

The Effect of Leverage, Firm Size, and Audit Opinion on Audit Delay in Consumer Non-Cyclical Companies Listed on the Indonesia Stock Exchange (2020–2024)

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Abstract

The prompt disclosure of externally verified corporate reports is essential because reporting postponements may lessen the usefulness of information for parties involved in economic decision-making. This empirical investigation examines whether debt intensity, entity scale, and auditor judgment are associated with reporting lag among consumer staples issuers traded on the IDX across the 2020–2024 timeframe. A quantitative design was adopted by utilizing archival evidence derived from yearly corporate reports and external audit reports. Through judgment-based sample selection, 44 firms were retained, generating 220 firm-year observations. The dataset was processed using a multivariate linear regression model in IBM SPSS Statistics version 27. The findings demonstrate that each explanatory factor, when tested separately, does not show a statistically meaningful relationship with reporting lag. In contrast, when the three predictors are entered into the model jointly, their combined contribution becomes statistically meaningful. These results extend prior evidence on the determinants of reporting lag and imply that companies need to strengthen reporting discipline in order to accelerate the release of verified financial information.

INTRODUCTION

The prompt release of externally examined corporate reports represents an important benchmark for evaluating the usefulness and credibility of corporate disclosure. When verified annual accounts are made available without unnecessary delay, external users such as capital providers, lenders, supervisory institutions, and other interested parties can rely on them more effectively in allocating resources and assessing business conditions. By contrast, late reporting may widen knowledge gaps between management and outside users, which can weaken public confidence in the actual condition of the entity. For this reason, the speed of publishing audited annual accounts has become a major concern in capital market practices. Annual reports that have been examined by independent auditors are commonly viewed as dependable references for assessing corporate accountability and performance (Adams, 2025; Hassan et al., 2026).

In the Indonesian setting, the deadline for public reporting is regulated under OJK Rule No. 14/POJK.04/2022. Nevertheless, delays in finalizing audit reports remain an important issue, particularly among consumer staples issuers traded on the IDX throughout 2020–2024. From the principal–agent perspective, the separation between owners and managers may create divergent interests because managers generally possess more internal knowledge than outside parties. Under this condition, debt intensity, organizational scale, and the auditor’s final judgment may jointly shape the length of the audit completion process.

Entities with heavier debt exposure are often associated with higher business and financing uncertainty. As a result, broader and more cautious substantive procedures may be required before

independent auditors can finalize their work, which may extend the audit-reporting interval (Adams, 2025). Conversely, entities with broader operational capacity usually possess more developed control mechanisms that can support faster financial reporting. Nevertheless, complicated transaction structures may still require auditors to allocate additional examination time (Durand, 2022). Furthermore, when the auditor issues a conclusion other than a clean report, extra clarification and verification procedures are often needed before the external audit report can be finalized (Behnampour & Momeni, 2025).

Prior empirical works have explored various determinants of audit-reporting lag; however, their conclusions have not produced a uniform pattern. Laily Barsyah (2025) reported that organizational scale was associated with audit-reporting lag, whereas debt intensity was not statistically related to it. Different evidence was presented by Reza Fahlevi Lubis (2022), who showed that debt intensity contributed positively to the length of audit completion. Meanwhile, Alan Darma Saputra (2020) revealed that the auditor's reporting judgment did not determine the audit completion interval. The divergence across these empirical results suggests that the association among debt intensity, organizational scale, auditor judgment, and audit-reporting lag still needs to be re-examined through alternative samples and research settings.

Apart from the inconsistency of earlier evidence, many previous investigations were concentrated on manufacturing, banking, and property-related sectors. Empirical attention directed specifically toward consumer staples issuers within the 2020–2024 observation window is still relatively scarce. This sector is important to examine because it has unique operating patterns and experienced notable development after the global health crisis. Therefore, additional empirical evidence is required to clarify what determinants may shape audit completion lag in this industry group.

