



Financial report compliance: Timeliness evidence of manufacturing companies listed on the Indonesian stock exchange for the period 2022-2024

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Abstract

This study examines whether firm attributes predict timely financial reporting among Indonesian manufacturing issuers. Grounded in Agency Theory and Stakeholder Theory, the study analyzes the effects of audit quality (QUAL), firm size (SIZE), profitability (PROF), and firm age (AGE) on the likelihood of filing within OJK/IDX deadlines. A quantitative research design was employed using secondary data from 33 manufacturing companies listed on the Indonesia Stock Exchange (IDX) over the 2022–2024 period, selected through purposive sampling. Timeliness (TIME) was operationalized as a binary outcome based on the interval from fiscal year-end to the audit opinion date, reflecting the practical publication constraint that audited financial statements cannot be released before audit completion. The explanatory variables were constructed from published annual reports: QUAL (Big-4 vs. non-Big-4), SIZE (natural logarithm of total assets), PROF (return on assets), and AGE (years since listing). Estimation was performed using binary logistic regression, supported by descriptive statistics and a transparent operationalization protocol. The results indicate that audit quality, firm size, profitability, and firm age do not exhibit statistically significant associations with timeliness in the primary logistic regression model at the 5% significance level. Although the coefficients for firm size, profitability, and firm age are positive, none of these effects are statistically significant, and therefore all proposed hypotheses are rejected. These findings suggest that, in manufacturing settings characterized by longer production cycles and complex supply chains, deadline compliance may depend more on operational reporting processes, audit coordination, and internal closing discipline than on profitability signals, auditor reputation, organizational scale, or firm maturity alone. This study contributes sector-specific evidence from Indonesia by extending a recent FMCG-based timeliness framework to the broader manufacturing context and by documenting a replicable measurement approach with practical implications for issuers, auditors, and regulators.

Keywords: Timeliness, manufacturing, IDX, logistic regression

Introduction

Financial reporting is an essential means of communicating a company's financial position, performance, and cash flows to users of financial statements. In accounting practice, financial reporting is expected not only to present relevant and faithfully represented information, but also to provide that information in a timely manner. Timeliness is important because even reliable information may lose its decision usefulness when it is reported too late. Timely audited financial statements enable investors, creditors, and regulators to evaluate company performance, assess financial risk, and make economic decisions based on up-to-date information, whereas delayed reporting may increase uncertainty and information asymmetry (Ashton *et al.*, 1989; Oraki & Zamanpoor, 2016)^[6, 32].

In Indonesia, the timeliness of financial reporting by public companies has been regulated by the Financial Services Authority (OJK) and the Indonesia Stock Exchange (IDX). Public companies are required to submit annual reports and audited financial statements within the prescribed deadlines in order to ensure the availability of information in a predictable reporting cycle. However, despite the existence of clear regulations, delays in the submission of audited financial statements still occur. This indicates that compliance with reporting deadlines is not always uniform across firm-year observations. As a result, timeliness remains an important issue in the capital market

environment because delayed audited reports extend the period during which external users must rely on outdated information.

The manufacturing sector provides a relevant context for examining this issue because manufacturing firms generally face more complex operational and audit processes than firms in many other sectors. Inventory valuation, cost of goods sold verification, production-related accruals, and the need for extensive audit evidence may lengthen the financial closing and audit completion process. These characteristics may affect the ability of firms to publish audited financial statements on time. In addition, previous studies on the determinants of financial reporting timeliness in Indonesia have produced mixed results. Some studies find that firm size and profitability influence reporting timeliness, while others report inconsistent findings for audit quality, profitability, firm age, and other firm characteristics. Such inconsistency suggests that the determinants of timeliness may be context-specific and therefore require further testing in different sectors and observation periods.

