



Sustainability Report, Audit Delay, and Public Accounting Firm Size: Determinants of Audit Quality Manufacturing Companies Listed on the Indonesia Stock Exchange (2016–2025)

Muhammad Aabid Shilihin ^a, Zulfatun Ruscitasari ^{b*}, Melvin Rahma Sayuga Subroto ^c

^a Muhammad.aabid.akt22@student.unu-jogja.ac.id, Universitas Nahdlatul Ulama yogyakarta

^{b*} Zzulfatunr@unu-jogja.ac.id, Universitas Nahdlatul Ulama yogyakarta

^c Melvinrahma@unu-jogja.ac.id, Universitas Nahdlatul Ulama yogyakarta

Receipt: 11 August 2026; Revision: 17 August 2026; Accepted: 18 August 2026

Abstract: This study investigates the extent to which sustainability reporting, audit delay, and public accounting firm size influence audit quality among manufacturing companies listed on the Indonesia Stock Exchange over the 2016–2025 period. Employing a quantitative research design, secondary data were collected from corporate sustainability reports, audited financial statements, and independent auditors' reports. A total of 150 firm-year observations were selected through purposive sampling and analyzed using panel data regression with EViews 14. The results indicate that sustainability reporting and audit delay exert a significant positive effect on audit quality, whereas public accounting firm size shows no significant influence on audit outcomes. Collectively, the three independent variables significantly affect audit quality, as evidenced by a Prob(F-statistic) of 0.038014, with the model explaining 36.83% of the variance in audit quality (Adjusted $R^2 = 0.3683$), indicating a moderate level of explanatory power.

Keywords: Sustainability Report; Audit Delay; Public Accounting Firm Size; Audit Quality; Manufacturing Companies; Indonesia Stock Exchange

This is an open access article under the CC-BY-SA license.



INTRODUCTION

The demand for high-quality financial data has become increasingly urgent amid the growing complexity of business competition, particularly for stakeholders who rely on such data in making strategic decisions. The disclosure of information regarding an entity's condition and achievements to external parties, such as investors and creditors, is largely facilitated through financial statements. Beyond serving as a form of managerial accountability, annual reports are utilized by market participants as a foundation for executing economic decisions (Virgiantino & Widiyati, 2023). This underscores the position of financial statements as a vital source of information for shareholders, who require that the information presented be both relevant and reliable. To minimize the risk of material misstatement in financial reporting, verification by a competent and independent external auditor becomes an absolute requirement (Hadi

& Handojo, 2017). The credibility of financial statements is highly contingent upon the quality of the audit conducted. Nevertheless, the determinants of audit quality are not confined to internal aspects of the auditor alone, but also depend on indicators of transparency demonstrated by the company (Lailatul et al., 2021).

International attention across business sectors has increasingly converged on sustainability issues in recent years. Sustainability-based development is recognized as a strategic orientation aimed at aligning economic objectives with social responsibility and environmental preservation (Ruscitasari et al., 2025). According to Fatchan et al. (2016), sustainability reporting serves as a means of evaluating and communicating organizational activities in measuring the fulfilment of sustainability targets, as well as a form of public accountability to all stakeholders.

Beyond these factors, the determination of audit quality is also significantly influenced by audit delay, measured as the time lag between the fiscal year-end date and the date of completion and publication of the audit report. According to Sitompul et al. (2021), high audit delay can lead to market inefficiency and diminish the usefulness of financial information due to delayed data distribution. This condition implies a potential decline in audit quality, as delayed financial data no longer reflects the current state of a company's performance. Accordingly, the timeliness of report submission plays a vital role in preserving the integrity of financial data and fostering investor confidence, given that audit quality serves as a critical monitoring mechanism that helps mitigate agency conflicts and constrain opportunistic financial reporting behavior.

Another determinant contributing to the achievement of audit quality is public accounting firm size, or the scale of the Public Accounting Firm (KAP) responsible for examining financial statements. Abbas & Zulman (2015) define a KAP as a professional entity that provides a range of independent services, including financial audit examinations, accounting services, tax consultation, and management advisory. Firm size is frequently used as an indicator of the quality of audits produced, wherein KAPs affiliated with the Big Four network are generally supported by superior resource adequacy and operational capability. In line with this, Ananda et al. (2025) found that Big Four firms tend to complete audit engagements more efficiently than Non-Big Four firms, owing to more competent personnel and modern technical infrastructure, ultimately enhancing overall audit quality.