Referring to the arguments above, the present research investigates whether debt intensity, organizational scale, and the auditor's reporting judgment are associated with audit-reporting lag among consumer staples issuers traded on the Indonesia Stock Exchange during 2020–2024, both separately and jointly. The research is driven by the mixed conclusions of earlier studies concerning the role of these three explanatory factors, as well as the lack of sector-specific evidence in the consumer staples industry, especially in the post-pandemic period. The originality of this research is reflected in its emphasis on consumer staples issuers over the 2020–2024 timeframe, thereby offering a more specific understanding of audit completion behavior in a sector with relatively stable business activities but persistent reporting-timeliness challenges.

Accordingly, the hypotheses are formulated as follows:

- H₁ : Debt intensity is expected to have a positive and statistically meaningful association with reporting lag among consumer staples issuers traded on the Indonesia Stock Exchange during 2020–2024.
- H₂: : Organizational scale is expected to have a negative and statistically meaningful association with reporting lag among consumer staples issuers traded on the Indonesia Stock Exchange during 2020–2024.
- H₃ : The auditor's reporting judgment is expected to have a positive and statistically meaningful association with reporting lag among consumer staples issuers traded on the Indonesia Stock Exchange during 2020–2024.

H₄ : Debt intensity, organizational scale, and the auditor's reporting judgment are expected to jointly have a statistically meaningful association with reporting lag among consumer staples issuers traded on the Indonesia Stock Exchange during 2020–2024.

METHODS

This research applied a descriptive quantitative framework to examine the relationship between debt intensity, entity scale, auditor judgment, and reporting lag. The empirical evidence was drawn from yearly corporate reports and external auditor reports issued by consumer staples firms traded on the Indonesia Stock Exchange across the 2020–2024 timeframe. The required materials were accessed through the IDX portal and the official corporate webpages of each sampled entity.

The research universe covered all consumer staples issuers traded on the IDX within the five-year period. A judgment-based selection procedure was applied to determine the final sample. Firms were included when they remained traded throughout the entire research window, disclosed complete audited accounts, and showed reporting lag within the examined years. After this screening process, 44 issuers were retained, producing 220 firm-year data points.

Evidence gathering was carried out through archival retrieval and academic source review. The academic review covered books, scholarly articles, and other relevant references, while the archival retrieval focused on collecting annual corporate reports and external auditor reports available through the IDX portal and each issuer's official website.

The outcome variable used in this research is reporting lag. This variable was calculated by counting the calendar-day interval from the fiscal closing date to the signing date of the external auditor's report. Debt intensity was represented by the debt-to-equity ratio (DER). Entity scale was calculated using the natural logarithm of total assets. Meanwhile, auditor judgment was coded as a binary indicator, where a score of 1 was assigned to firms receiving a clean audit judgment and a score of 0 was assigned to firms receiving any other type of auditor judgment.

The statistical processing was performed with IBM SPSS Statistics version 27. The analytical procedures included descriptive profiling, diagnostic testing for predictor overlap and unequal residual variance, multiple linear regression, model explanatory-power assessment, overall model testing, and individual predictor testing.

RESULTS AND DISCUSSION

A total of 220 firm-year records from 44 consumer staples issuers traded on the Indonesia Stock Exchange during 2020–2024 were analyzed in this research. Descriptive profiling was first conducted to summarize the characteristics of the research constructs, namely reporting lag, debt intensity, entity scale, and auditor judgment. The summary is displayed in Table 1.

Table 1. Descriptive Summary of Research Constructs

Construct	N	Lowest	Highest	Average	SD
Reporting Lag	220	57	272	97.22	24.434
Debt Intensity	220	-23.618	92.500	2.51195	8.418444
Entity Scale	220	24.604	31.445	28.38679	1.493433
Auditor Judgment	220	0	1	0.986	0.116
Valid Cases	220				

The descriptive output indicates that the mean reporting lag reached 97.22 days, with the shortest interval recorded at 57 days and the longest at 272 days. Debt intensity produced an average value of 2.51195, while entity scale had a mean value of 28.38679. In addition, most firm-year cases received a clean auditor judgment, representing 98.6% of the sample, whereas 1.4% obtained a different type of audit judgment.