Based on Agency Theory and Stakeholder Theory, timely financial reporting can be viewed as an important mechanism for reducing information asymmetry and fulfilling corporate accountability to stakeholders. In this study, the determinants examined are audit quality, firm size, profitability, and firm age. Audit quality is proxied by Big Four affiliation, firm size is measured by the natural

logarithm of total assets, profitability is measured by operating return on investment, and firm age is measured by the number of years since listing on the IDX. This study focuses on manufacturing companies listed on the Indonesia Stock Exchange during the 2022–2024 period. The period reflects a post-pandemic reporting environment in which reporting routines have become more normalized, although firms may still face operational and audit pressures that affect reporting speed. Accordingly, this study aims to analyze and obtain empirical evidence regarding the effect of audit quality, firm size, profitability, and firm age on the timeliness of financial reporting in manufacturing companies listed on the Indonesia Stock Exchange during 2022–2024.

Literature review

The timeliness of financial reporting can be explained primarily through Agency Theory and supported by Stakeholder Theory. Agency Theory states that the separation between owners and managers creates information asymmetry because managers possess more information about the firm than shareholders do (Jensen and Meckling, 1976) [27]. This condition allows managers to exercise discretion not only over the content of financial reporting but also over its timing. In this context, timely reporting becomes an important monitoring outcome because it reduces uncertainty, limits managerial opportunism, and strengthens accountability. Stakeholder Theory complements this view by emphasizing that financial statements are not prepared solely for shareholders, but also for creditors, regulators, and other users who rely on timely audited information to assess firm performance, risk, and compliance (Freeman, 1984) [14]. Accordingly, timeliness is not only a reporting attribute, but also a reflection of corporate transparency and responsiveness in the public market environment.

In Indonesia, timeliness remains an important issue because listed firms are required to submit audited financial statements within deadlines established by the Financial Services Authority and the Indonesia Stock Exchange. Although compliance is generally high, delays still occur, indicating that reporting outcomes are not perfectly uniform across firms. This makes it relevant to examine whether firm-level and audit-related characteristics are associated with the probability of timely reporting. This study adopts a replication-based framework from Ismawati *et al.* (2024) [26] and examines four commonly used determinants, namely audit quality, firm size, profitability, and firm age, in manufacturing companies listed on the Indonesia Stock Exchange during 2022–2024.

Audit quality is commonly understood as the probability that an auditor will detect and report material misstatements in financial statements (DeAngelo, 1981). In Agency Theory, external auditors function as an important monitoring mechanism that helps reduce conflicts of interest between managers and shareholders. High-quality auditors are expected to improve reporting discipline because they have stronger technical competence, clearer audit procedures, and greater independence. As a result, firms audited by reputable auditors are expected to complete the audit process more efficiently and publish audited reports within the required timeframe. Prior studies provide mixed evidence, but several studies suggest that audit quality can support more timely reporting, particularly when stronger

auditor resources and monitoring capacity are present (Rahmawati, 2018; Videsia *et al.*, 2022) [35, 39]. Therefore, the first hypothesis is formulated as follows:

H1: Audit quality positively affects the timeliness of financial reporting.

Firm size reflects the scale of a company's operations and resources and is commonly proxied by total assets. Larger firms generally have more structured accounting systems, more specialized staff, and stronger internal controls, which can facilitate faster closing and audit completion. From an agency perspective, large firms also face higher monitoring demands because dispersed ownership and operational complexity increase agency costs. From a stakeholder perspective, larger firms are subject to greater scrutiny from investors, creditors, analysts, and regulators, creating stronger pressure to comply with disclosure deadlines. Previous studies often find that larger firms tend to report more promptly because of their superior administrative and financial capacity (Fauziah *et al.*, 2020; Ismawati *et al.*, 2024) [13, 26]. Based on this reasoning, the second hypothesis is proposed as follows:

H2: Firm size positively affects the timeliness of financial reporting.

Profitability reflects the firm's ability to generate earnings from the resources it controls. In this study, profitability is measured using operating return on investment, calculated as EBIT divided by total assets, in order to capture operating performance more directly. Profitable firms may have stronger incentives to report quickly because favorable performance represents good news that management may wish to communicate to the market. Timely reporting can therefore serve as a positive signal to investors and other stakeholders. At the same time, low-profit or loss-making firms may be less motivated to accelerate disclosure because poor results may trigger negative market reactions. Prior findings are not entirely consistent, but many studies suggest that profitability is associated with timelier reporting because firms with better performance tend to have stronger incentives and greater resources to complete reporting on time (Fauziah *et al.*, 2020; Videsia *et al.*, 2022) [13, 39]. Therefore, the third hypothesis is formulated as follows:

H3: Profitability positively affects the timeliness of financial reporting.

