



Proceeding – ICOBIS

INTERNATIONAL CONFERENCE ON GLOBAL INNOVATION AND TRENDS IN ECONOMICS
(ICOBIS)

Influence Audit Fee Stickiness, Abnormal Audit Fee, And Audit Delay on Earnings Management with Auditor Industry Specialization as a Moderating Variable

In the Transportation and Logistics Sector Companies Listed on the Indonesia Stock Exchange in 2021–2025

1st Azzahra Rizki Aulia

*Accounting Study Program, Faculty of Economics and Business
Pancasakti University Tegal
rizkiazahra934@gmail.com*

2nd Dien Noviany Rahmatika

*Accounting Study Program, Faculty of Economics and Business
Pancasakti University Tegal
diennovianyrahmatika@gmail.com*

3rd Irwan Prasetyo

*Accounting Study Program, Faculty of Economics and Business
Pancasakti University Tegal
irwanprasetyo@gmail.com*

Abstract –

This study examines the influence of audit fee stickiness, abnormal audit fee, And audit delay on earnings management, with auditor industry specialization as a moderating variable, in transportation and logistics sector issuers listed on the Indonesia Stock Exchange for the 2021–2025 period. This study was motivated by the sector's financial performance volatility following the COVID-19 pandemic, which is suspected of driving opportunistic management behavior in earnings reporting. Meanwhile, the role of external audit as a monitoring mechanism has not been widely tested in an integrated manner in this sector. The study used a quantitative approach with a purposive sampling technique, resulting in 12 issuers meeting the sample criteria with a five-year observation period, resulting in 60 observations. Earnings management is proxied through discretionary accrual based Modified Jones Model, while hypothesis testing uses multiple regression analysis and Moderated Regression Analysis (MRA). The test results show that audit fee stickiness has a negative impact on earnings management, abnormal audit fee has a positive effect, whereas audit delay was not found to have a significant effect, and auditor industry specialization failed to moderate these three relationships. These findings indicate that audit fee stability is associated with more conservative earnings reporting practices, while fee deviations from fair value open up opportunities for accrual manipulation, regardless of the auditor's sectoral expertise level handling the assignment.

Keywords – *Audit Fee Stickiness, Abnormal Audit Fee, Audit Delay, Auditor Industry Specialization, Earnings Management*

I. INTRODUCTION

Financial reports are the primary channel for management to communicate financial position, performance, and business prospects to investors and creditors. The agency relationship between managers as managers and owners as

mandate givers has the potential to trigger conflicts of interest, because managers have broader access to information and can use it opportunistically [1].

The transportation and logistics sector in Indonesia has complex operational characteristics, high asset intensity, and sensitivity to economic shocks and policy changes. These characteristics increase financial reporting risks and open up opportunities for earnings management practices, especially following performance pressures caused by the COVID-19 pandemic [2], [3]. Several cases, such as the spotlight on revenue recognition at PT Garuda Indonesia (Persero) Tbk [4] and performance fluctuations at other aviation and land transportation issuers [5], confirm that this sector is vulnerable to earnings manipulation to maintain the perception of stability in the eyes of the market.

In such conditions, external audit plays an important role as an independent oversight mechanism that limits opportunistic behavior of managers while increasing the credibility of financial reports [6]. The effectiveness of this oversight function does not stand alone, but is influenced by the economic dynamics of the auditor-client relationship. Contemporary audit literature highlights three characteristics of this relationship, namely audit fee stickiness or the rigidity of adjusting audit fees to changes in risk and client workload [7], abnormal audit fee or deviation of the honorarium from its reasonable estimate which has the potential to create economic dependence of the auditor on the client [8], as well as audit delay or the audit completion time span that reflects the efficiency and independence of the audit process [9].

Previous studies on these three audit characteristics generally position them as determinants of audit quality [7], [9], while research explicitly linking them to earnings management in the context of the Indonesian transportation and logistics sector is still limited. The role of auditor industry specialization as a factor that can strengthen or weaken this relationship has also not been tested simultaneously [10]. This gap forms the basis for research to examine the influence of audit fee stickiness, abnormal audit fee, and audit delay on earnings management, with auditor industry specialization as a moderating variable, in transportation and logistics sector companies listed on the Indonesia Stock Exchange for the 2021–2025 period.

