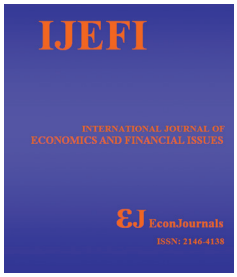

International Journal of Economics and Financial Issues

ISSN: 2146-4138

available at http: www.econjournals.com

International Journal of Economics and Financial Issues, 2025, 15(6), 1-9.

The Impact of Earnings Management on Stock Returns with the Moderating Role of Audit Quality in Emerging Markets

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Received: 17 April 2025 **Accepted:** 13 August 2025 **DOI:** https://doi.org/10.32479/ijefi.20458

ABSTRACT

This study aims to evaluate the impact of earnings management (EM) on stock returns in the context of emerging markets, while also examining the moderating role of audit quality, represented by the presence of Big 4 audit firms. Utilizing prominent EM measurement models, including Jones (1991), Dechow et al. (1995), and Kothari et al. (2005), the research conducts panel data analysis with firm- and year-fixed effects, along with robustness checks through clustered standard errors. The empirical results reveal a positive association between EM and stock returns, suggesting that earnings management behaviors may be positively received by the market in the short term. However, when audit quality is high (Big 4 auditors), this relationship weakens or even reverses, implying that high-quality audits can mitigate the influence of earnings management activities. Furthermore, the findings indicate a notable difference between listed and unlisted firms, highlighting the role of market monitoring environments. The study contributes to the enrichment of agency theory, signaling theory, and asymmetric information theory in the context of emerging economies.

Keywords: Earnings Management, Stock Returns, Audit Quality, Emerging Markets, Agency Theory, Signaling Theory
JEL Classifications: M41; G15; G30

1. INTRODUCTION

In the context of globalization and intensified competition in financial markets, the demand for transparency and reliability in financial disclosures by publicly listed companies has become increasingly critical. One of the salient issues attracting the attention of researchers and practitioners alike is earnings management (EM) - a practice involving the manipulation of financial reports to achieve specific managerial objectives, which may at times distort the true economic value of firms (Healy and Wahlen, 1999). EM not only affects the quality of financial information but also directly influences stock returns, which are central to investor confidence and behavior in the capital market.

From the perspective of agency theory, EM may arise from conflicts of interest between managers and shareholders, particularly under conditions of information asymmetry (Jensen and Meckling, 1976). In emerging markets—characterized by underdeveloped legal systems, limited regulatory enforcement, and weak market supervision, EM tends to be more prevalent and harder to detect than in developed economies (Nelson et al., 2003).

Numerous studies have explored the relationship between EM and firm value or financial performance. For instance, the M-Score model was developed to detect potential financial fraud, demonstrating that firms with high levels of EM often yield lower investment returns in the future (Beneish, 1999). Investors may be misled by accounting earnings manipulated through accruals, leading to mispricing in the stock market (Dechow et al., 1996). These findings emphasize the adverse impact of EM on investment efficiency and highlight its role in undermining the effectiveness of stock price valuation. However, the relationship between EM and stock returns is not always consistent. Under certain conditions, EM may serve as a strategic tool to communicate private information

to the market (Subramanyam, 1996). Furthermore, in emerging markets where accounting information is often the primary source for equity valuation, EM can play a dual role—both as a signaling device and a deceptive mechanism (Houqe et al., 2012).

Audit quality is considered a key factor in mitigating EM behavior. Auditors from large and reputable firms (e.g., Big 4) are generally more capable of detecting and preventing earnings manipulations (DeAngelo, 1981). In contrast, smaller or less independent audit firms may be more susceptible to client pressure, potentially overlooking EM practices. As such, audit quality is expected to act as a moderator in the relationship between EM and stock returns.

In emerging economies such as Vietnam, China, India, and ASEAN countries, improving audit quality remains a major challenge—especially as the number of listed firms grows rapidly while the legal and supervisory infrastructure struggles to keep pace. Recent studies in emerging markets have begun to investigate this issue. In Vietnam, research on this relationship remains limited, fragmented, and lacks a clear examination of the moderating role of audit quality in the specific context of a developing market (Hung and Van, 2020), (Pham et al., 2020), (Dang and Tran, 2019b).

Accordingly, this study aims to clarify the effect of EM on stock returns among listed firms in emerging economies, while testing the moderating role of audit quality in this relationship. By combining EM measures, stock return data, and audit quality characteristics (e.g., Big 4 affiliation), this study aspires to contribute both academically and practically. Academically, it extends agency and signaling theories by validating the role of accounting information and oversight mechanisms in protecting investor interests. Practically, the findings are expected to provide important insights for investors, regulators, and listed companies in formulating policies to enhance financial transparency, improve audit quality, and safeguard capital markets.

The article is structured into five main sections. Section 1 introduces the research context, problem statement, and objectives. Section 2 presents the theoretical background, relevant literature, and the formulation of research hypotheses. Section 3 describes the data, analytical approach, and regression models. Section 4 reports the empirical results and discusses key findings. Finally, Section 5 concludes with implications, recommendations, and research limitations.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Theoretical Framework

Agency theory, proposed by (Jensen and Meckling, 1976), posits that conflicts of interest often exist between shareholders and managers, particularly when information asymmetry and the separation of ownership and control are present. In such contexts, managers may engage in earnings management (EM) to pursue personal objectives such as bonuses, promotions, or job security. In emerging economies, where ownership is often concentrated and monitoring mechanisms are weak—conflicts between controlling and minority shareholders are exacerbated. This environment facilitates managerial manipulation without timely detection or punishment (Shen and Chih, 2007). Audit quality plays a crucial role in constraining such behavior. Reputable audit firms, such as the Big Four, have greater capacity to detect and prevent EM practices, thereby reducing investor risk and enhancing market efficiency (Le and Moore, 2023).