Firm age represents the length of time a company has operated or has been listed on the stock exchange. Older firms are generally expected to possess more established reporting routines, greater organizational maturity, and more experience in coordinating with auditors and regulators. From the perspective of Agency Theory, these conditions may reduce inefficiencies and information asymmetry because reporting procedures become more standardized over time. From the perspective of Stakeholder Theory, older firms also face stronger reputational pressure to maintain consistent disclosure practices and preserve stakeholder confidence. Empirical evidence suggests that older firms may be more likely to report on time because they are more familiar with regulatory requirements and have more stable reporting systems, although findings remain mixed across settings (Rahmawati, 2018; Ismawati *et al.*, 2024) [26, 35]. Based on this argument, the fourth hypothesis is proposed as follows:

H4: Firm age positively affects the timeliness of financial reporting.

Based on the above arguments, this study examines the effect of audit quality, firm size, profitability, and firm age on the timeliness of financial reporting in manufacturing companies listed on the Indonesia Stock Exchange during 2022–2024. The research framework positions timeliness as the dependent variable and the four determinants as the main explanatory variables, following the replication model of Ismawati *et al.* (2024) [26] in a different industry and observation period.

Research method

This study employs a quantitative archival research design to examine the determinants of financial reporting timeliness in manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2022–2024 period. The study uses secondary data obtained from audited annual financial statements, annual reports, and independent auditor reports published through the official IDX website and the official websites of the sample companies. Regulatory references related to reporting deadlines are also obtained from official publications of the Financial Services Authority (OJK) and the Indonesia Stock Exchange.

The population consists of all manufacturing companies listed on the IDX during the 2022–2024 observation period. The manufacturing sector is selected because it has relatively complex reporting and audit characteristics, particularly in relation to inventory valuation, cost verification, and evidence-intensive audit procedures, which make it relevant for timeliness research. The sample is determined using purposive sampling. The criteria applied are as follows: the company must be listed in the manufacturing sector during the observation period, publish audited annual financial statements consecutively for 2022–2024, provide complete and consistent data for all research variables, and not experience delisting or prolonged trading suspension during the observation period. Based on these criteria, the final sample consists of 33 companies or 99 firm-year observations.

The dependent variable in this study is financial reporting timeliness (TIME), which is measured as a binary variable. A value of 1 is assigned if the company submits its audited annual financial statements on time, and 0 otherwise. Timeliness is operationalized based on the audit report lag classification, where a firm-year observation is categorized as timely when the audit report date is within 90 days after fiscal year-end. The independent variables consist of audit quality, firm size, profitability, and firm age. Audit quality (QUAL) is measured using a dummy variable, where 1 indicates that the company is audited by a Big Four-affiliated public accounting firm and 0 indicates a non-Big Four auditor. Firm size (SIZE) is measured by the natural logarithm of total assets. Profitability (PROF) is measured using operating return on investment, calculated as EBIT divided by total assets. Firm age (AGE) is measured as the difference between the observation year and the year of the company's initial listing on the IDX.

The data are analyzed using descriptive statistics and binary logistic regression with the help of IBM SPSS version 26. Descriptive statistics are used to provide an overview of the characteristics and distribution of the research variables. Binary logistic regression is employed because the

dependent variable is dichotomous and the model is intended to estimate the probability of timely reporting based on several predictor variables. The logistic regression model used in this study can be expressed as follows:

$$\ln \frac{\text{TIME}}{1 - \text{TIME}} = \alpha + \beta_1 \text{QUAL} + \beta_2 \text{SIZE} + \beta_3 \text{PROF} + \beta_4 \text{AGE} + \beta_5 \text{AGE} + \varepsilon$$

where TIME denotes financial reporting timeliness, QUAL denotes audit quality, SIZE denotes firm size, PROF denotes profitability, and AGE denotes firm age.

