utilized. Both the Kaiser-Meyer-Olkin, also called KMO, statistic and the Bartlett's Test of Sphericity were utilized in order to examine whether or not the correlation matrix was suitable for factor analysis. The Kaiser-Meyer-Olkin statistic assessed sampling adequacy for factor analysis. The underlying constructs were extracted using Principal Component Analysis with Varimax rotation. Factors with factor loadings of at least 0.40 and eigenvalues larger than one were kept for further analysis, according to Hair et al. (2022). The observed variables accurately mirrored the associated theoretical ideas, according to the validity evaluation.

3.6 Data Analysis Techniques

Analyses were performed on the data using SPSS and panel data econometric techniques.

Means and standard deviations were computed as descriptive statistics to characterize respondents' opinions of the research variables. To determine the strength and direction of associations among the independent and dependent variables, the Pearson's correlation coefficients were estimated.

The effect of financial leverage, liquidity, profitability, and operational efficiency on earning management procedures was then investigated using multiple linear regression analysis. The regression model provided estimates of the relative contribution of each explanatory variable, after controlling for the effects of the remaining variables.

To supplement the survey evidence, panel regression analysis was used to analyze secondary financial statement data for the 5 years study period. To decide on the more appropriate estimation method, either the fixed-effects or the random-effects model, we performed a Hausman specification test. The results of the test indicated that the fixed-effects estimator was the best choice because it sufficiently accounted for the unobserved firm-specific heterogeneity.

3.7 Model Specification

The empirical relationship between the explanatory variables and dependent variable was estimated using the following multiple regression model:

$$AA_i = \beta_0 + \beta_1 LQ_i + \beta_2 LEV_i + \beta_3 PROF_i + \beta_4 OE_i + \varepsilon_i$$

Where:

- (AA) = Aggressive Accounting Practices
- (LQ) = Liquidity
- (LEV) = Financial Leverage

- (PROF) = Profitability
- (OE) = Operational Efficiency
- (β_0) = Invariant term
- (β_1 1- β_1 4) = Regression parameters
- (ε_i) = Error term

The 5% significance threshold was used to test the null hypotheses. For the purpose of determining the relative significance of each independent predictor, standardized regression coefficients were utilized, and p-values were used to determine statistical significance.

3.8 Diagnostic Tests

To confirm adherence to the multiple regression analysis's underlying assumptions, a number of diagnostic tests were carried out. Tolerance statistics and the VIF were used to evaluate multicollinearity. There was no detrimental multicollinearity because the obtained VIF values were well below the critical threshold of 10.

The Kolmogorov-Smirnov and Shapiro-Wilk tests were used to assess the residuals' normality. The Durbin-Watson statistic evaluated residual autocorrelation, and the Breusch-Pagan test was used to investigate homoscedasticity. The diagnostic results affirmed the accuracy and dependability of the computed regression coefficients, validating that the prerequisites of multiple regression were well met.

4. RESULTS

4.1 Descriptive Statistics

The participants' opinions on the factors impacting financial distress and income smoothing practices in the NSE-quoted companies were presented in the study using descriptive statistics. Table 4.1 displays the mean values and standard deviations of the variables examined in the study.

Table 4.1 Descriptive Statistics of the Study Variables

Variable	Mean	SD
Liquidity	4.00	0.35
Financial Leverage	4.28	0.19
Profitability	4.16	0.36
Operational Efficiency	1.67	0.34
Aggressive Accounting Practices	4.26	0.27

The results of Table 4.1 show that the leading causes of aggressive accounting as reported by the

respondents are financial leverage (mean = 4.28, standard deviation = 0.19) and profitability pressures (mean = 4.16, standard deviation = 0.36). The participants also gave a high average score for liquidity (M = 4.00, SD = 0.35), suggesting that they associated liquidity worries with earning management techniques. On the other hand, the mean for operational efficiency was quite low (M = 1.67, SD = 0.34) suggesting that little consensus existed about the direct impact of operational inefficiencies on creative accounting practices. The overall mean of the outcome variable was significant (M = 4.26, SD = 0.27) in the sense that it represented a general agreement about the frequency of creative accounting practices in publicly traded companies. This showed the importance of the outcome variable.