Within the scope of manufacturing issuers listed on the Indonesia Stock Exchange (IDX), research on audit quality occupies an increasingly critical position. This complexity heightens the risk of financial misstatement, demanding more stringent audit standards (Fauziyyah, 2020), while growing regulatory pressure for transparent and timely disclosure further reinforces the relevance of agency-based monitoring mechanisms in this sector.

On the other hand, prior literature evaluating the relationship among sustainability reporting, audit delay, public accounting firm size, and audit quality still exhibits contradictory empirical findings. A number of studies indicate that audit delay negatively affects audit quality, as delays in completing audit procedures often signal underlying technical constraints or heightened complexity in financial statements. Nurgina & Nurmalina (2024) confirmed that audit delay has a significant effect on audit quality. Conversely, Kristianto & Pangaribuan (2022) found no such influence. Firm size has been more extensively studied, with most prior research suggesting that Big Four firms produce superior audit quality compared to Non-Big Four firms, consistent with the agency-theory premise that larger, more reputable auditors serve as stronger monitoring agents capable of constraining managerial opportunism. In contrast, studies directly examining sustainability reporting's impact on audit quality remain limited.

Nevertheless, the conceptual relationship between sustainability reporting and audit quality can be understood through an indirect pathway. Prior literature demonstrates that sustainability reporting plays a role in enhancing corporate openness, reducing information asymmetry, and improving the quality of financial information (Ningrum et al., 2021). As a form of non-financial disclosure, sustainability reporting shares substantive similarities with CSR and ESG criteria, both of which are commonly used as proxies to explain variable relationships. Research in the fields of CSR and ESG identifies that a high level of sustainability disclosure is associated with improved financial reporting quality and corporate transparency, which ultimately drives improvements in audit quality. The inconsistency of findings across prior studies indicates a research gap that warrants further empirical investigation. Furthermore, the 2016–2025 period is considered particularly important to examine, as it reflects post-pandemic conditions in which companies faced various challenges in maintaining performance, transparency, and business sustainability.

LITERATURE REVIEW

A. Audit Quality

Indicators of audit quality are reflected in an auditor's capability to detect and disclose material misstatements in financial statements. Audit quality occupies a vital position in ensuring the credibility of financial data utilized by stakeholders in formulating business decisions. As stated by Indriyani et al. (2021), audit quality is shaped by the interaction of various factors, originating from both internal and external domains.

Internal dimensions include auditor experience, professional commitment, time budget pressure allocation, audit tenure, and the auditor's investigative competence in identifying potential errors. Auditors with superior qualifications, experience, and competence tend to produce more reliable audit outputs owing to their deeper understanding of audit risk profiles. External dimensions, on the other hand, encompass the profile of the client entity, such as firm size, the complexity of operational activities,

and the magnitude of the agreed audit fee. In addition, auditor independence and the effectiveness of a Public Accounting Firm's (KAP) internal quality control system are also key determinants. Auditors who consistently maintain independence tend to produce more objective audit assessments and opinions.

B. Sustainability Report

As a form of non-financial accountability, sustainability reporting continues to develop rapidly as an instrument through which entities demonstrate concern for the impact of their business activities. According to Situmorang & Bimo (2023), sustainability report disclosures based on the Global Reporting Initiative (GRI) guidelines contain comprehensive information regarding operational impacts in the economic, environmental, and social domains. This emphasis indicates that the role of sustainability reporting extends beyond financial performance to encompass long-term business sustainability. As described by Fatchan et al. (2016), the presentation of a company's future vision through sustainability reporting serves as a distinct attraction for prospective investors, in addition to demonstrating the creation of corporate value grounded in environmental and social criteria. The existence of such reporting directly reinforces the accountability and transparency of the entity, thereby enhancing stakeholder trust.

Within the context of achieving audit quality, the publication of a sustainability report may influence auditors' professional judgment regarding potential audit risk. Entities that are transparent in disclosing sustainability indicators tend to be perceived as having sounder corporate governance, which ultimately facilitates the audit examination process. Conversely, the high variation and complexity of non-financial data within sustainability reports may increase the analytical burden on auditors, particularly when the entity's reporting mechanisms are not yet optimally integrated.

C. Audit Delay

According to Nurgina & Nurmalina (2024), audit delay refers to the length of time required to complete an audit, measured from the fiscal year-end date to the issuance of the audit report. Virgiantino & Widiyati (2023) explain that longer audit delay tends to result in a decline in audit quality. This occurs due to a trade-off between reporting timeliness and the reliability of the resulting information. Corporate management and auditors must balance the need for timely reporting with the need to ensure that the information presented has undergone an adequate audit process.