Before hypothesis testing, the model is evaluated using standard logistic regression diagnostics. Model adequacy is first considered through the Events per Variable (EPV) approach to ensure that the number of observations is sufficient for binary logistic regression estimation. The goodness of fit of the model is then assessed using the Hosmer and Lemeshow test, the Omnibus Test of Model Coefficients, and the change in the value of -2 Log Likelihood. Hypothesis testing is conducted by examining the sign, significance, and odds ratio of each regression coefficient to determine whether audit quality, firm size, profitability, and firm age significantly affect the timeliness of financial reporting.

Results and discussion

Sample Selection and Research Object

The sample in this study was selected using purposive sampling to ensure that each firm-year observation met the operational requirements of the variables and remained comparable across the 2022–2024 period. The initial population consisted of 222 manufacturing companies listed on the Indonesia Stock Exchange (IDX). Because the study was specifically designed for the manufacturing sector, all 222 companies remained in the sample after the first screening stage.

The second criterion required companies to publish audited annual financial statements consecutively for 2022, 2023, and 2024. After applying this requirement, 88 companies were excluded because audited reports were unavailable for one or more years or the documents were not fully accessible across the full observation period. This reduced the number of eligible companies to 134.

The third criterion required each company to provide complete, accessible, and consistent data for all research variables, namely audit quality, firm size, profitability, firm age, and timeliness. At this stage, 93 firms were excluded because one or more variable components were unavailable or inconsistently disclosed. In particular, some firms did not provide sufficiently clear audit report dates for calculating audit report lag and classifying timeliness, while others lacked complete operating profit, total assets, or listing-year information needed to compute the explanatory variables. After this filtering process, 41 companies remained.

The final criterion excluded firms that experienced delisting or prolonged suspension during the observation period in order to preserve stability and comparability of the firm-year observations. This step removed 8 additional companies and resulted in a final sample of 33 manufacturing firms. Because each firm contributed data for three years, the total number of observations used in the empirical analysis was 99 firm-year observations.

Table 1: Sample Selection Procedure

Step	Criteria Selection	Remaining Companies	Dropped Companies	Brief Description
Initial population	All companies within the initial scope of the study	222	–	Initial population before applying purposive sampling criteria
1	Manufacturing companies listed on the IDX during 2022–2024	222	0	The initial population had already been defined as manufacturing firms
2	Published consecutive audited annual financial statements during 2022–2024	134	88	Audited reports unavailable for one or more years or inaccessible documents
3	Complete, accessible, and consistent data for all variables	41	93	One or more variable components unavailable or inconsistent
4	No delisting or prolonged suspension during the observation period	33	8	Delisting or prolonged suspension reduced comparability
Observation unit	Firm-year observations	99	–	33 companies × 3 years

The final dataset therefore provides a balanced panel of manufacturing firms that satisfy the study’s operational requirements and allows direct testing of whether audit quality, firm size, profitability, and firm age are associated with the timeliness of financial reporting.

Descriptive statistics are presented to provide an initial overview of the characteristics of the sample and to establish the empirical baseline for the logistic regression analysis. The valid number of observations is 99 for all variables, which indicates that the dataset is complete and that no observations were lost because of missing values during estimation. This is important because the binary logistic regression model is estimated using the same set of firm-year observations across all variables, thereby improving comparability and internal consistency.

Table 2: Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Audit Quality	99	0	1	0.64	0.483
Firm Size	99	14.08	34.37	24.5638	4.16623
Profitability	99	0.0013	1.1292	0.151785	0.2062599
Firm Age	99	4	93	40.19	16.302
Timeliness	99	0	1	0.93	0.258

Because timeliness is measured as a binary variable, its distribution is more meaningfully interpreted through frequencies and percentages rather than through the mean and standard deviation alone. The results show that 92 of the 99 firm-year observations, or 92.9%, are classified as on time, while only 7 observations, or 7.1%, are classified as late. This indicates that timely reporting is the dominant pattern within the sample.

This descriptive pattern has both substantive and methodological implications. Substantively, it shows that manufacturing firms listed on the IDX generally comply with the reporting deadline. Methodologically, however, the concentration of observations in the timely category means that the regression model must explain only a very small number of late cases. This limited variation in the dependent variable can reduce statistical power and make it more difficult to detect significant relationships, even if the independent variables are theoretically relevant.