Signaling theory, developed by (Spence, 1973), suggests that market participants use signals to convey otherwise unobservable information. In financial contexts, firms may use EM as a signal of future performance. However, such signaling is only effective when supported by credible monitoring mechanisms. High-quality audits validate these signals, thereby improving information credibility and reducing investor risk (Afifa et al., 2023).

Information asymmetry theory, as articulated by (Akerlof, 1970), holds that investors lack sufficient information to accurately assess firm performance. When managers engage in EM, financial statements may become less reliable, misrepresenting the firm's intrinsic value. This misrepresentation can lead to mispricing and distorted stock returns. Several studies have documented the negative impact of EM on market performance. (Barton and Simko, 2002) found that firms engaging in EM often experience declines in market value over time. Similarly, (Francis et al., 2005) demonstrated that firms with high EM levels yield lower stock returns. High audit quality mitigates information asymmetry by ensuring that financial reports fairly reflect firms' financial health, thus enabling better investor decisions and improving market efficiency (Jasman and Amin, 2017).

2.2. Earnings Management and Stock Returns

Earnings management refers to managerial interventions in financial reporting processes with the intent to achieve predetermined objectives, often at the cost of faithfully representing a firm's financial condition (Healy and Wahlen, 1999). Managers may employ either accrual-based earnings management or real activities manipulation to alter reported earnings. Measurement models based on discretionary accruals, such as those proposed by (Jones, 1991), (Dechow et al., 1995), (Kothari et al., 2005), have become standard tools for analyzing EM.

A growing body of literature examines the impact of EM on market reactions. Some studies suggest that EM degrades the quality of financial information, leading to stock prices that do not accurately reflect firm value (Beneish, 2001). In emerging markets—where transparency is lower and oversight is weaker—EM may significantly influence investor valuation (Houqe et al., 2012). Stock returns are key indicators of investor expectations about firm performance, and accounting earnings play a central role in forming these expectations (Ball and Brown, 1968). When earnings are manipulated, they may create misinformed expectations and result in stock mispricing.

Recent research indicates that EM may cause investors to undervalue firms in the long term, thereby lowering stock returns. (Nguyen et al., 2022) and (Jeong and Choi, 2019) provided empirical evidence that EM undermines the usefulness of financial

information and reduces investor valuation of firms suspected of engaging in EM.

However, in practice, firms often use EM to present favorable financial reports, which may elicit a positive short-term reaction from investors who lack sufficient information to detect manipulative behavior. This can result in temporarily inflated stock prices and higher-than-expected returns. (Loureiro and Silva, 2022) found that EM increases downside risk following de-cross-listing. (Kim and Zhang, 2014) also concluded that EM is positively and significantly associated with downside risk. (Qureshi et al., 2022) showed that EM is positively correlated with market-adjusted returns. (Ali and Bansal, 2023) explored the differential effects of income-increasing and income-decreasing EM on stock returns, finding that investors respond positively to income-increasing EM but demand higher returns for income-decreasing EM due to perceived risk.

Hypothesis H_1: Earnings management has a significant impact on stock returns.

2.3. The Moderating Role of Audit Quality in the EM–Stock Return Relationship

Independent auditing plays a vital role in enhancing the transparency of financial statements. High audit quality can reduce the likelihood of EM by detecting or correcting manipulations before they are disclosed to the public (Francis et al., 1999). Numerous studies use the presence of Big Four auditors as a proxy for high audit quality (DeAngelo, 1981), (Becker et al., 1998). Audit quality is believed to moderate the relationship between EM and stock returns. Specifically, high-quality audits may mitigate the negative effects of EM on stock performance by improving the reliability of financial information. This, in turn, influences investor trust and market reactions. (Gul et al., 2009) confirmed that high audit quality not only constrains EM but also increases the reliability of financial reports.

Audit quality is considered a governance mechanism to control EM. Independent auditors with high competence and ethical standards are more capable of detecting and curbing EM. (DeAngelo, 1981) defined audit quality as the probability that an auditor will detect and truthfully report financial misstatements. The role of Big Four auditors in limiting EM has been well-documented (Becker et al., 1998), (Francis et al., 1999). Firms audited by Big Four auditors typically report earnings that more closely reflect underlying business performance, thereby enhancing information quality and investor confidence, ultimately stabilizing stock returns.

In emerging economies—where legal and regulatory infrastructures remain underdeveloped, the role of audit quality becomes even more critical. In countries with low investor protection, high audit quality increases the value-relevance of accounting earnings and reduces EM (Houqe et al., 2012). This suggests that audit quality may serve as a moderator in the EM–stock return nexus. In Vietnam, for instance, higher audit quality is associated with greater return synchronicity, indicating that well-audited firms exhibit returns more aligned with broader market movements, thereby improving financial information credibility (Pham et al., 2020).