Audit delay is influenced by several factors, such as company complexity, firm size, the quality of accounting information systems, and auditor experience. Companies with a high degree of complexity, such as manufacturing firms, generally experience longer audit delays due to the more detailed audit procedures required (Sembiring, 2022). Therefore, precise time management in the audit process is essential for maintaining audit quality.

D. Public Accounting Firm Size

The size of a Public Accounting Firm (KAP) is one of the indicators closely associated with the achievement of audit quality. As explained by Virginia (2025), the classification of firm size is distinguished between KAPs affiliated with the Big Four network and Non-Big Four KAPs. In general, Big Four-affiliated firms possess more comprehensive resource advantages, including an adequate number of professional personnel, accumulated audit experience, and mastery of modern audit technology.

Findings from Indriyani et al. (2021) indicate that firm size has the potential to positively affect improvements in audit quality, such that larger firms tend to be capable of producing more optimal audit outcomes. This is driven by the need to maintain public reputation as well as the availability of operational resources that support the smooth execution of the audit process. The extensive international networks possessed by large firms also facilitate the handling of entities with high levels of business complexity. Nevertheless, the audit quality of smaller firms cannot be immediately assumed to be inferior, as the degree of quality is highly dependent on the individual qualifications of the auditors and their adherence to applicable professional standards (Saemargani et al., 2015). Therefore, although firm size is an important parameter, it is not the sole determinant of audit quality.

E. Agency Theory

Agency theory explains conflicts arising from the separation of ownership and control, wherein information asymmetry between principals and agents necessitates independent monitoring mechanisms (Jensen & Meckling, 1976). Recent studies affirm that auditing remains central to reducing agency costs and enhancing financial reporting credibility (Amos Sunday, 2026). Similarly, corporate governance mechanisms, including audit committees, strengthen monitoring capacity and mitigate managerial opportunism within agency-based frameworks (El-Deeb et al., 2024).

Hypothesis Development

A. The Effect of Sustainability Report on Audit Quality

A sustainability report constitutes a form of non-financial disclosure that reflects a company's commitment to economic, social, and environmental dimensions. Such disclosure not only demonstrates overall corporate performance but also reflects the company's commitment to creating long-term value. Sawitri & Setiawan (2017) explain that, within the economic dimension, sustainability reports encompass information on economic performance, market position, economic impact, and procurement practices undertaken by the company.

The broader and more transparent the disclosure of a sustainability report, the higher the level of corporate accountability (Yohana & Suhendah, 2023). Such transparency facilitates auditors in understanding a company's condition and enables more accurate assessment of audit risk. Furthermore, companies that consistently

publish sustainability reports tend to exhibit sound corporate governance, thereby reducing the likelihood of material misstatement.

H1: Sustainability report has a positive effect on audit quality.

B. The Effect of Audit Delay on Audit Quality

Audit delay describes the length of time required to complete the audit process, measured from the end of the fiscal year to the issuance of the audit report. Soedarman & Janadea (2024) state that audit delay represents the interval between the closing date of the financial statements and the date of issuance of the auditor's report. The duration of this process reflects the auditor's efficiency and risk management capability.

Efficient and well-managed control of audit delay reflects auditor professionalism and precision in executing examination procedures. Completing an audit within an optimal timeframe helps preserve the relevance of financial information without compromising auditor thoroughness. An auditor's ability to systematically minimize audit delay indicates strong planning capacity and adherence to rigorous examination standards. Accordingly, greater efficiency in reducing audit delay positively affects the improvement of audit quality.

H2: Audit delay has a positive effect on audit quality.

C. The Effect of Public Accounting Firm Size on Audit Quality

Firm size is frequently used as a benchmark for assessing audit quality. Research by Ananda et al., (2025) indicates that auditors working at Big Four firms tend to be more capable of managing audit time efficiently and completing the examination of financial statements more quickly compared to auditors at smaller firms. This advantage enables large firms to conduct audits more effectively and systematically, thereby producing higher-quality audit outcomes. Consequently, audit results issued by large firms are more likely to be trusted by users of financial statements. In general, large firms possess superior resources and support systems that enable the execution of higher-quality audits ((Julia, 2020).

H3: Public accounting firm size has a positive effect on audit quality.