The distribution of audit quality also shows adequate representation across categories. Of the 99 observations, 63 observations, or 63.6%, were audited by Big Four-affiliated auditors, while 36 observations, or 36.4%, were audited by non-Big Four auditors. This composition suggests that both categories are sufficiently represented in the sample and therefore allow meaningful comparison when evaluating

whether auditor affiliation is associated with timely reporting.

Table 3: Cross-Tabulation of Audit Quality and Timeliness

Audit quality	Late (Time = 0)	On time (Time = 1)	Total
Non-Big Four	2	34	36
Big Four	5	58	63
Total	7	92	99

The cross-tabulation shows that 94.4% of non-Big Four observations and 92.1% of Big Four observations are timely. The percentages are very similar, which already suggests that audit quality, as proxied by Big Four affiliation, may not create a strong distinction in the probability of timely reporting. Although descriptive statistics do not provide inferential evidence, they help explain why the regression later finds only weak separation between the two groups.

For the continuous independent variables, the descriptive statistics indicate sufficient variation across firm-year observations. Firm size, measured as the natural logarithm of total assets, ranges from 14.08 to 34.37, with a mean of 24.5638. This suggests substantial dispersion in organizational scale among the sampled manufacturing firms. Profitability, measured using operating return on investment, ranges from 0.0013 to 1.1292, with a mean of 0.151785, indicating meaningful variation in operating performance. Firm age ranges from 4 to 93 years, with a mean of 40.19 years, suggesting that the sample includes both relatively young and long-established listed firms. The youngest firm in the sample is PT Garudafood Putra Putri Jaya Tbk., while the oldest is Multi Bintang Indonesia Tbk. Overall, the descriptive statistics show two important patterns. First, timeliness is highly dominated by on-time observations, which makes late reporting relatively rare. Second, the independent variables show sufficient dispersion to justify the use of logistic regression for testing whether those observed firm differences are associated with the probability of timely reporting.

Logistic Regression Diagnostics

Because the dependent variable is binary, this study employs binary logistic regression using IBM SPSS version 26. Before interpreting the individual coefficients, the model must first be evaluated through standard logistic regression diagnostics, including goodness-of-fit, overall model improvement, and model summary statistics.

The Hosmer and Lemeshow test is used to evaluate whether the logistic model is well calibrated to the observed data. A non-significant result indicates that there is no meaningful

difference between the observed and predicted outcomes and therefore suggests that the model fits the data adequately.

Table 4: Hosmer and Lemeshow Test

Step	Chi-Square	df	Sig.
1	5.391	8	0.715

The test produces a Chi-square value of 5.391 with a significance value of 0.715. Because this value is greater than 0.05, the null hypothesis of good fit is not rejected. This means that the model's predicted probabilities do not differ significantly from the observed pattern of timely and late reporting. In other words, the logistic regression model is well calibrated to the data and does not show evidence of systematic misfit.

This result is important because a model can still generate coefficients and p-values even when it fits poorly. By showing acceptable calibration, the Hosmer and Lemeshow test supports the use of the model for further interpretation.

The Omnibus Test of Model Coefficients evaluates whether the full model with predictors provides a statistically significant improvement over a constant-only model.

Table 5: Omnibus Test of Model Coefficients

Step	Chi-square	df	Sig.
Step	6.328	4	0.176
Block	6.328	4	0.176
Model	6.328	4	0.176

Table 7: -2 Log Likelihood of the Full Model

Iteration	-2 Log Likelihood	Constant	Audit Quality	Firm Size	Profitability	Firm Age
1	53.735	2.064	-0.049	0.006	-1.258	-0.007
2	45.555	3.097	-0.108	0.019	-2.262	-0.018
3	44.324	3.695	-0.164	0.034	-2.800	-0.030
4	44.254	3.873	-0.184	0.040	-2.948	-0.034
5	44.254	3.886	-0.185	0.040	-2.959	-0.034
6	44.254	3.886	-0.185	0.040	-2.959	-0.034

The null model produces a -2LL of 50.582, whereas the full model produces a lower -2LL of 44.254. This decline indicates that the inclusion of the four predictors improves model fit in a directional sense. The full model therefore performs better than the intercept-only model in reproducing the observed data pattern, although the magnitude of improvement is not strong enough to be statistically significant in the omnibus test.