Hypothesis H_2: Audit quality has a significant impact on stock returns.

Hypothesis H_3: Audit quality moderates the relationship between earnings management and stock returns.

3. RESEARCH METHODOLOGY

3.1. Research Design

This study adopts a quantitative research approach to examine the relationship between earnings management (EM) and stock returns (SR), and to assess the moderating role of audit quality (AQ) in this relationship. A panel data design is employed using secondary data collected from firms listed on the Vietnamese stock market.

3.2. Research Models

Model 1: Examines the effect of earnings management on stock returns.

$$SR_{it} = \beta_0+\beta_1 EM_{it}+\alpha_1 Control_{it}+\varepsilon_{it} \quad (1)$$

Model 2: Investigates the moderating role of audit quality in the relationship between earnings management and stock returns.

$$SR_{it} = \beta_0+\beta_1 EM_{it}+\beta_1 AQ_{it}+\beta_1 EM\_AQ_{it}+\alpha_1 Control_{it}+\varepsilon_{it} \quad (2)$$

Where:

SR_{it}: Stock return of firm *i* in year *t*, calculated based on the model of Easton and Harris (1991), using the formula:

$$SR_{it} = \frac{(P_{it} - P_{it-1}) + D_{it}}{P_{it-1}} \quad (3)$$

P_{it-1}, P_{it}: is the corresponding stock price of enterprise i at the end of year (t-1) and at the end of year t

D_{it}: is the dividend of enterprise i in year t.

EM_{it}: Earnings management, measured using three well-established models: (Jones, 1991), (Dechow et al., 1995), (Kothari et al., 2005).

$$\frac{TA_{it}}{A_{it-1}} = a_1 \frac{1}{A_{it-1}} + a_2 \frac{\Delta REV_{it}}{A_{it-1}} + a_3 \frac{PPE_{it}}{A_{it-1}} + \varepsilon \quad (4.1)$$

$$\frac{TAC_{it}}{A_{it-1}} = a_1 \frac{1}{A_{it-1}} + a_2 \frac{\Delta REV_{it} - \Delta REC_{it}}{A_{it-1}} + a_3 \frac{PPE_{it}}{A_{it-1}} + \varepsilon \quad (4.2)$$

$$\frac{TAC_{it}}{A_{it-1}} = \alpha_1 \frac{1}{A_{it-1}} + \alpha_2 \frac{\Delta REV_{it} - \Delta REC_{it}}{A_{it-1}} + \alpha_3 \frac{PPE_{it}}{A_{it-1}} + +\alpha_4 ROA_{it-1} \quad (4.3)$$

Where: TAC_{it} is the accrual accounting variable of company i in year t, $TAC_{it} = \Delta CA_{it} - \Delta Cash_{it} - \Delta CL_{it} - \Delta DCL_{it} - DEP_{it}$. ΔCA_{it} is the change in current assets, $\Delta Cash_{it}$ is the change in cash and cash equivalents, ΔCL_{it} is the change in current liabilities, ΔDCL_{it} is the change in short-term borrowings, DEP_{it} is depreciation expense. ΔREV_{it} is the change in revenue, ΔREC_{it} is the change in net receivables, PPE_{it} is total fixed assets, A_{it-1} is total assets in year

t-1, ROA_{it-1} is return on assets in year t-1. Equations (4.1), (4.2) and (4.3) are estimated cross-sectionally for each industry group in each year, with a minimum of 10 firms in each industry group in each year. The absolute value of residuals from these models is used as the proxy for EM.

AQ_{it}: Audit quality, proxied by a dummy variable equal to 1 if audited by a Big Four firm, and 0 otherwise.

$EM_{it}\_AQ_{it}$: Interaction term representing the moderating effect of audit quality on the EM stock return relationship.

$Control_{it}$: A set of control variables including: Firm size (SIZE): logarithm of total assets; Financial leverage (LEV): total liabilities to total assets; Profitability (ROA): return on assets

3.2.1. Data

The study uses secondary data from https://fiinpro.com/fiinpro-x and https://vietstock.vn. The sample comprises non-financial firms in Vietnam, including both listed firms on HOSE, HNX, and unlisted firms on UPCOM. Firms with missing data are excluded. The study covers the period 2015-2024. To calculate lagged variables and avoid bias, observations from 2015 and 2016 and outliers at the 1st and 99th percentiles are winsorized. The final panel includes 8,839 firm-year observations from 2017 to 2024. Details are provided in Appendix 1 and 2.

3.2.2. Analytical method

The study employs panel regression models to examine the relationship between EM and SR, with audit quality as a moderator. First, Fixed Effects (FE) models are used to control for unobservable firm- and time-specific effects. The Hausman test is conducted to compare FE and Random Effects (RE) models. To address potential heteroskedasticity and serial correlation, clustered standard errors are applied. Multicollinearity is assessed using the Variance Inflation Factor (VIF) to ensure the robustness and generalizability of the model.

4. RESULTS AND DISCUSSION

4.1. Descriptive Statistics and Correlations

Table 1 presents the descriptive statistics for the main variables based on 8,839 firm-year observations, representing a sufficiently large sample size to ensure the reliability of subsequent quantitative analyses. The mean value of stock returns (SR) is 0.144, indicating an average return of 14.4%. However, the standard deviation is relatively high (0.584), with a wide range from −0.762 to 3.750, suggesting significant dispersion in firm performance. This reflects notable heterogeneity in profitability across listed companies in Vietnam.