D. The Effect of Sustainability Report, Audit Delay, and Public Accounting Firm Size on Audit Quality

Audit quality results from the interaction of multiple factors, originating from both the internal environment of the company and the auditor. Sustainability reporting reflects the level of corporate transparency, audit delay indicates the efficiency of the audit process, while firm size represents the auditor's capacity to conduct the audit. These three factors may collectively influence the resulting audit quality.

Companies with a high level of transparency, supported by competent staff and efficient audit processes, tend to produce higher audit quality. It is therefore important to examine the combined effect of these three variables in order to obtain a more comprehensive understanding of the determinants of audit quality.

H4: Sustainability report, audit delay, and public accounting firm size simultaneously have a positive effect on audit quality.



Figure 1. Conceptual Framework

METHOD

This study employs a quantitative method with a causal-associative approach to evaluate the effect of sustainability reporting, audit delay, and public accounting firm size on audit quality. The population consists of manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2016–2025 period, encompassing the Basic Industry and Chemicals, Automotive, and FMCG sectors. These sectors were selected due to their operational complexity, which is closely associated with the evaluation of audit quality. The sample was determined using purposive sampling based on the following criteria: (1) manufacturing issuers listed on the IDX throughout the 2016–2025 period; (2) publication of annual financial statements; (3) complete and uninterrupted availability of data on sustainability reporting, audit delay, and public accounting firm size; and (4) freedom from delisting during the observation period.

This study utilizes secondary data in the form of annual reports and sustainability reports obtained from the official IDX website and related corporate sources. Data collection employed a documentation technique through the following systematic steps: sample selection, downloading of report documents for the observation period, extraction of variables (sustainability reporting, audit delay, public accounting firm size, and audit quality), and data tabulation for subsequent analysis.

Operational Definition of Variables

Table 1. Operational Definition of Variables

No	Variable	Indicator	Measurement	Scale
1	Sustainability Report	Level of disclosure based on GRI standards	Items disclosed : total GRI items	Ratio
2	Audit Delay	Audit completion time	Difference between audit completion date and fiscal year-end date (in days)	Ratio
3	Public Accounting Firm Size	Classification of firm size	Dummy: Big Four = 1, Non-Big Four = 0	Nominal
4	Audit Quality	Discretionary accruals	Discretionary accrual value (Modified Jones Model approach)	Interval

A. Sustainability Report

In this study, sustainability reporting is measured using a disclosure index based on the Global Reporting Initiative (GRI) standards. Measurement was conducted by identifying the disclosure items contained within a company's sustainability report and comparing the number of items disclosed against the total number of items required under the GRI standards. The resulting comparison is expressed as a ratio, whereby a higher value indicates a broader extent of disclosure.

B. Audit Delay

Audit delay is calculated as the interval between the fiscal year-end date and the date of issuance of the audit report. This variable is measured in days, providing a clear indication of the efficiency and timeliness of the audit process. A longer audit delay reflects greater complexity in the audit process or the potential presence of underlying issues within the company's financial statements.

C. Public Accounting Firm Size

Public accounting firm size in this study is used to distinguish the capacity and reputation of the auditor engaged to audit the company. This variable is measured using a dummy variable, whereby a value of 1 is assigned to entities audited by a Big Four-affiliated firm, and a value of 0 is assigned to entities audited by a non-Big Four firm. This measurement is based on the assumption that Big Four firms generally possess superior system resources and adhere to more rigorous audit standards compared to non-Big Four firms.

D. Audit Quality

Audit quality reflects the extent to which an auditor is able to detect and investigate misstatements within financial statements. As this variable cannot be observed directly, it is measured using a proxy approach, namely discretionary accruals estimated through

the Modified Jones Model. This approach is based on the separation of accruals into normal (non-discretionary) components and those influenced by management's policy choices (discretionary). A lower discretionary accrual value indicates higher audit quality, as it reflects the auditor's ability to constrain earnings management practices.

ANALYSIS AND DISCUSSION

A. Descriptive Statistical Analysis

Table 2. Descriptive Statistics Results

	Y1	X1	X2	X3
Mean	7636.270	0.822695	82.21986	0.602837
Median	7825.000	1.000000	82.00000	1.000000
Maximum	10711.00	1.000000	303.0000	1.000000
Minimum	-3824.000	0.000000	29.00000	0.000000
Std.Dev	1828.418	0.383288	28.88774	0.491055
Skewness	-2.232950	-1.689828	3.665265	-0.420334
Kurtosis	13.62524	3.855517	27.26339	1.176681
Observations	150	150	150	150

Source: EViews 14 Output Results, Processed, 2026

Based on the descriptive statistical results, this study employs 150 observations from manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2016–2025 period. The audit quality variable (Y) recorded a mean value of 7,636.270, with a minimum value of -3,824 and a maximum value of 10,711. A standard deviation of 1,828.418 indicates that the variation in audit quality across companies remains relatively high. Sustainability reporting exhibited an average disclosure level of 0.82 on a scale of 0–1, indicating that the majority of sample companies have disclosed most of the GRI items in their sustainability reports. Audit delay averaged 82 days, ranging from 29 to 303 days, reflecting a fairly wide variation in audit completion time across companies. Additionally, 60.28 percent of the sample companies were audited by Big Four firms.