4.2 Correlation Analysis

To assess the associations between the variables under investigation, Pearson's product-moment correlation coefficients were calculated before performing the regression analysis. Table 4.2 displays these findings.

Table 4.2 Pearson Correlation Matrix

Variable	1	2	3	4	5
Liquidity	1				
Financial Leverage	0.530**	1			
Profitability	0.587**	0.664**	1		
Operational Efficiency	0.118	0.125	0.133	1	
Aggressive Accounting	0.530**	0.664**	0.701**	0.128	1

*p<0.05

The correlation analysis demonstrates a significant positive relationship between aggressive accounting and liquidity ($r=0.530$, $p<.01$) (Table 4.2). Also, the link between creative accounting and financial leverage was ($r = 0.664$, $p <.01$). And the correlation between earning management and profitability was ($r = 0.701$, $p <.01$). The bivariate study showed that the most significant link was between income smoothing practices and profitability, followed by financial leverage. There was a weak positive correlation between creative accounting and operational efficiency ($r = 0.128$) suggesting that there is a limited linear link between the two variables. The relationships between the explanatory factors were within the boundaries of multicollinearity accepted in general. Therefore, it can be concluded that the variables tested reflected different but interrelated financial features.

4.3 Multiple Regression Analysis

To examine the effects of aggressive accounting practices on profitability, financial leverage, liquidity, and operational efficiency, a regression analysis was conducted.

Model Summary

Table 4.3: Regression Model Summary

Statistic	Value
R	0.801
R ²	0.641
Adjusted R ²	0.636
Standard Error	0.185

Table 4.3 revealed a substantial explanatory power, with the regression model explained 64.1% of the variance in aggressive accounting practices ($R^2 = 0.641$). The model maintained significant predictive capability following the adjustment for the quantity of explanatory variables, as indicated by the adjusted coefficient of determination (Adjusted $R^2 = 0.636$).

Analysis of Variance

Table 4.4 ANOVA Results

Source	df	F	p-value
Regression	4	122.309	<0.001
Residual	274		
Total	278		

Table 4.4 showed a regression model as statistical significance ($F = 122.309$, $p < 0.001$), indicating that the predictor variables together measured aggressive accounting practices

Regression Coefficients

Table 4.5 Regression Coefficients

Predictor	β	t	p-value
Liquidity	0.173	4.050	<0.001
Financial Leverage	0.270	5.920	<0.001
Profitability	0.472	8.760	<0.001
Operational Efficiency	0.014	0.430	0.670

Table 4.5 regression analysis indicated that liquidity had a favorable and statistically significant

influence on aggressive accounting ($\beta = 0.173$, 95% CI $p < 0.001$). Financial leverage showed a significant and favorable predictor of creative accounting practices ($\beta = 0.270$, 95% CI $p < 0.001$). Profitability emerged as the strongest predictor ($\beta = 0.472$, 95% CI $p < 0.001$), showing that increased usage of earning management techniques was linked to demands related to profitability. On the other hand, income smoothing was not much impacted by operational efficiency ($\beta = 0.014$, 95% CI $p = 0.670$).

4.4 Diagnostic Tests

To confirm adherence to the fundamental ideas of multiple regression analysis, diagnostic tests were carried out.