Before estimating the regression equation, diagnostic testing was performed to ensure that the data met the required statistical conditions. The diagnostic procedures covered checks for excessive correlation among predictors and non-constant error variance. The diagnostic outcomes are summarized in Table 2.

Table 2. Diagnostic Test Summary

Diagnostic Check	Benchmark	Outcome	Interpretation
Predictor Overlap	Tolerance > 0.10; VIF < 10	All predictors fulfilled the benchmark	Serious predictor overlap was not detected
Unequal Residual Variance	Sig. > 0.05	All predictors fulfilled the benchmark	Residual variance problem was not detected

The diagnostic findings show that the estimated equation fulfilled the required statistical conditions. Each explanatory variable had a Tolerance score above 0.10 and a VIF score below 10, meaning that excessive overlap among predictors was absent. The residual-variance test also generated probability values above 0.05. Therefore, the data were considered appropriate for further regression analysis.

After the diagnostic requirements were fulfilled, the explanatory strength of the model was examined through determination statistics. The results are presented in Table 3.

Table 3. Model Explanatory Power

Statistic	Score
R	0.199
R Square	0.040
Adjusted R Square	0.026
Standard Error of Estimate	20.556

The adjusted R-square score of 0.026 shows that debt intensity, entity scale, and auditor judgment jointly explain 2.6% of the differences in reporting lag. The remaining 97.4% is likely shaped by other determinants that were not incorporated into the current model.

The next stage involved testing the proposed hypotheses to assess the separate and combined effects of the explanatory variables on reporting lag. The hypothesis-testing output is

shown in Table 4.

Table 4. Hypothesis Testing Output

Linkage	Coefficient	t/F Score	Sig.	Result
Debt Intensity → Reporting Lag	0.262	0.084	0.933	H ₁ Not Supported
Entity Scale → Reporting Lag	-1.591	-1.702	0.090	H ₂ Not Supported
Auditor Judgment → Reporting Lag	-21.070	-1.757	0.080	H ₃ Not Supported
Debt Intensity, Entity Scale, and Auditor Judgment → Reporting Lag	-	2.956	0.033	H ₄ Supported

The individual regression output records a coefficient value of 0.262 for debt intensity, -1.591 for organizational scale, and -21.070 for auditor judgment, with probability values of 0.933, 0.090, and 0.080, respectively. Since all three probability values are above the 5 percent threshold, H₁, H₂, and H₃ are not empirically supported. Meanwhile, the joint model produces an F-statistic of 2.956 with a probability value of 0.033, which is below 0.05; therefore, H₄ is supported. This finding implies that although the three predictors do not explain reporting lag separately, their combined presence contributes meaningfully to variations in the audit completion interval.

DISCUSSION

Effect of Leverage on Audit Delay

The empirical evidence shows that debt intensity is not a decisive predictor of reporting lag; therefore, H₁ is not supported. Although the coefficient moves in a positive direction, its probability value does not meet the required statistical threshold. This means that a company's debt burden alone cannot explain how long auditors need to complete their work. Independent auditors are still required to follow professional audit requirements, so a higher level of borrowing does not automatically extend the audit completion process.

Conceptually, this condition can be understood through the principal-agent perspective. External auditors function as neutral assurance providers who help reduce information gaps between managers and capital providers. In highly indebted entities, stronger monitoring pressure from creditors and other external parties may encourage management to prepare clearer disclosures earlier in order to protect corporate credibility. As a consequence, the financial reports may already be more organized when the audit process begins.

Furthermore, auditors are required to comply with the Standards of Professional Practice for Public Accountants. Debt-related risks can be addressed through careful audit planning, risk assessment, and technology-supported audit procedures. Therefore, high debt exposure does not necessarily postpone the issuance of audited reports. This evidence is consistent with Fujianti and Satria (2020), who also reported that debt intensity is not associated with reporting lag.

Effect of Firm Size on Audit Delay

The analysis indicates that organizational scale does not determine reporting lag; therefore, H₂ is not supported. Although the coefficient has a negative direction, its probability value remains

above the accepted level. This suggests that the speed of audit completion cannot be judged merely from whether an entity has a larger or smaller asset base.