A. Panel Data Regression Model Selection

Table 3. Chow Test Results

Effects Test	Statistic	d.f.	Probability
Cross-section F	1.603004	(13,124)	0.0928
Cross-section Chi-square	21.903158	13	0.0569

Source: EViews 14 Output Results, Processed, 2026

The Chow test results show a probability value of 0.0928 for the cross-section F-statistic and 0.0569 for the cross-section Chi-square statistic. Since both values exceed 0.05, the Common Effect Model (CEM) is deemed more appropriate than the Fixed Effect Model.

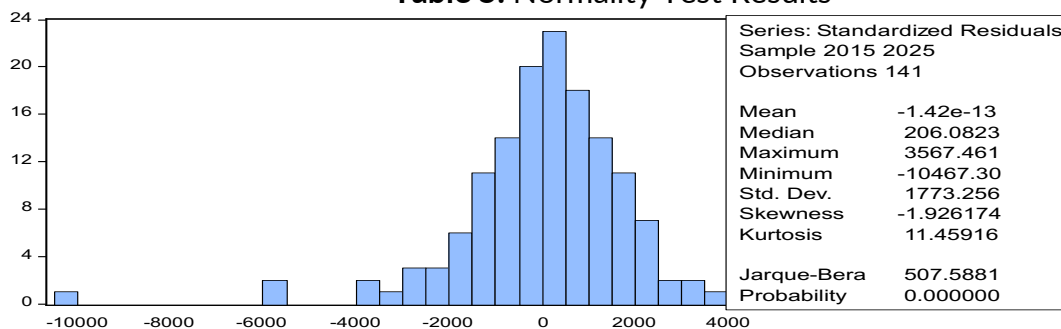
Table 4. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Probability
Cross-section random	0.384753	3	0.9434

Source: EViews 14 Output Results, Processed, 2026

The Hausman test, conducted as a comparative check, yielded a probability value of 0.9434, well above 0.05, indicating that no sufficiently strong individual effects across companies were found to support either the fixed effect or random effect model. Accordingly, the panel data regression estimation in this study employs the Common Effect Model (pooled OLS).

B. Classical Assumption Tests

Table 5. Normality Test Results

Source: EViews 14 Output Results, Processed, 2026

The Jarque-Bera normality test produced a statistic of 507.59 with a probability value of 0.0000, which is smaller than 0.05, indicating that the residuals are not normally distributed. This condition is consistent with the skewness and kurtosis patterns observed in the descriptive statistics and remains acceptable given the relatively large sample size of 150 observations; based on the Central Limit Theorem, this deviation from normality does not materially affect the regression estimation results, although data transformation of the audit quality variable may be considered in future research.

Table 6. Multicollinearity Test Results

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.375337	18.20274	1.227388
X1	0.154851	6.107987	1.140158
X2	2.93E-05	10.68052	1.164432
X3	0.113288	3.333102	1.311020

Source: EViews 14 Output Results, Processed, 2026

The multicollinearity test results indicate that the centered VIF values for all independent variables are well below 10. This condition confirms the absence of excessive correlation among the independent variables, allowing the effect of each variable on audit quality to be interpreted independently, and indicating that the regression model is free from multicollinearity issues.

C. Panel Data Regression Analysis

Table 7. Coefficient of Determination (R^2) Results

R-square	0.394292
Adjusted R-square	0.368324

Source: EViews 14 Output Results, Processed, 2026

The R-squared value of 0.394292 and Adjusted R-squared value of 0.368324 indicate that sustainability reporting, audit delay, and public accounting firm size collectively explain 36.83 percent of the variation in audit quality. The remaining 63.17 percent is explained by other factors outside the model, such as individual auditor characteristics, corporate operational complexity, or governance mechanisms not incorporated in this study.