The contribution of this research lies in the integration of three characteristics of the auditor-client relationship in one empirical model in a rarely studied sector, as well as testing the moderating effect of auditor sectoral expertise, which has so far been more frequently tested in the manufacturing or financial sectors [11], [12].

2.1 Agency Theory and Signaling Theory

Agency theory explains the contractual relationship between principals (owners) and agents (managers), where differences in interests and information asymmetry can give rise to agency costs in the form of monitoring costs, binding costs, and residual losses [1], [13]. External auditors function as an independent monitoring mechanism that suppresses the potential for such conflicts, but their effectiveness is highly dependent on maintaining the independence of the auditor-client relationship.

Signaling theory explains how parties with more information, in this case management, send signals to external parties to reduce information asymmetry [14], [15]. In the context of auditing, characteristics such as fee stability, reasonableness of fees, and timeliness of audit completion can be interpreted by the market as signals regarding the quality of supervision and the reliability of the client's financial statements.

2.2 Audit Fee Stickiness and Earnings Management

Audit fee stickiness describes a condition where the reduction in audit fees is not commensurate with the reduction in risk or client workload [7]. A relatively rigid fee pattern reflects a stable audit working relationship, thus reducing the space for annual fee renegotiation which has the potential to become a loophole for post-contract opportunism, while also allowing auditors to build a cumulative understanding of the client's business. Ananda and Faisal [6] found that audit fee has a negative effect on discretionary accruals. Based on this description, the following hypothesis is formulated:

H1: Audit fee stickiness influence on earnings management.

2.3 Abnormal Audit Fees and Earnings Management

Abnormal audit fee reflects the difference between the actual fee and its reasonable estimate based on the risk and complexity of the audit [16], [17]. Payment of fees that are far beyond reasonable can create an economic bond (economic bonding) between auditors and clients, thus potentially weakening independence and encouraging auditor tolerance of management accrual policies [8], [18]. Based on this description, the following hypothesis is formulated:

H2: Abnormal audit fee influence on earnings management.

2.4 Audit Delay and Earnings Management

Audit delay is the time span between the end of the fiscal year and the date of signing the audit report which reflects the efficiency of the audit process [19], [20]. The longer the audit duration, the greater the suspicion of technical obstacles or negotiations between the auditor and management regarding the presentation of earnings, so that the audit duration is suspected to be associated with earnings management practices. Based on this description, the following hypothesis is formulated:

H3: Audit delay influence on earnings management.

2.5 Auditor Industry Specialization as Moderator

Auditor industry specialization reflects the auditor's in-depth expertise in a particular sector, which increases the effectiveness of risk identification and accounting errors [21]. This expertise is expected to strengthen the auditor's oversight function, thereby weakening the impact of vulnerable audit-client relationship characteristics, such as rigid fees, fees that deviate from fair value, or protracted audits, on earnings management. Based on this description, the following hypothesis is formulated:

H4: Auditor industry specialization moderates the influence of audit fee stickiness on earnings management.

H5: Auditor industry specialization moderates the influence of abnormal audit fee on earnings management.

H6: Auditor industry specialization moderates the influence of audit delay on earnings management.

II. METHOD

3.1 Definition, Population, and Sample

This study uses an associative quantitative approach with secondary data in the form of annual reports [22]. The population includes all transportation and logistics sector companies listed on the Indonesia Stock Exchange. The sample was determined using a random sampling technique with the following criteria: (1) consistently listed on the IDX throughout 2021–2025, (2) publishing a complete annual report during that period, and (3) presenting audited financial reports containing audit fee data, audit opinion date, and accrual components required for variable measurement. Based on these criteria, 12 issuers were selected with a five-year observation period, resulting in a total of 60 panel data observations, as listed in Table 1.

TABLE I. LIST OF SAMPLE COMPANIES

Code	Company name
ACTION	Mineral Resources Mandiri Tbk
ASSA	Adi Sarana Armada Tbk.
BLTA	Berlian Laju Tanker Tbk
TREES	Mitra Investindo Tbk.
NELY	Nelly Dwi Putri Shipping Tbk.
SAFE	Steady Safe Tbk
SMDR	Samudera Indonesia Tbk.
TMAS	Temas Tbk.
TNC	Trimuda Nuansa Citra Tbk.
BPTR	Batavia Prosperindo Trans Tbk.
SAPX	Satria Antaran Prima Tbk.
PPGL	Prima Globalindo Logistics Tbk.