Table 1: Descriptive statistics

Variable	Obs	Mean	Std. dev.	Min.	Max.
SR	8,839	0.144	0.584	−0.762	3.750
EM_J91	8,839	0.096	0.106	0.001	0.792
EM_D95	8,839	0.097	0.107	0.001	0.812
EM_K05	8,839	0.096	0.106	0.001	0.812
ROA	8,839	0.032	0.354	−24.205	1.034
LEV	8,839	0.578	1.220	0.000	45.076
SIZE	8,839	27.023	1.607	19.259	32.866
BiG4	8,839	0.181	0.385	0	1

The three variables representing earnings management (EM), measured by the models (Jones, 1991), (Dechow et al., 1995), (Kothari et al., 2005), all exhibit mean values of approximately 0.096-0.097, with standard deviations around 0.106-0.107 and minimum values as low as 0.001. These statistics indicate that the extent of earnings management in the sample is moderate to low.

Regarding audit quality, the variable BIG4 - a dummy variable indicating whether a firm is audited by a Big Four accounting firm, has a mean of 0.181. This implies that only about 18.1% of the firms were audited by Big4 auditors, reflecting a limited prevalence of high-quality audits in emerging markets, consistent with findings by (Gul et al., 2009).

Among the control variables, the average return on assets (ROA) is 0.032, significantly lower than that in developed markets, suggesting that post-tax profits amount to just 3.2% of total assets. The high standard deviation (0.354) and the extreme minimum value of −24.205 likely indicate the presence of severely loss-making firms.

Financial leverage (LEV) exhibits an average debt ratio of 57.8%, with a range from 0% to 4,507.6% and a high standard deviation (1.22), indicating both elevated and uneven debt usage. This suggests considerable financial risk, which is a common characteristic in emerging economies (Balsam et al., 2003), (Dang et al., 2017).

Firm size (SIZE), measured as the logarithm of total assets, has a mean of 27.023 and a relatively low standard deviation of 1.607, indicating that firms are relatively similar in size. Nevertheless, the variation remains sufficient to maintain representativeness in regression analyses.

Overall, the descriptive statistics reveal a diverse and risk-prone landscape among firms in emerging markets. The limited use of Big Four auditors, high leverage levels, and volatile stock returns are notable characteristics that may influence the relationship between earnings management and stock performance, reinforcing the importance of high-quality audits as a critical moderating factor.

Table 2 presents the correlation matrix indicating the linear relationships among variables in the research model. The stock return (SR) exhibits a weak positive correlation with return on assets (ROA) (0.0407), while showing negligible correlation with earnings management indicators such as EM_J91, EM_D95, and EM_K05. This suggests that the effect of earnings management on stock returns may be indirect or moderated by other factors. The three EM indicators demonstrate very high correlations with one another (above 0.91), reflecting methodological consistency in measuring earnings management. ROA is negatively correlated with EM indicators, indicating that more profitable firms are less likely to engage in earnings management, consistent with agency

Table 2: Correlation matrix

	SR	EM_J91	EM_D95	EM_K05	ROA	LEV	SIZE	BiG4
SR	1							
EM_J91	0.019	1						
EM_D95	0.0126	0.9251*	1					
EM_K05	0.0131	0.9137*	0.9808*	1				
ROA	0.0407*	−0.1176*	−0.1344*	−0.0784*	1			
LEV	−0.006	0.1272*	0.1355*	0.1280*	−0.2904*	1		
SIZE	−0.005	−0.1339*	−0.1290*	−0.1271*	0.1052*	−0.0934*	1	
BiG4	−0.007	−0.0497*	−0.0500*	−0.0497*	0.0447*	−0.0267*	0.4156*	1

theory. The firm size variable (SIZE) has a significant positive correlation with Big4 auditing (0.4156), suggesting that larger firms are more likely to employ Big Four auditors. All correlation coefficients are below 0.8, indicating no serious multicollinearity issues and supporting the validity of using linear regression models.

Table 3 presents regression results examining the relationship between earnings management (EM) and stock returns (SR), controlling for ROA, leverage (LEV), and firm size (SIZE), as well as fixed effects for firm and year. In all three models, the coefficients for earnings management indicators are positive, implying that firms with higher levels of EM tend to have higher stock returns. Specifically, the coefficient for EM_J91 is 0.151 and statistically significant at the 5% level (t = 1.97), while the coefficients for EM_D95 (0.113; t = 1.57) and EM_K05 (0.103; t = 1.43) are positive but not statistically significant. These results are consistent with prior studies suggesting that investors may not fully recognize earnings management in the short term, leading to overvaluation of firms engaging in such practices (Beneish, 2001), (Kothari et al., 2005), (Tran and Dang, 2021). However, these findings also raise questions about market efficiency, especially in emerging markets characterized by lower transparency and weaker oversight (Dang and Tran, 2019a), (Hung and Van, 2020).

Notably, ROA is positively and significantly associated with SR, supporting the notion that intrinsic profitability attracts investors (Fama et al., 1993). In contrast, LEV is not statistically significant, and SIZE shows a negative association with SR, potentially reflecting speculative behavior toward small-cap stocks in emerging markets like Vietnam.