Both the Shapiro-Wilk test ($p = 0.553$) and the Kolmogorov-Smirnov test ($p = 0.200$) failed to reject the null hypothesis of normality, supporting evaluations of normality that showed the residuals followed a normal distribution. Multicollinearity assessments revealed acceptable Variance Inflation Factor (VIF) values between 1.017 and 1.366, with tolerance levels above the suggested cutoff of 0.20, indicating the absence of detrimental multicollinearity. Homoscedasticity was found to be present in the residuals, as indicated by the Breusch-Pagan test ($p = 0.355$). This indicates that the variance of the errors was consistent across all of the data points. A Durbin-Watson value of 1.783 indicated that the residuals were independent, and there was no need for concern regarding autocorrelation or other forms of correlation. Normality tests showed that the residuals followed a normal distribution. This was reinforced by the Kolmogorov-Smirnov test ($p = 0.200$) and the Shapiro-Wilk test ($p = 0.553$), both of which failed to reject the null hypothesis of normality. Overall, the results of the normality tests indicated that the residuals were normal. The findings, taken as a whole, demonstrated that the assumptions of multiple linear regression were adequately satisfied.

4.5 Robustness Analysis Using Panel Data

To corroborate the study results, secondary data obtained from audited financial statements spanning 2019 to 2023 were examined employing panel regression methodologies. The adoption of the fixed-effects estimator was supported by the Hausman specification test, which indicated a relationship between the independent variables and firm-specific effects. The study results and the fixed-effects results were mostly in agreement. In aggressive accounting, financial leverage continued to be a useful and statistically significant component, and profitability also had a big impact. While operational efficiency was statistically insignificant, liquidity showed a diminished but favorable correlation with creative accounting. Additional proof of the predictive association between financial circumstances and accounting practices was provided by Panel Granger causality analysis, which also showed that traits of financial distress preceded shifts in earning management behavior.

The reliability and validity of the study's conclusions are strengthened by the agreement between the

initial survey results and the subsequent panel data analysis.

4.6 Summary of Hypothesis Testing

Table 4.6 Summary of Hypothesis Testing

Hypothesis	Decision
H ₁ : Liquidity profoundly impacts aggressive accounting practices	Supported
H ₂ : Financial leverage significantly affects aggressive accounting practices.	Supported
H ₃ : Profitability profoundly impacts aggressive accounting practices.	Supported
H ₄ : Operational efficiency significantly affects aggressive accounting practices.	Not Supported

Table 4.6 indicates that liquidity, financial leverage, and profitability significantly affect the use of creative accounting practices by NSE listed firms. Profitability had the greatest significant impact among the explanatory variables, with financial leverage following closely behind. Operational efficiency did not serve as a substantial predictor of creative accounting practices. The results indicate that financial constraints linked to funding choices and profitability are more significant in elucidating earning management than operational effectiveness.

5. DISCUSSION

This study analyzed the impact of liquidity, financial leverage, profitability and operational efficiency on the earning management practices of the NSE listed entities. The findings indicate that the particular financial features of a company matter to explain the creative accounting behavior, with the profitability and financial leverage identified as the main elements. The model accounted for 64.1% of the variance in aggressive accounting practices, which suggests that financial conditions have a significant impact on managerial reporting behavior when considering emerging markets

The results show that the liquidity distress signals have a positive and statistically significant effect on creative accounting practices. Therefore, firms that face liquidity problems are more prone to use accounting discretion to present a more favorable short-term financial position. Executives experiencing liquidity problems might speed up income recognition, delay expense recognition, or alter accounting estimates in order to boost stakeholders' confidence that the company will be able to meet its short-term financial commitments. These results are in line with Risk and Return Theory which suggests that higher financial distress will lead managers to implement strategies to survive the organization. The results are in line with previous studies that show that liquidity shortages cause a higher chance of using creative accounting (Abdullah et al., 2023; Martínez-Sola et al., 2024). However, the results of this study do not support the findings of previous studies which found no significant relationship between liquidity and earning management. This is an indication of the

changes in institutional settings, regulatory strictness and the growth of capital markets as sources of variation. In the Kenyan setting, liquidity problems appear to aggravate incentives for earnings distortion and other creative financial reporting techniques.