Source: Indonesia Stock Exchange, processed data (2026)

3.2 Operational Definition of Variables

The dependent variable in this study is earnings management, which is measured through discretionary accrual based on Modified Jones Model [23]. The independent variables consist of audit fee stickiness, which is measured by the difference in the logarithm of the audit fee for the current year compared to the previous year [24]; abnormal audit fee, which is measured by the difference between the actual honorarium and the estimated normal honorarium [16]; and audit delay, which is measured through the time span between the auditor's report date and the fiscal year-end date [19]. The moderating variable, auditor industry specialization, is measured through the ratio of market share based on

total client assets handled by a Public Accounting Firm in a particular sector to the total assets of all companies in the same sector [25]. A summary of operational definitions is presented in Table 2.

TABLE II. OPERATIONAL VARIABLES

Variables	Measurement	Ref.
Manajemen Laba (Y)	Discretionary accrual (Modified Jones Model)	[23]
Audit Fee Stickiness(X1)	Log (Fee auditt / Fee auditt-1)	[24]
Abnormal Audit Fee(X2)	Actual fee - estimated normal fee	[16]
Audit Delay(X3)	Auditor's report date - book closing date	[19]
Auditor Industry Specialization (Z)	Total assets of KAP clients sector j / total assets sector j	[25]

3.3 Data Analysis Techniques

The data were analyzed using descriptive statistics, classical assumption tests (normality, multicollinearity, heteroscedasticity, and autocorrelation), multiple linear regression analysis, and Moderated Regression Analysis (MRA) with the help of SPSS software. The basic regression model is formulated as $ML = \alpha + \beta_1 AFS + \beta_2 AAF + \beta_3 AD + \beta_4 SIA + \varepsilon$, while the MRA model adds three interaction variables, namely $AFS \times SIA$, $AAF \times SIA$, and $AD \times SIA$, to test the moderating role of auditor industry specialization.

III. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

TABLE III. DESCRIPTIVE STATISTICS

Our.	N	Min	Max	Mean	SD
AFS	60	-1,959	2,620	0,037	0,973
AAF	60	-4,127	3,758	-0,008	1,842
AD	60	57	119	87,980	12,124
ML	60	-0,251	0,335	-0,067	0,094
IS	60	0,004	0,701	0,151	0,229

Source: Data processed by SPSS (2026)

The descriptive statistics in Table 3 show quite large variations across all research variables. The range of values audit fee stickiness And abnormal audit fee The wide gap indicates the diversity of operational complexity, business risks, and governance efficiency among issuers in the transportation and logistics sector. Audit delay The average of around 88 days indicates that the sample issuers are generally still compliant with the reporting deadlines set by the Financial Services Authority, while variations in earnings management and auditor industry specialization indicate differences in accounting reporting strategies and the selection of Public Accounting Firms between companies.

4.2 Classical Assumption Test

The Kolmogorov-Smirnov test yielded an Asymp. Sig. value of 0.200 (>0.05), indicating that the model residuals were normally distributed. The multicollinearity test showed that the tolerance values for all variables were above 0.10 and the VIF values were below 10 (ranging from 1.228 to 2.059), indicating no signs of multicollinearity. The heteroscedasticity test using a scatterplot graph showed a random distribution of residual points without a specific pattern, indicating that the model was homoscedastic. The autocorrelation test yielded a value of Durbin-Watson of 1.885, is between the limits of dU (1.7274) and 4-dU (2.2726), so the model is declared free from autocorrelation. With all the classical assumptions fulfilled, the regression model is declared suitable for use in hypothesis testing.