Although the R-squared is low (0.002), this is common in financial models using large panel datasets and does not undermine the statistical validity of the estimates. In summary, the findings highlight the latent role of earnings management in shaping investor expectations and valuations, particularly in contexts marked by information asymmetry.

Table 4 incorporates a lagged variable of stock return (L.SR) into the model to control for the dynamic effects of past returns on current returns. The results indicate that the coefficient of L.SR is −0.212 and statistically significant at the 1% level (P < 0.01), suggesting a negative relationship between previous and current stock returns. This implies a tendency for the market to revert after experiencing sharp gains or losses in the prior period,

Table 3: Baseline regression results

Variable	SR	SR	SR1
EM_J91	0.151**		
	[1.97]		
EM_D95		0.113	
		[1.57]	
EM_K05			0.103
			[1.43]
ROA	0.0710**	0.0710**	0.0686**
	[2.55]	[2.55]	[2.47]
LEV	−0.00154	−0.00155	−0.00173
	[−0.24]	[−0.24]	[−0.27]
SIZE	−0.0515**	−0.0513**	−0.0512**
	[−2.01]	[−2.00]	[−2.00]
_cons	1.520**	1.518**	1.518**
	[2.19]	[2.19]	[2.19]
Firm fixed effect	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes
Observations	8839	8839	8839
R-squared	0.002	0.002	0.002

*P<0.1. **P<0.05. ***P<0.01

Table 4: Regression results of audit quality moderator variables

Variable	SR	SR	SR
EM_J91	0.215**		
	[2.56]		
EM_J91_BIG4	−0.468**		
	[−2.47]		
EM_D95		0.193**	
		[2.45]	
EM_D95_BIG4		−0.573***	
		[−3.48]	
EM_K05			0.183**
			[2.31]
EM_K05_BIG4			−0.595***
			[−3.47]
BiG4	0.03	0.0394	0.0411
	[0.63]	[0.84]	[0.87]
ROA	0.0715**	0.0716***	0.0677**
	[2.57]	[2.59]	[2.44]
LEV	−0.00259	−0.00289	−0.0032
	[−0.41]	[−0.47]	[−0.52]
SIZE	−0.0518**	−0.0514**	−0.0512**
	[−2.02]	[−2.01]	[−2.00]
_cons	1.523**	1.515**	1.511**
	[2.20]	[2.18]	[2.18]
Firm fixed effect	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes
Observations	8839	8839	8839
R-squared	0.003	0.003	0.003

*P<0.1. **P<0.05. ***P<0.01

reflecting a mean reversion mechanism that is commonly observed in emerging markets. This finding is consistent with the study by Berggrun et al. (2020), which demonstrates that financially sound stocks are more favored by investors, leading to immediate price increases and consequently lower returns in the subsequent year. Furthermore, this result aligns with prior research in Asian markets, which suggests that short-term fluctuations are often reversed in following cycles due to investor overreaction (Nguyen et al., 2022), (Jeong and Choi, 2019). Thus, including the lagged variable enhances the reliability of the model and better controls for the dynamic nature of stock returns, thereby clarifying the true impact of earnings management on stock performance.

4.2. The Role of Audit Quality

Upon the inclusion of audit quality (BIG4) and the interaction terms between earnings management and audit quality (EM_J91_BIG4, EM_D95_BIG4, EM_K05_BIG4), the regression results reveal a more pronounced impact of earnings management (EM) on stock returns (SR). Specifically, the interaction coefficients between EM and BIG4 are all negative and statistically significant (EM_J91_BIG4 = −0.364, EM_D95_BIG4 = −0.499, EM_K05_BIG4 = −0.515), indicating that the presence of high-quality auditors (BIG4) weakens the positive relationship between EM and stock returns. This implies that companies audited by BIG4 firms are more constrained in their ability to engage in excessive earnings management, or that investors are more aware of earnings manipulation signals in firms with reputable auditors, thus leading to a reduced market response to adjusted earnings. These findings are consistent with prior studies such as (Francis and Krishnan, 1999) and (Gul et al., 2009), which argue that BIG4 auditors serve a stronger monitoring function and help mitigate earnings manipulation. Additionally, BIG4 auditors contribute to enhancing the credibility of accounting information, thereby moderating market reactions.

Moreover, the standalone BIG4 variable is statistically insignificant, suggesting that reputable auditors do not directly increase stock returns. Rather, their effectiveness is primarily realized through their role in constraining earnings management behavior. Therefore, this study highlights the moderating role of high-quality auditing in the relationship between EM and stock performance and extends the empirical evidence in the context of emerging markets.

4.3. Sensitivity Analysis and Additional Robustness Checks

Table 5 presents the regression results using the vce(cluster firmid) option, which adjusts for clustered standard errors at the firm level to enhance the reliability of estimates in the context of panel data. In such data structures, observations within the same unit (firm) may be correlated over time. This approach is particularly suitable for data with group structures (e.g., firms over multiple years), as it controls for intra-cluster correlation and heteroskedasticity, issues that conventional estimation methods (such as OLS) fail to adequately address. In the results table, the coefficients for the key variables, including earnings management (EM_J91, EM_D95, EM_K05), remain statistically significant and directionally consistent with the baseline model not applying vce(cluster firmid).