Table 8. F-Test (Simultaneous) Results

R-square	0.394292	Mean dependent var	7636.270
Adjusted R-square	0.368324	S.D. dependent var	1828.418
S.E. of regression	1792.566	Akaike info criterion	17.84864
Sum squared resid	4.40E+08	Schwarz criterion	17.93230
Log likelihood	-1254.329	Hannan-Quinn criter	17.88264
F-statistic	2.885390	Durbin-Watson stat	1.793308
Prob(F-statistic)	0,038014		

Source: EViews 14 Output Results, Processed, 2026

The test results yield an F-statistic of 2.885390 with a Prob(F-statistic) of 0.038014. Since this probability value is smaller than the 0.05 significance level ($0.038014 < 0.05$), the regression model is confirmed to possess explanatory power and to significantly and simultaneously affect audit quality. The three independent variables jointly contribute to explaining variation in audit quality. Although the partial test results indicate that only sustainability report and audit delay have a significant individual effect, the overall regression model remains valid, as the three variables collectively exert a significant simultaneous influence on audit quality.

Table 9. t-Test (Partial Hypothesis) Results

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	6353.252	648.0996	9.802895	0.0000
X1	849.4411	415.3389	2.045176	0.0428
X2	3.494594	5.650187	0.618492	0.0373
X3	492.4407	347.6717	1.416396	0.1589

Source: EViews 14 Output Results, Processed, 2026

Sustainability report has a positive and significant effect on audit quality, with a coefficient of 849.44 and a probability value of 0.0428, thereby supporting H1. This indicates that companies disclosing more extensive sustainability information tend to achieve higher audit quality. Audit delay also exerts a positive and significant effect (probability value of 0.0373), thereby supporting H2; the length of audit completion time in this study's sample is one of the determining factors of audit quality. Meanwhile, public accounting firm size does not have a significant effect (probability value of 0.1589), thereby rejecting H3. Affiliation with Big Four or non-Big Four firms was not sufficiently able to distinguish audit quality among the manufacturing companies examined.

The Effect of Sustainability Report on Audit Quality

The t-test results indicate that sustainability report has a positive and significant effect on audit quality (coefficient of 849.44; probability value of 0.0428), thereby supporting H1. The average level of sustainability report disclosure in this study's sample is relatively high, at 0.82 on a scale of 0–1, indicating that the majority of sampled manufacturing companies have disclosed most of the GRI items in their sustainability reports. This finding is consistent with the argument from developed in the conceptual framework which draw of Situmorang & Bimo (2023), namely that companies with broader sustainability disclosure tend to possess sounder corporate governance, there by facilitating auditors in obtaining audit evidence and assessing audit risk. This result further reinforces the notion that sustainability reporting may function as an indirect proxy for CSR and ESG, as discussed in the introduction, given that studies directly linking sustainability reporting to audit quality remain limited in number.

The Effect of Audit Delay on Audit Quality

Audit delay has a positive and significant effect on audit quality (probability value of 0.0373), thereby supporting H2. The average audit delay in the sample is 82 days, ranging from 29 to 303 days. The direction of this relationship should be interpreted with caution, as audit quality in this study is proxied by discretionary accruals, wherein a lower value indicates higher audit quality. The positive relationship between audit duration and the audit quality proxy value may suggest that longer audit periods in this sample do not merely reflect inefficiency, but instead provide auditors with greater opportunity to conduct more thorough verification procedures, particularly for manufacturing companies characterized by high operational complexity, such as extensive inventory management and large-scale fixed assets. This finding is consistent with urgina & Nuralina (2024), who similarly found that audit delay significantly affects audit quality, but contrasts with Kristianto & Pangaribuan (2022), who found no significant relationship between the two variables. This

discrepancy may be attributable to differences in sector, observation period, and the audit quality proxy employed across studies.

The Effect of Public Accounting Firm Size on Audit Quality

Testing of the third hypothesis (H3) results in its rejection, as public accounting firm size does not have a significant effect on audit quality (probability value of 0.1589). The predominance of Big Four firm usage, at 60.28 percent of the manufacturing sample, does not necessarily demonstrate that firm affiliation status serves as the primary determinant of audit quality. This finding diverges from the studies of Indriyani et al. (2021) and Ananda et al. (2025), which identified a positive effect of firm size on audit quality. This result underscores that the reliability of the audit process is more strongly influenced by individual auditor competence and adherence to professional standards than by firm reputation. In addition, the relatively balanced composition of Big Four and non-Big Four firms within the sample may have reduced the model's statistical sensitivity to detecting resource disparities between firm types.