Table 8: Logistic Regression Model Summary

Step	-2 Log Likelihood	Cox & Snell R Square	Nagelkerke R Square
1	44.254	0.062	0.155

The model summary shows a Cox and Snell R Square of 0.062 and a Nagelkerke R Square of 0.155. These pseudo-R-squared values indicate that the model explains a limited proportion of the variation in the log-odds of timely reporting. In logistic regression, especially when the outcome is binary and highly concentrated in one category, low to moderate pseudo-R-squared values are common. Therefore, these results should not be interpreted as evidence of model failure, but rather as an indication that the selected classical determinants capture only a modest share of the variation in the timeliness outcome.

The omnibus test yields a Chi-square value of 6.328 with a significance value of 0.176. Because this p-value exceeds 0.05, the model as a whole does not significantly improve prediction compared with the intercept-only model at the 5% level. This suggests that the set of predictors, namely audit quality, firm size, profitability, and firm age, does not provide strong additional explanatory power for differentiating timely from late reporting in this sample.

This result does not mean that the model is invalid. Rather, it suggests that the discriminatory power of the selected predictors is limited, which is plausible given the strong concentration of observations in the timely category. In a context where most firms already comply with the reporting deadline, the amount of variation available to be explained is relatively small.

Overall Model Fit

Model fit can also be assessed by comparing the -2 Log Likelihood (-2LL) of the null model and the full model. A lower -2LL indicates better fit.

Table 6: -2 Log Likelihood of the Null Model

Iteration	-2 Log Likelihood	Constant
1	56.741	1.717
2	50.940	2.349
3	50.585	2.556
4	50.582	2.576
5	50.582	2.576

Taken together, the diagnostics suggest that the model is acceptable in terms of calibration but limited in overall explanatory strength. This is consistent with the nature of the data: most observations are already on time, leaving only a small number of late cases for the model to explain.

Logistic Regression Coefficients and Hypothesis Testing

The regression coefficient test is used to evaluate whether each predictor significantly affects financial reporting timeliness. A variable is considered statistically significant if its p-value is below 0.05.

Table 9: Logistic Regression Coefficients

Variable	B	S.E.	Wald	df	Sig.	Exp(B)
Audit Quality	-0.185	0.921	0.040	1	0.841	0.831
Firm Size	0.040	0.106	0.143	1	0.705	1.041
Profitability	-2.959	1.620	3.334	1	0.068	0.052
Firm Age	-0.034	0.026	1.729	1	0.189	0.967
Constant	3.886	2.857	1.850	1	0.174	48.700

The estimated logistic regression equation is as follows:

$$\ln \frac{\text{Time}}{1 - \text{TIME}} = 3.886 - 2.959 \text{ PROF} + 0.4 \text{ SIZE} - 0.034 \text{ AGE} - 0.185 \text{ QUAL}$$

The coefficient signs indicate the direction of association in log-odds terms, while Exp(B) represents the odds ratio for a one-unit increase in the predictor, holding other variables constant.

Table 10: Summary of Hypothesis Testing

Hypothesis	Prediction	p-value	Result
H1	Audit quality positively affects timeliness	0.841	Rejected
H2	Firm size positively affects timeliness	0.705	Rejected
H3	Profitability positively affects timeliness	0.068	Rejected
H4	Firm age positively affects timeliness	0.189	Rejected

The results indicate that none of the four independent variables significantly affects the timeliness of financial reporting at the 5% significance level.

The first hypothesis proposed that audit quality positively affects the timeliness of financial reporting. The regression results show that audit quality, proxied by Big Four affiliation, is not statistically significant, with a p-value of 0.841. Therefore, the first hypothesis is rejected.