Table 5: Regression results when adding vce (cluster firmid)

Variable	SR	SR	SR
EM_J91	0.149*		
	[1.74]		
EM_J91_BIG4	−0.364**		
	[−2.12]		
EM_D95		0.161**	
		[2.02]	
EM_D95_BIG4		−0.499***	
		[−3.40]	
EM_K05			0.149*
			[1.88]
EM_K05_BIG4			−0.515***
			[−3.42]
BiG4	0.0365	0.0488	0.0501
	[0.83]	[1.13]	[1.16]
ROA	0.0776***	0.0782***	0.0749**
	[2.62]	[2.66]	[2.52]
LEV	0.00605	0.00575	0.00549
	[1.12]	[1.05]	[1.01]
SIZE	−0.0295	−0.0293	−0.0291
	[−1.04]	[−1.03]	[−1.02]
_cons	0.853	0.845	0.843
	[1.11]	[1.10]	[1.10]
Firm fixed effect	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes
Observations	8839	8839	8839
R-squared	0.191	0.191	0.191

*P<0.1. **P<0.05. ***P<0.01

Notably, the interaction terms (EM_J91_BIG4, EM_D95_BIG4, EM_K05_BIG4) continue to exhibit negative and statistically significant effects, confirming the robustness of the results. This implies that engagement with high-quality auditors (BIG4) diminishes the positive impact of earnings management on stock returns. In sum, applying vce(cluster firmid) not only increases the credibility of statistical inferences but also strengthens the study's conclusions by addressing common issues in panel data models, such as heteroskedasticity and intra-cluster correlation.

Table 6 displays regression results for two subgroups: listed companies and unlisted enterprises (UPCOM). The findings reveal substantial differences in the relationship between earnings management (EM) and stock returns (SR), especially when considering the moderating role of audit quality (Big4). For listed companies, all earnings management models (EM_J91, EM_D95, EM_K05) yield positive and statistically significant coefficients ($p < 0.05$), indicating a positive association between EM and stock returns. This aligns with the findings of prior studies, such as (Ali and Bansal, 2023), which suggest that investors may react favorably in the short term to earnings manipulation. However, when interaction terms with audit quality (EM_BIG4) are included, the coefficients become negative and highly significant (particularly in the EM_D95 and EM_K05 models), underscoring the monitoring role of Big4 auditors in dampening the "artificial" positive effect of EM, consistent with the assertions of (Francis and Yu, 2009) regarding the role of high-quality auditing.

Conversely, in the unlisted firm group (UPCOM), the corresponding EM coefficients remain positive but are statistically insignificant, and the interaction terms (EM_BIG4) are also insignificant.

Table 6: Regression results of listed and unlisted enterprises

Variable	Listed company			Unlisted Enterprise (UPCOM)		
	SR	SR	SR	SR	SR	SR
EM_J91	0.253**			0.172		
	[2.18]			[1.43]		
EM_J91_BIG4	−0.535**			−0.413		
	[−2.08]			[−1.49]		
EM_D95		0.201*			0.183	
		[1.94]			[1.55]	
EM_D95_BIG4		−0.655***			−0.379	
		[−3.03]			[−1.48]	
EM_K05			0.193*			0.176
			[1.83]			[1.50]
EM_K05_BIG4			−0.729***			−0.383
			[−3.15]			[−1.49]
BiG4	0.0105	0.0212	0.0272	0.0614	0.0573	0.0574
	[0.18]	[0.37]	[0.47]	[0.74]	[0.73]	[0.73]
ROA	1.188***	1.172***	1.175***	0.0559**	0.0571**	0.0533**
	[5.59]	[5.54]	[5.55]	[2.27]	[2.31]	[2.18]
LEV	0.156	0.163	0.165	−0.00363	−0.00347	−0.00376
	[1.31]	[1.37]	[1.39]	[−0.53]	[−0.51]	[−0.55]
SIZE	−0.0719**	−0.0724**	−0.0724**	−0.0367	−0.0366	−0.0367
	[−2.31]	[−2.33]	[−2.32]	[−0.85]	[−0.84]	[−0.84]
_cons	1.959**	1.975**	1.974**	1.112	1.107	1.11
	[2.34]	[2.36]	[2.36]	[0.96]	[0.96]	[0.96]
Firm fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4098	4098	4098	4741	4741	4741
R-squared	0.013	0.013	0.013	0.002	0.002	0.002

*P<0.1. **P<0.05. ***P<0.01

This may reflect the lower transparency and inefficiency of the UPCOM market, where investors are less responsive to more sophisticated accounting signals, a point supported by (Ball et al., 2000), who argue that weak market mechanisms are typical in emerging economies. Overall, the findings underscore the critical importance of stock market listing and audit quality in enhancing financial reporting transparency and shaping the market's reaction to earnings management behaviors.

5. CONCLUSION AND RECOMMENDATIONS

This study investigates the impact of earnings management (EM) on stock returns, while also examining the moderating role of audit quality in the context of emerging markets, particularly Vietnam. Drawing on panel data from more than 8,839 firm-year observations over the period 2017-2024, the findings contribute to the extension of asymmetric information theory (Akerlof, 1970) and agency theory (Jensen and Meckling, 1976), and clarify the role of financial reporting quality in developing capital markets characterized by underdeveloped institutional monitoring and disclosure requirements.