The use of financial leverage distress signals has become a more important signal of the presence of income smoothing practices. The more financial liabilities a firm has, the more likely it is to use earning management than a firm with less leverage. The results of this research corroborate the assertions of the Trade-off concept and the debt covenant principle under Positive Accounting Theory. The Trade-off Theory posits that to secure access to debt financing, maintain robust credit ratings and avert covenant breaches, earning manipulation is a common practice among executives working for highly leveraged companies. Highly leveraged firms experience covenant pressure, creating incentives to accelerate revenue recognition or defer expenses to avoid technical default. (Black et al., 2021; Jain & Nissim, 2025). This finding aligns with the results of other researches done in emerging markets, where lenders and financial markets are more sensitive to businesses with higher debt levels. Leverage is a key component of the forceful accounting strategies used by Kenyan publicly traded companies, according to the positive association shown in the survey and panel data evaluations.

It was understood that the main reason for aggressive accounting techniques was profitability. Companies with declining earnings were far more likely to employ creative accounting to make the reported financial performance appear better. Lower profitability means less internal resources and increased dependence on external finance. As such the management has an incentive to portray a rosy picture of the financial statements in an effort to keep the confidence of the investors and raise more capital. The result gives a strong support for Pecking Order Theory which predicts that firms will use more external financing when internal resources are low and for Positive Accounting Theory which explains the incentives that managers have to improve both personal and firm benefits through discretionary accounting choices. This is consistent with the recent research that indicate profit-driven pressures are significant determinants of the tendency of earnings manipulation, especially in times of economic instability and financial crisis (Mesrawati et al., 2022; Kebede et al., 2024). The prominence of profit as the initial signal implies that the expectations of investors and financial markets still play a significant role in the adoption of income smoothing systems by publicly listed companies.

In contrast to expectations, financial manipulation techniques were not statistically significantly impacted by operational efficiency. The results indicate that managers do not often correct operational flaws by altering financial accounts, despite the possibility that poor inventory, receivables, and asset management could jeopardize organizational effectiveness. Leverage distress signals and firms' profitability distress signals have a greater influence on accounting than internal operational efficiency. This outcome contradicts the Credit Risk Theory, which maintains that operational defects boost the incentives for creative financial reporting by rising perceived borrowing risk. Nevertheless,

it is consistent with other research that demonstrates weak or nonexistent relationships between profits manipulation and operational effectiveness for businesses. According to the findings, operational inefficiencies may not be direct predictors of aggressive accounting; rather, they may have an indirect impact on earning management through the consequences that they have on profitability and liquidity.

In light of the findings, financial manipulation techniques that are adopted by publicly traded companies in Kenya are mostly affected by rather than by internal operational issues. Organizations that are experiencing growing debt commitments, declining earnings, and difficulties with liquidity flow are more likely to utilize creative accounting techniques in order to maintain their fiscal integrity and guarantee that they will always have access to capital whenever they need it. The necessity of recognizing indicators of financial difficulty as potential precursors to fraudulent financial reporting is highlighted by these findings.

Both the subjective survey data and the objective panel statistics are combined in this research, which contributes to the improvement of the accounting literature. This is accomplished by combining various financial components into a single empirical structure. The congruence between the two data sources not only increases the level of confidence in the findings, but it also draws attention to the need of methodological triangulation in accounting research. Moreover, the research broadens empirical understanding from Sub-Saharan Africa, where investigations into the factors influencing creative accounting are remarkably limited. The results consequently improve comprehension of financial reporting techniques in emerging capital markets marked by developing regulatory frameworks, concentrated ownership, and rather fragile institutional settings.

6. CONCLUSION

This research examined the financial factors influencing income smoothing methods in companies registered on the NSE. The study rigorously analyzed the impact of liquidity, financial leverage, profitability, and operational efficiency on financial manipulation practices through a mixed-source quantitative strategy that integrated primary survey data with secondary panel data derived from verified financial statements.