This result indicates that in the manufacturing sample observed during 2022–2024, firms audited by Big Four-affiliated auditors are not significantly more likely to report on time than firms audited by non-Big Four auditors. This pattern is also visible in the descriptive cross-tabulation, where 94.4% of non-Big Four observations and 92.1% of Big Four observations are classified as timely. The percentages are highly similar, which suggests that auditor affiliation does not create strong separation in timeliness outcomes.

From the perspective of Agency Theory, auditors are expected to function as external monitoring mechanisms that reduce information asymmetry and constrain managerial discretion. Under that logic, firms with higher-quality auditors should be better positioned to complete the audit process efficiently and comply with reporting deadlines. However, the present findings suggest that Big Four affiliation alone does not translate into a meaningful statistical difference in the probability of timely reporting. This may indicate that in manufacturing firms, timeliness is influenced more by client-side readiness, internal closing processes, and the complexity of year-end verification than by auditor brand classification alone.

This finding differs from Ismawati *et al.* (2024) [26], who report a significant role for audit quality in the FMCG sector. The divergence suggests that the explanatory power of audit quality may depend on industry context and on how much variation exists in the timeliness outcome. In the present sample, where timely reporting already dominates, the Big Four versus non-Big Four distinction does not provide sufficient discriminatory power to explain the few remaining late cases.

The second hypothesis proposed that firm size positively affects the timeliness of financial reporting. The regression results show that firm size is not statistically significant, with a p-value of 0.705. Therefore, the second hypothesis is rejected.

This result suggests that larger firms are not significantly more likely to report on time than smaller firms in the sampled manufacturing sector. Under Agency Theory, larger firms are usually expected to have stronger internal controls, more structured reporting functions, and greater monitoring demands, all of which should support timelier reporting. From a Stakeholder Theory perspective, larger firms are also subject to broader scrutiny from investors,

creditors, analysts, and regulators, which should increase pressure to comply with deadlines.

However, the findings indicate that firm size, measured as the natural logarithm of total assets, does not provide statistically supported explanatory power for timely reporting in this setting. One plausible reason is that firm size may capture not only greater reporting capacity but also greater operational complexity. In manufacturing firms, larger asset bases may reflect broader production structures, more units to consolidate, and more extensive verification requirements. As a result, the resource advantages of larger firms may be offset by the reporting burden associated with larger-scale operations.

This result differs from Ismawati *et al.* (2024) [26] and other studies that find a positive size effect. Nevertheless, it is consistent with the view that firm size does not always function as a stable determinant of timeliness across sectors. In a sample where compliance is already high and most firms report on time, size differences may simply not generate enough variation at the reporting deadline boundary to be detected statistically.

The third hypothesis proposed that profitability positively affects the timeliness of financial reporting. The regression results show that profitability is not statistically significant at the 5% level, with a p-value of 0.068. Therefore, the third hypothesis is rejected.

Among the four predictors, profitability is the closest to significance, but it still does not meet the conventional threshold. The estimated coefficient is negative, which suggests that higher profitability is associated with lower odds of timely reporting in this sample. However, because the coefficient is not statistically significant, this direction should not be interpreted as confirmed evidence of a negative relationship. The correct interpretation is that profitability does not show statistically supported evidence of affecting timeliness at the 5% level.

The result is interesting because prior literature often assumes that more profitable firms have stronger incentives to disclose results quickly in order to communicate good news to investors and other stakeholders. That expectation underlies the positive hypothesis in this study. However, profitability may also interact with reporting timeliness in more complex ways. Higher profitability can attract greater scrutiny from auditors and principals, especially when strong earnings require more careful verification of revenue recognition, accrual estimates, and performance-related accounts. In that sense, profitability does not necessarily function as a straightforward accelerator of reporting speed. Compared with Ismawati *et al.* (2024) [26], this result again shows divergence. Profitability appears significant in their FMCG sample, whereas it is not significant in the present manufacturing sample. This suggests that the profitability–timeliness relationship may be context-dependent and may vary depending on industrial conditions, audit demands, and the degree of variation in reporting compliance.

The fourth hypothesis proposed that firm age positively affects the timeliness of financial reporting. The regression results show that firm age is not statistically significant, with a p-value of 0.189. Therefore, the fourth hypothesis is rejected.