The regression results suggest a positive relationship between earnings management and stock returns (SR), especially when EM is measured using the models of (Jones, 1991), (Dechow et al., 1995), (Kothari et al., 2005). This implies that in emerging markets like Vietnam, investors may not fully recognize EM behavior or may still be attracted to reported positive financial performance, regardless of its underlying sustainability. However, when incorporating the interaction term between EM and audit quality (Big4), the relationship reverses, with statistically significant negative coefficients. This confirms the role of high-quality auditors in mitigating the undue impact of EM behavior. Furthermore, the effect is more pronounced among listed firms compared to unlisted ones, indicating that listed markets are more efficient in processing accounting information, consistent with findings by (Francis and Yu, 2009) and (Ball et al., 2000).

From a theoretical perspective, these findings align with and support agency theory, suggesting that managers' short-term earnings manipulation may harm long-term shareholder value. The presence of reputable auditors, such as Big4 firms, helps mitigate this conflict by enhancing the reliability and credibility of financial reports. Under signaling theory, positive financial disclosures may act as signals to attract investors; however, if investors lack analytical capacity, these signals—such as high earnings—may inflate stock prices even when earnings are artificially managed. Big4 auditors serve as a filtering mechanism to verify the credibility of these signals. As for information asymmetry theory, it highlights the imbalance of information between managers and investors. When the market is inadequately informed, EM behavior may exploit this gap. Strengthening the presence of reputable auditors helps reduce information asymmetry, increase transparency, and support a more efficient market.

Based on these findings, we propose the following recommendations:

1. For firms: Increase transparency in financial reporting and prioritize the use of reputable auditors to enhance the credibility of reports and improve firm valuation
2. For investors: Exercise caution when interpreting financial indicators that may be subject to manipulation, especially

in the absence of quality auditing. More attention should be paid to non-financial information and the accompanying audit quality

3. For regulators: Improve audit standards, mandate periodic audits for large-scale enterprises, and enhance market information transparency.

Overall, the study provides both theoretical and practical contributions, clarifying the supervisory role of high-quality auditing in constraining EM behavior and protecting market value, particularly in emerging economies like Vietnam. However, the study has certain limitations, such as not considering real earnings management and not fully controlling for industry-specific effects. Future research may address these issues by incorporating machine learning or deep learning techniques for fraud detection or using structural equation models to clarify the mediating mechanisms between EM and market performance.

REFERENCES

Afifa, M.M.A., Saleh, I.H., Haniah, F.F. (2023), Does earnings management mediate the relationship between audit quality and company performance? Evidence from Jordan. Journal of Financial Reporting and Accounting, 21(3), 747-774.

Akerlof, G.A. (1970), The market for "lemons": Quality uncertainty and the market mechanism. The Quarterly Journal of Economics, 1970, 488-500.

Ali, A., Bansal, M. (2023), Impact of upward and downward earnings management on stock returns. South Asian Journal of Business Studies, 12(2), 202-219.

Ball, R., Brown, P. (1968), An empirical evaluation of accounting income numbers. Journal of Accounting Research, 6(2), 159-178.

Ball, R., Kothari, S., Robin, A. (2000), The effect of international institutional factors on properties of accounting earnings. Journal of Accounting and Economics, 29(1), 1-51.

Balsam, S., Krishnan, J., Yang, J.S. (2003), Auditor industry specialization and earnings quality. Auditing: A Journal of Practice and Theory, 22(2), 71-97.

Barton, J., Simko, P.J. (2002), The balance sheet as an earnings management constraint. The Accounting Review, 77(S-1), 1-27.

Becker, C.L., DeFond, M.L., Jiambalvo, J., Subramanyam, K. (1998), The effect of audit quality on earnings management. Contemporary Accounting Research, 15(1), 1-24.

Berggrun, L., Cardona, E., and Lizarzaburu, E. (2020), Firm profitability and expected stock returns: Evidence from Latin America. Research in International Business and Finance, 51(1), 101119.

Beneish, M.D. (1999), Incentives and penalties related to earnings overstatements that violate GAAP. The Accounting Review, 74(4), 425-457.

Beneish, M.D. (2001), Earnings Management: A Perspective. Available from: https://ssrn/269625

Dang, H.N., Tran, D.M. (2019a), Relationship between accrual anomaly and stock return: The Case of Vietnam. The Journal of Asian Finance, Economics and Business 6(4), 19-26.

Dang, H.N., Tran, D.M. (2019b), Relationship between accrual anomaly and stock return: The case of Vietnam. The Journal of Asian Finance, Economics and Business, 6(4), 19-26.

Dang, N.H., Hoang, T.V.H., Tran, M.D. (2017), Factors affecting earnings management: The Case of listed firms in Vietnam. International Journal of Economic Research, 14(20), 117-134.

DeAngelo, L.E. (1981), Auditor size and audit quality. Journal of Accounting and Economics, 3(3), 183-199.

Dechow, P.M., Sloan, R.G., Sweeney, A.P. (1995), Detecting earnings management. Accounting Review, 70(2), 193-225.

Dechow, P.M., Sloan, R.G., Sweeney, A.P. (1996), Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. Contemporary Accounting Research, 13(1), 1-36.

Fama, E.F., French, K.R., Booth, D.G., Sinquefield, R. (1993), Differences in the risks and returns of NYSE and NASD stocks. Financial Analysts Journal, 49(1), 37-41.