The Combined Effect of Sustainability Report, Audit Delay, and Public Accounting Firm Size on Audit Quality

Simultaneously, the combination of sustainability report, audit delay, and public accounting firm size is shown to significantly affect audit quality, with a Prob(F-statistic) value of 0.038014, thereby supporting H4. This finding is consistent with the results of the individual tests, indicating that the synergy of the three independent variables retains predictive capacity for variation in audit quality. The model's explanatory power (Adjusted R-squared) of 0.368324 indicates that 36.83 percent of the variation in audit quality can be predicted by the model, while the remaining 63.17 percent is attributable to factors outside the scope of this study, such as auditor expertise, the effectiveness of corporate governance, and operational complexity.

CONCLUSION

This study provides empirical evidence on the determinants of audit quality among manufacturing firms listed on the Indonesia Stock Exchange during the 2016–2025 period, using a panel data regression framework. The findings demonstrate that sustainability reporting and audit delay are positive and statistically significant predictors of audit quality, whereas public accounting firm size does not emerge as a significant determinant. Taken together, the three variables jointly explain a meaningful proportion of the variation in audit quality, underscoring their combined relevance to the audit environment of manufacturing firms.

These results carry two key implications. First, corporate transparency through sustainability disclosure emerges as a more consequential driver of audit quality than firm affiliation, consistent with agency theory's emphasis on voluntary disclosure as a mechanism for reducing information asymmetry between management and stakeholders. Second, the positive association between audit delay and audit quality

nuances the conventional view of delay as inefficiency; rather, it may reflect the additional monitoring effort auditors exert to verify complex financial information, reinforcing their role as agency-theory monitoring agents. Collectively, these findings challenge firm size as a reliable proxy for audit quality, pointing instead to disclosure practices and audit rigor as more effective agency-cost-reducing mechanisms within the Indonesian manufacturing sector.

For companies, these results underscore the value of enhancing sustainability disclosure completeness to support more effective auditor monitoring, in line with agency theory's disclosure-based approach to mitigating conflicts of interest. For auditors and accounting firms, they suggest that audit quality does not automatically follow from firm size; rather, individual competence and adherence to professional standards remain the more decisive monitoring factors.

This study has several limitations. First, regression residuals depart from normality per the Jarque-Bera test, though this is largely mitigated by the relatively large sample size. Second, audit quality is measured solely through discretionary accruals via the Modified Jones Model, which may limit generalizability to other conceptualizations such as audit opinion or audit report lag. Third, the Adjusted R-squared of 36.83 percent, while consistent with typical explanatory power in discretionary-accrual-based studies, indicates that a meaningful share of variation remains attributable to factors beyond this study's scope, such as auditor expertise and corporate governance effectiveness. The sample's confinement to the manufacturing sector further limits generalizability to other industries.

Future research should incorporate additional variables, such as audit tenure, auditor industry specialization, and governance mechanisms, and apply alternative audit quality proxies to verify robustness. Extending the analysis to non-manufacturing sectors would also broaden the understanding of audit quality determinants in Indonesia.

REFERENCES

- Abbas, Zulman, R. (2015). *Pengaruh Profitabilitas, Solvabilitas, Opini Audit Dan Reputasi Kantor Akuntan Publik Terhadap Audit Report Lag*.
- Ananda, C. D., Abbas, D. S., & Hidayat, I. (2025). *The Effect Of Company Size , Public Accounting Firm Size , And Audit Tenure On Audit Report Lag With Auditor Industry Specialization As A Moderating Variable*. 13(3), 2749–2762.
- El-Deeb, M. S., Alarabi, Y., & Mohamed, A. (2024). The role of audit committee characteristics in improving the risk disclosure of companies examining the moderating role of audit quality. *Future Business Journal*, 10(1). <https://doi.org/10.1186/s43093-024-00417-2>
- Fatchan, I. N., Studi, P., Internasional, A., Ekonomi, F., & Trisnawati, R. (2016). *Pengaruh Good Corporate Governance Pada Hubungan Antara Sustainability Report Dan Nilai Perusahaan (Studi Empiris Perusahaan Go Public di Indonesia Periode 2014-2015) Pendahuluan Kajian Literatur Hipotesis dan Pengembangan*. 1(2011), 25–34.
- Fauziyyah, Z. I. (2020). *Audit fee, audit tenure* ., 9, 1–17.