4.3 Regression Results and Hypothesis Testing

TABLE IV. MULTIPLE LINEAR REGRESSION RESULTS (BEFORE MODERATION)

Variables	B	t	Say.
Permanent	-0,148	-2,990	0,004
AFS	-0,021	-2,873	0,006
AAF	0,026	5,651	0,000
AD	0,001	1,697	0,095

Variables	B	t	Sig.
IS	0,004	0,137	0,891

Source: Data processed by SPSS (2026)

TABLE V. MODERATED REGRESSION / MRA RESULTS (AFTER MODERATION)

Variables	B	t	Sig.
Permanent	-0,132	-2,461	0,017
AFS	-0,023	-2,694	0,009
AAF	0,029	5,845	0,000
AD	0,001	1,273	0,209
IS	-0,370	-1,177	0,244
AFS×SIA	0,047	1,196	0,237
AAF×SIA	-0,058	-1,899	0,063
AD×SIA	0,004	1,023	0,311

Source: Data processed by SPSS (2026)

TABLE VI. MODEL FEASIBILITY TEST (F) AND DETERMINATION COEFFICIENT

Model	F	Sig.	Adj. R ²
Before Moderation	9,852	0,000	0,375
After Moderation	6,487	0,000	0,394

Source: Data processed by SPSS (2026)

The basic regression equation formed is $ML = -0.148 - 0.021AFS + 0.026AAF + 0.001AD + \varepsilon$, with a calculated F value of 9.852 (Sig. 0.000) which indicates a simultaneous model fit, and an Adjusted R² of 0.375 which means that the four independent variables are able to explain 37.5% of the variation in earnings management. After entering the moderating variables, the MRA equation becomes $ML = -0.132 - 0.023AFS + 0.029AAF + 0.001AD - 0.370SIA + 0.047(AFS \times SIA) - 0.058(AAF \times SIA) + 0.004(AD \times SIA) + \varepsilon$, with F count 6.487 (Sig. 0.000) and Adjusted R² increasing to 0.394.

Based on Table 4 and Table 5, the results of the hypothesis testing can be summarized as follows: audit fee stickiness has a negative and significant effect on earnings management (Sig. 0.006 and 0.009 < 0.05), so H1 is accepted. Abnormal audit fee has a positive and significant effect on earnings management (Sig. 0.000 < 0.05), so H2 is accepted. Audit delay does not have a significant effect on earnings management (Sig. 0.095 and 0.209 > 0.05), so H3 is rejected. The three interaction variables, namely AFS×SIA (Sig. 0.237), AAF×SIA (Sig. 0.063), and AD×SIA (Sig. 0.311), are all insignificant at the 5% level, so H4, H5, and H6 are rejected.

4.4 Discussion

Negative influence audit fee stickiness on earnings management supports H1 and is in line with the findings of Ananda and Faisal [6] and Setyawan and Ghazali [26]. Stable audit fees from year to year indicate a mature audit working relationship, where the auditor has a deep understanding of the client's business characteristics and is therefore able to send a better signal of supervisory quality to the market, in accordance with signaling theory. Viewed from the agency theory, fee rigidity also narrows the space for annual honorarium renegotiation which has the potential to become a loophole for post-contract opportunism, so that auditor independence is maintained and the pressure on managers to refrain from profit manipulation becomes greater. The implication is that companies in the transportation and logistics sector should not make emphasizing audit fees a top priority in selecting auditors, because fee stability is actually associated with better supervision.

Positive influence abnormal audit fee on earnings management supports H2 and is consistent with the concept of economic bonding in agency theory [8], [1]. When the fee paid deviates significantly from its reasonable estimate, a stronger economic bond is created between the auditor and the client so that the auditor has the potential to be more compromising with management's accrual policy. This finding is in line with Kiryanto et al. [27] and Virgiantino and Widiyati [28] who emphasized the relevance of audit fees as an important determinant of earnings management. The implication is that audit committees and boards of commissioners need to more closely monitor the fairness of audit fee determinations to avoid compromising auditor independence.

Audit delay was not proven to significantly influence earnings management, thus H3 was rejected. This finding indicates that the length of the audit process in the transportation and logistics sector is more influenced by the

complexity of transactions and accounting estimates, such as fixed asset valuations and fleet lease contracts, than by the presence or absence of earnings manipulation efforts. Auditors appear to be able to maintain their independence and professional skepticism despite the longer audit process, so audit duration alone does not directly reflect the level of earnings management. The limited number of observations (60 observation data) also contributes to variations in the results. audit delay between companies is less diverse so that its influence is difficult to detect statistically.