Francis, J., LaFond, R., Olsson, P., Schipper, K. (2005), The market pricing of accruals quality. Journal of Accounting and Economics, 39(2), 295-327.

Francis, J.R., Krishnan, J. (1999), Accounting accruals and auditor reporting conservatism. Contemporary Accounting Research, 16(1), 135-165.

Francis, J.R., Maydew, E.L., Sparks, H.C. (1999), The role of Big 6 auditors in the credible reporting of accruals. Auditing: A Journal of Practice and Theory, 18(2), 17-34.

Francis, J.R., Yu, M.D. (2009), Big 4 office size and audit quality. The Accounting Review, 84(5), 1521-1552.

Gul, F.A., Fung, S.Y.K., Jaggi, B. (2009), Earnings quality: Some evidence on the role of auditor tenure and auditors' industry expertise. Journal of accounting and economics, 47(3), 265-287.

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

Houqe, M.N., Van Zijl, T., Dunstan, K., Karim, A.W. (2012), The effect of IFRS adoption and investor protection on earnings quality around the world. The International Journal of Accounting, 47(3), 333-355.

Hung, D.N., Van, V.T.T. (2020), Studying the impacts of earnings quality on stock return: Experiments in Vietnam. International Journal of Advanced and Applied Sciences, 7, 45-53.

Jasman, J., Amin, M.N. (2017), Internal audit role on information asymmetry and real earnings management. Jurnal Akuntansi dan Auditing Indonesia, 21(2), 95.

Jensen, M.C., Meckling, W.H. (1976), Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(4), 305-360.

Jeong, K.H., Choi, S.U. (2019), Does real activities management influence earnings quality and stock returns in emerging markets? Evidence from Korea. Emerging Markets Finance and Trade, 55(12), 2834-2850.

Jones, J.J. (1991), Earnings management during import relief investigations. Journal of Accounting Research, 29(2), 193-228.

Kim, J.B., Zhang, L. (2014), Financial reporting opacity and expected crash risk: Evidence from implied volatility smirks. Contemporary Accounting Research, 31(3), 851-875.

Kothari, S.P., Leone, A.J., Wasley, C.E. (2005), Performance matched discretionary accrual measures. Journal of Accounting and Economics, 39(1), 163-197.

Le, B., Moore, P.H. (2023), The impact of audit quality on earnings management and cost of equity capital: Evidence from a developing market. Journal of Financial Reporting and Accounting, 21(3), 695-728.

Loureiro, G., Silva, S. (2022), Earnings management and stock price crashes post US cross-delistings. International Review of Financial Analysis, 82, 102215.

Nelson, M., Elliott, J., Tarpley, R. (2003), How are earnings managed? Examples from auditors. Accounting Horizons, 17(1), 17-35.

Nguyen, N.T., Iqbal, A., Shiwakoti, R.K. (2022), The context of earnings management and its ability to predict future stock returns. Review of Quantitative Finance and Accounting, 59(1), 123-169.

Pham, C.B.T., Vu, T.M.T., Nguyen, L.H., Nguyen, D.D. (2020), Audit

quality and stock return co-movement: Evidence from Vietnam. The Journal of Asian Finance, Economics and Business, 7(7), 139-147.
Qureshi, Q.G.M., Mard, Y., Aubert, F. (2022), Effects of earnings management on firms' marketadjusted return. Journal of Accounting and Taxation, 14(3), 203-214.
Shen, C.H., Chih, H.L. (2007), Earnings management and corporate governance in Asia's emerging markets. Corporate Governance: An International Review, 15(5), 999-1021.
Spence, M. (1973), Job market signaling. The Quarterly Journal of Economics, 87(3), 355-374.
Subramanyam, K. (1996), The pricing of discretionary accruals. Journal of Accounting and Economics, 22(1-3), 249-281.
Tran, M.D., Dang, N.H. (2021), The impact of ownership structure on earnings management: The case of Vietnam. SAGE Open, 11(3), 1-14.

APPENDIX

Appendix 1: Research data by year and by industry

Industry	Year								Total	
	2017	2018	2019	2020	2021	2022	2023	2024	N	%
Industry	354	468	478	494	478	487	523	495	3,777	42.73
Information technology	24	25	25	24	23	23	24	23	191	2.16
Pharmaceuticals and healthcare	24	40	47	46	49	53	54	57	370	4.19
Oil and gas	7	8	9	10	10	10	10	11	75	0.85
Consumer services	72	94	95	104	84	100	111	107	767	8.68
Consumer goods	125	163	189	194	196	204	199	201	1,471	16.64
Raw materials	116	150	154	144	154	152	166	149	1,185	13.41
Community utilities	71	105	123	125	135	133	132	126	950	10.75
Telecommunications	2	6	6	8	7	8	8	8	53	0.6
Total	795	1,059	1,126	1,149	1,136	1,170	1,227	1,177	8,839	

Appendix 2: Research data by stock exchange

Year	Enterprise		Total
	Unlisted	Listed	
2017	346	449	795
2018	560	499	1,059
2019	605	521	1,126
2020	640	509	1,149
2021	624	512	1,136
2022	657	513	1,170
2023	670	557	1,227
2024	639	538	1,177
Total	4,741	4,098	8,839