- Hadi, F. W., & Handojo, I. (2017). *Faktor-Faktor Yang Mempengaruhi Kualitas*. 19(2), 209–219.
- Indriyani, M., Meini, Z., & Akuntansi, P. S. (2021). *Jurnal Akuntansi dan Keuangan FEB Universitas Budi Luhur*. 10(2), 107–124.
- Julia. (2020). *Effect Financial Ratio , Company Age , Size Public Accountant Firm In Audit Delay*. XXIV(01), 51–66.
- Kristianto, E. J., & Pangaribuan, H. (2022). *The Effect Of Audit Tenure , Company Size , And Audit Delay On Audit Quality (Study On Non-Financial Sector Listed On Idx For The 2019-2021 Period)*. 23(1), 126–137.
- Lailatul, U., Yanthi, M. D., Akuntansi, J., Surabaya, U. N., Ketintang, K., Akuntansi, J., Surabaya, U. N., & Ketintang, K. (2021). *Pengaruh Fee Audit , Komite Audit , Rotasi Audit Terhadap Kualitas Audit The Effect of Fee Audit , Audit Committees , Audit Rotation on Audit Quality*. 10(1).
- Ningrum, N. R. W., Kirana, D. J., & Miftah, M. (2021). *Pengaruh pengungkapan sustainability report, asimetri informasi, dan kinerja keuangan terhadap nilai perusahaan*. *Jurnal Penelitian Akuntansi*, 2(1), 42–57.
- Nurgina, S. A., & Nurmalina, R. (2024). *Pengaruh Audit Tenure , Ukuran Perusahaan , dan Audit Delay terhadap Kualitas Audit The Effect of Audit Tenure , Company Size , and Audit Delay on Audit Quality*. 4(3), 204–214.
- Ruscitasari, Z., Marzuqoh, M., & Mutia, G. R. (2025). *Kesiapan Pelaporan Keberlanjutan Pemerintah Daerah : Kepatuhan Standar Gri di Bantul dan Sleman (Local Government Sustainability Reporting Readiness : Gri Standard Compliance in Bantul and Sleman)*. 4(1), 55–67.
- Saemargani, F. I., Pengajar, S., Akuntansi, J. P., Negeri, U., Perusahaan, U., Perusahaan, U., Perusahaan, P., Perusahaan, S., Perusahaan, S., Perusahaan, U., Perusahaan, P., Perusahaan, S., Perusahaan, U., Perusahaan, P., & Auditor, O. (2015). *Jurnal nominal / volume iv nomor 2 / tahun 2015 pengaruh ukuran perusahaan, umur perusahaan, profitabilitas, solvabilitas, ukuran kap, dan opini auditor terhadap audit delay*. IV.
- Sawitri, A. P., & Setiawan, N. (2017). *Analisis pengaruh pengungkapan sustainability report , kinerja keuangan , dan kinerja lingkungan terhadap nilai perusahaan*. 1–8. <https://doi.org/10.14414/jbb.v7i2.1397>
- Sembiring, L. D. (2022). *Impact of Reputation of Public Accounting Firms as Mediating Between Leverage , Profitability , and Company Size Against Audit Delay of Large Trading Companies on Indonesia Stock Exchange*. 11(2), 177–196.
- Sitompul, S. M., Panjaitan, M., & Ginting, W. A. (2021). *Pengaruh fee audit , rotasi auditor , reputasi KAP , audit delay terhadap kualitas audit*. 16(3), 559–570.
- Situmorang, D., & Bimo, I. D. (2023). *Pengaruh Sustainability Reporting Terhadap Nilai Perusahaan Dengan Kualitas Audit Sebagai Variabel*. 20(1), 1–17.
- Soedarman, M., & Janadea, N. A. (2024). *Pengaruh Audit Delay, Komite Audit, Dan Kualitas Laporan Keuangan Terhadap Nilai Perusahaan Dengan Kepemilikan Manajerial Sebagai Variabel Moderasi*. 8(September), 171–183.
- Virgiantino, B., & Widiyati, D. (2023). *Balance : Jurnal Akuntansi dan Manajemen Pengaruh Audit Delay , Audit Fee , Dan Kinerja Keuangan Terhadap*. 2(3).
- Virginia, R. (2025). *Pengaruh Independensi Auditor , Audit Tenure , Fee Audit , Rotasi Kap , dan Ukuran Kap Terhadap Kualitas Audit*. 8(1), 586–597.
- Yohana, S., & Suhendah, R. (2023). *The Effect Of Profitability , Leverage , And Firm Size On Sustainability Report Disclosure*. 27(03), 525–545.