Auditor industry specialization was not proven to moderate the three tested relationships, so H4, H5, and H6 were all rejected. This finding is in line with Parapat and Mukhlisin [21] and Larassati and As'ari [29] who also found that auditor industry specialization did not affect earnings management, although it differs from Prihantoro [30] who proved a significant moderating role in other sector contexts, confirming that the effectiveness of the moderating role of auditor specialization is highly dependent on the sector context and the characteristics of the variables tested. One possible explanation is the limited number of Public Accounting Firms that truly have in-depth expertise in the transportation and logistics sector in Indonesia, considering that this sector is considered very specific compared to the manufacturing or financial sectors, as also mentioned in the findings of Misnawati et al. [25] regarding the conditional nature of the moderating effect of auditor specialization. This is also consistent with the pattern in the audit delay variable, as found by Aurely et al. [31], that audit delay is determined more by the characteristics of the object being audited than by who is auditing. The implication is that companies cannot rely entirely on the selection of specialist auditors as the sole mechanism for suppressing earnings management, and still need to build solid internal governance as a complement.

IV. CONCLUSIONS

This study concludes that audit fee stickiness has a negative effect on earnings management, whereas abnormal audit fees have a positive impact on transportation and logistics sector companies listed on the Indonesia Stock Exchange for the 2021–2025 period. Audit delay was not proven to have a significant effect, and auditor industry specialization failed to moderate the influence of the three audit variables on earnings management. Overall, these results confirm that the stability of the audit working relationship is associated with a decrease in earnings management practices, while the deviation of audit fees from their fair value opens the way for accrual manipulation, regardless of the level of sectoral expertise of the auditor handling the assignment.

For companies in the transportation and logistics sector, it is recommended to maintain stable working relationships with external auditors without aggressively suppressing audit fees, ensure the fairness of honorarium determination through audit committee oversight, and strengthen internal governance mechanisms, considering that auditor industry specialization has not proven effective as a moderating mechanism. For future researchers, it is recommended to expand the sample coverage both in terms of sector and observation period, and consider panel data analysis methods to accommodate variations. cross-section And time-series more reliably, as well as adding other variables related to audit characteristics, such as KAP size, audit tenure, or the effectiveness of the audit committee, in order to obtain a more comprehensive picture.

The author would like to express his gratitude to the Accounting Study Program, Faculty of Economics and Business, Pancasakti University, Tegal, and all parties who have provided support during this research process.

REFERENCES

- [1] M. C. Jensen and W. H. Meckling, Theory of the firm: managerial behavior, agency costs and ownership structure, *Journal of Financial Economics* 3 (1976) 305–360.
- [2] R. Ningtias and Jaeni, Analysis of the impact of the Covid-19 pandemic on financial performance of transportation companies listed on the Indonesia Stock Exchange for the 2019–2020 period, 15(2) (2022) 454–464.
- [3] N. Fajriati, E. T. Wahyuni, and D. Rosdini, Financial distress and earnings management before and during the Covid-19 pandemic, *Indonesian Accounting and Auditing Journal* 27(1) (2023).
- [4] A. P. D. Asiyanti and S. Trisnangsing, Business ethics violations in accounting practices: a case study of financial statement manipulation at PT Garuda Indonesia, *Journal of Management Research and Economics* 3(1) (2025).
- [5] A. Khalik and Sylvia, Dimensions of earnings management in transportation service companies in Indonesia, *Akuntansi XXVI*(01) (2022) 44–60.
- [6] C. Ananda and F. Faisal, Audit fees, audit tenure, auditor industry specialization, audit firm size, and audit quality: evidence from Indonesian listed companies, *Dinamika Akuntansi dan Bisnis* 10(2) (2023) 213–230.
- [7] A. P. A. Jannah and I. Harymawan, The effect of audit fee stickiness on audit quality, *Journal of Accounting and Business* 21(1) (2021) 43–56.
- [8] T. A. Ervianti and Supatmi, Audit fees and related party transactions: evidence from Indonesia, 20(1) (2023) 117–135.
- [9] D. H. Gunawan and E. Suryani, The effect of abnormal audit fees, key audit matters, and audit tenure on audit quality, *Al-Kharaj: Journal of Islamic Economic and Business* (2024) 1144–1159.
- [10] N. A. Puspita, R. K. L. Yovita, and P. J. Kusuma, Analysis of financial performance on stock prices of issuers in the logistics transportation sector 2021–2023, *Islamic Economics & Business Studies* 6(7) (2025) 2657–2674.