According to empirical data, earning management techniques in Kenyan publicly traded companies are mostly determined by profitability and financial leverage, whereas liquidity has a considerable but relatively small impact. However, creative accounting practices are not significantly correlated with operational efficiency. The results show that leverage financial distress signals, profitability distress indicators, and liquidity constraints—rather than operational shortcomings—are the main factors influencing financial manipulation.

The study contributes to the corpus of existing research by shedding more light on the variables driving

aggressive accounting in a developing African capital market. Instead of concentrating on specific components, the study provides a comprehensive explanation of managerial financial reporting behavior by integrating multiple theoretical frameworks with corroborating empirical data. The findings highlight the importance of financial distress indicators as crucial predictors for identifying companies that may employ creative accounting practices.

Overall, the results indicate that financial pressure, rather than operational inefficiencies are the main catalysts for aggressive accounting behaviors in publicly traded companies within emerging markets.

7. PRACTICAL IMPLICATIONS

Regulators, corporate governance bodies, investors, auditors, financial institutions, and lawmakers will all be significantly impacted by the results.

Implications for Governance Oversight Mechanisms;

The results highlight the necessity for audit committees and boards of directors to increase their supervision of financial reporting, especially in companies with significant debt or financial difficulties. To lessen the possibility of opportunistic financial reporting, effective administration should prioritize careful examination of accounting assumptions, revenue recognition procedures, impairment evaluations, and discretionary accruals.

Implications for Financial Stakeholders;

Financial experts, creditors, and investors all find the results to be important. When assessing the integrity of financial disclosures and business risk, investment decisions should take into account comprehensive analyses of debt, liquidity, and profitability patterns in addition to reported earnings. Keeping an eye on these financial metrics could help identify possible profit manipulation before big business downturns.

Implications for Regulatory Bodies

According to the findings, regulatory bodies such as the CMA and the NSE should closely monitor companies that consistently have high levels of leverage, low profitability, and declining liquidity because these traits greatly raise the possibility of aggressive accounting practices. To enable the prompt identification of potentially deceptive financial statements, regulatory supervision frameworks should integrate financial distress indicators into risk-focused monitoring systems.

Implications for Professional and Assurance Institutions

The study emphasizes how crucial it is for professional accounting associations and external auditors to enhance ethical accounting standards and auditing practices in industries with a high level of administrative discretion. More professional oversight could improve the dependability and openness

of corporate financial reporting in emerging capital markets.

8. LIMITATIONS AND FUTURE RESEARCH

However, despite the fact that it has achieved a great deal, this work has a great deal of shortcomings that present opportunities for further exploration.

The study's initial focus was solely on quoted NSE companies, which limited the findings' applicability to privately held companies and other developing nations. To determine whether the observed relationships hold true across various institutional frameworks, future research should examine larger cross-national samples in African capital markets.

Secondly, future research may use extensive panel datasets to investigate changes in accounting procedures throughout several economic cycles, even if the mixed-source quantitative design improved the reliability of the results. The Generalized Method of Moments (GMM) and other dynamic panel estimating techniques can effectively handle endogeneity and reverse causality issues pertaining to creative accounting practices and financial characteristics.

Third, the analysis ignored macroeconomic variables that could affect financial manipulation practices, such as inflation, interest rates, currency exchange volatility, and economic policy ambiguity, in favor of concentrating on firm-specific financial features. Future studies should combine macroeconomic and company-specific components into a single analytical framework.

Fourth, the study was not able to establish causal links between the study variables due to the cross-sectional strategy utilized to collect primary data based on respondents' perceptions. Given that the data were collected at the same time, the results are indicative of significant connections and not definitive cause-and-effect linkages. Future research, using experimental or longitudinal methodologies, could effectively investigate causal relationships and changes in aggressive accounting practices over time.

Lastly, more governance and organizational features, such as ownership concentration, board diversity, executive compensation, audit dependability, environmental, social, and governance (ESG) performance, and digital financial reporting systems, should be investigated in order to broaden the current model.

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