From the principal–agent viewpoint, larger entities usually face wider monitoring needs because their ownership structure tends to be more dispersed. To manage this condition, large issuers often develop advanced accounting systems and stronger internal-control mechanisms. These systems may help auditors obtain and verify evidence more efficiently, thereby reducing the possibility that organizational complexity will slow down the audit process. This finding is in line with Sirait (2021), who found that organizational scale is not related to reporting lag.

Effect of Audit Opinion on Audit Delay

The findings reveal that auditor judgment is not a decisive factor in explaining reporting lag; consequently, H_3 is not supported. Although the coefficient shows a negative direction, the probability value is still higher than 0.05. This means that the category of audit conclusion received by an issuer does not independently determine the duration of audit completion.

From the principal–agent perspective, the auditor’s conclusion serves as an assurance signal for outside users regarding the credibility of financial reports. A modified conclusion is commonly linked to material misstatement issues, scope restrictions, or negotiation between auditors and management, which may slow down report publication. However, the descriptive evidence in this research shows a highly dominant pattern, where 98.6% of observations received a clean audit conclusion, while only 1.4% received another type of conclusion. This imbalance may weaken the explanatory role of auditor judgment in the model. The finding supports Nugroho and Rahmawati (2021) as well as Alan Darma Saputra (2020), who found that audit conclusion category is not related to reporting lag.

Effect of Leverage, Firm Size, and Audit Opinion on Audit Delay

When debt intensity, organizational scale, and auditor judgment are examined together, the model shows a statistically meaningful joint relationship with reporting lag; therefore, H_4 is supported. This result indicates that reporting lag is not shaped by one isolated determinant, but by the interaction of several corporate characteristics that operate together during the audit completion process.

This evidence is compatible with the principal–agent perspective because the need for credible and promptly released financial information encourages companies to manage several audit-related conditions at the same time. Nevertheless, the Adjusted R-Square value of 0.026 shows that the explanatory power of the model is still limited. The three predictors explain only 2.6% of the variation in reporting lag, while the remaining 97.4% is likely influenced by other determinants beyond the variables included in this research.

CONCLUSION

This research was designed to examine whether debt intensity, organizational scale, and auditor judgment are related to reporting lag among consumer staples issuers traded on the Indonesia Stock Exchange within the 2020–2024 timeframe. The empirical output shows that none of the three predictors provides a statistically meaningful partial contribution. However, when they are tested jointly, the model produces a meaningful relationship with reporting lag. This

means that the audit completion interval in the examined sector is better understood as the result of combined corporate characteristics rather than a single explanatory factor.

The Adjusted R-Square value of 0.026 confirms that the model accounts for only 2.6% of differences in reporting lag. The remaining 97.4% may be explained by other unobserved factors. Therefore, audit completion time in consumer staples issuers may also be influenced by auditor-related attributes, operational complexity, governance structure, internal reporting readiness, and other contextual conditions.

This research adds sector-specific evidence to the literature on audit-reporting timeliness in Indonesia. It broadens empirical understanding of how debt intensity, organizational scale, and auditor judgment operate within consumer staples firms. In addition, the findings show that industry characteristics may produce different outcomes compared with studies conducted in other sectors.

Several limitations should be acknowledged. The analysis only includes three explanatory factors and is limited to consumer staples issuers during the 2020–2024 period. In addition, the low explanatory value indicates that many relevant determinants have not been incorporated into the model. For this reason, the findings should not be generalized to all industrial sectors without additional testing.

Recommendations

Future researchers are encouraged to include broader predictors, such as profitability, operating complexity, audit quality, public accounting firm scale, and corporate governance practices, so that the model can explain reporting lag more comprehensively. Later studies may also expand the sample to other industry groups and extend the observation period to improve the generalizability of the findings.

From a practical standpoint, firms should improve the quality of financial reporting, strengthen internal-control effectiveness, and maintain close coordination with external auditors. These efforts can support a more efficient audit process and help ensure the punctual release of audited reports.

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