- [11] I. K. S. A. Natha and I. G. A. Wirajaya, The effect of financial distress on earnings management with managerial ownership as moderating variable, *Jurnal Akuntansi* 34(11) (2024) 2752–2765.
- [12] A. S. Soraya and D. Arieftiara, Financial distress and earnings management: an empirical study of non-financial firms listed on the Indonesia Stock Exchange, *Indonesian Journal of Social Technology* 5(11) (2024) 5448–5463.
- [13] K. M. Eisenhardt, Agency theory: an assessment and review, *The Academy of Management Review* 14(1) (1989) 57–74.
- [14] M. Spence, Job market signaling, *The Quarterly Journal of Economics* 87(3) (1973) 355–374.
- [15] W. R. Scott, *Financial Accounting Theory* (2015).
- [16] M. Huljannah and N. Djamil, Abnormal audit fees in manufacturing companies listed on the Indonesia Stock Exchange in 2021–2022 and the factors influencing them, 2(1) (2024) 48–65.
- [17] H. D. Ratnasari, The effect of abnormal audit fees on audit quality, *JASa (Journal of Accounting, Auditing and Accounting Information Systems)* 5(1) (2021) 64–76.
- [18] M. Ridzky and F. Fitriany, The impact of abnormal audit fees on audit quality: a study of ASEAN countries, *Political Issue and Economic Development* (2022) 395–403.
- [19] N. L. P. Widhiastuti, C. J. Adytia, and N. L. G. Novitasari, Factors determining audit delay, *Information Systems, Finance, Auditing, and Taxation* 8(2) (2024) 157–167.
- [20] N. S. Fadhila and D. A. Surjandari, Factors influencing audit delay in Indonesia, *E-Journal of Accounting* 33(1) (2023) 202–216.
- [21] M. Parapat and Mukhlisin, The influence of audit committee expertise, auditor industry specialization, and internal control on earnings management, *Journal of Accounting, Auditing and Finance* 4320(1) (2023) 39–55.
- [22] P. D. Sugiyono, *Quantitative, Qualitative, and R&D Research Methods* (2013).
- [23] P. M. Dechow, R. G. Sloan, and A. P. Sweeney, Detecting earnings management, *The Accounting Review* 70(2) (1995) 193–225.
- [24] S. Wahyudi, Does audit fee stickiness and audit quality are reciprocal?, *JPPI (Jurnal Penelitian Pendidikan Indonesia)* 10(3) (2024) 828–842.
- [25] Misnawati, M. Nindito, and H. Khairunnisa, The role of auditor industry specialization in moderating the influence of audit tenure and KAP size on audits, *Journal of Accounting, Taxation and Auditing* 5(3) (2024) 637–655.
- [26] D. Setyawan and I. Ghazali, Audit quality, firm value and earnings management, *Journal of Accounting* 35 (2025) 2132–2148.
- [27] Kiryanto, D. Permatasari, and A. Triyani, Analysis of the role of the independent auditor on reducing time lags in financial reporting and earnings management, *Innovare Journal of Social Sciences* 10(6) (2022).
- [28] B. Virgiantino and D. Widiyati, The effect of audit delay, audit fee, and financial performance on audit quality, *Journal of Accounting and Management* 2(3) (2023).
- [29] F. A. Larassati and H. As'ari, The effect auditor industry specialization, audit tenure, leverage, and profitability on earnings management in manufacturing companies listed on the Indonesian Stock Exchange, *Journal of Economic, Business and Accounting* 7 (2023).
- [30] F. J. Prihantoro, The influence of audit market competition and good corporate governance on earnings management with auditor industry specialization as a moderator, *Proceedings of the 8th UNIMUS National Seminar* (2025).
- [31] C. Aurely, R. Destiana, and K. Saadah, The effect of audit tenure, earnings quality and auditor industry specialization on audit delay, *Indonesian Accounting Literacy Journal* 01(03) (2021) 734–750.