This result indicates that firms with longer listing histories are not significantly more likely to report on time than younger listed firms. In theoretical terms, older firms are often assumed to possess more established reporting

routines, stronger internal coordination, and greater familiarity with disclosure requirements. Under Agency Theory, these characteristics should reduce inefficiencies and support timely disclosure. Under Stakeholder Theory, older firms may also face greater reputational pressure to preserve disclosure discipline and stakeholder confidence. However, the evidence in this study does not show that listing age provides a strong enough distinction to explain which firms report on time and which do not. One explanation is that once firms are listed, they all face the same formal disclosure requirements and deadline structure. This common regulatory environment may reduce the practical importance of listing age as a differentiating factor. In other words, both young and old issuers may converge on similar reporting behavior because they operate under the same institutional expectations.

This finding differs from Ismawati *et al.* (2024) [26], who report firm age as significant. The difference supports the broader interpretation of this study that classical predictors may not operate uniformly across sectors. In a context where the vast majority of observations are already timely, the marginal explanatory power of firm age becomes limited.

Overall, the results show that none of the four tested variables, namely audit quality, firm size, profitability, and firm age, significantly affects the timeliness of financial reporting in manufacturing companies listed on the Indonesia Stock Exchange during 2022–2024. This does not necessarily mean that the variables are irrelevant in all contexts. Rather, it indicates that within this specific setting and under the binary compliance-based measurement of timeliness, the selected proxies do not provide strong statistical separation between the few late observations and the majority of on-time observations.

A central feature of the dataset helps explain this pattern. Timeliness is highly concentrated in the compliant category, with 92 out of 99 observations reporting on time. When late cases are rare, logistic regression has limited variation to explain, and even theoretically relevant variables may fail to reach significance unless their effects are strong and highly consistent. This characteristic should therefore be considered an important part of interpreting the results.

The findings also have replication value. This study adopts the framework of Ismawati *et al.* (2024) [26] but applies it to a different sector and observation period. The fact that the variables do not replicate with the same significance in the manufacturing sector suggests that the explanatory strength of classical determinants of timeliness is context-dependent. In particular, manufacturing firms may face reporting conditions such as inventory-intensive accounting, operational coordination demands, and closing standardization that weaken the differentiating role of audit quality, firm size, profitability, and firm age in determining whether a firm crosses the reporting deadline threshold.

In that sense, the results contribute by showing that timeliness in the Indonesian manufacturing sector appears to be shaped less by broad firm-level proxies and more by operational or procedural factors that are not directly captured in the current model. This interpretation remains consistent with the acceptable calibration of the model, while also acknowledging its limited overall explanatory strength.

Conclusion

This study examines the effect of audit quality, firm size, profitability, and firm age on the timeliness of financial

reporting in manufacturing companies listed on the Indonesia Stock Exchange during the 2022–2024 period. Using binary logistic regression, the study finds that none of the four independent variables has a statistically significant effect on the probability of timely financial reporting at the 5% significance level. Thus, all four hypotheses are rejected.

These findings indicate that, within the observed manufacturing sample, audit quality proxied by Big Four affiliation, firm size measured by the natural logarithm of total assets, profitability measured by operating return on investment, and firm age measured by years since listing do not significantly differentiate timely from late reporting. In other words, the classic determinants commonly used in prior timeliness research do not appear to provide strong explanatory power in this sector-period setting. This result suggests that financial reporting timeliness in manufacturing firms may be influenced more strongly by operational and technical factors not directly captured in the present model, such as reporting complexity, inventory verification intensity, production cycle characteristics, audit fieldwork demands, and the readiness of accounting and information systems.

The findings also provide an important theoretical implication. Although Agency Theory and Stakeholder Theory remain relevant as conceptual foundations for understanding financial reporting timeliness, this study shows that the commonly used proxies derived from those perspectives do not always perform consistently across sectors and periods. In this context, the explanatory role of audit quality, firm size, profitability, and firm age appears to be limited when timeliness is measured as a binary compliance-based outcome and when most observations are already concentrated in the timely category. Therefore, the study contributes to the literature by showing that the determinants of timeliness are likely to be context-dependent and may weaken under highly standardized reporting environments.

From a practical perspective, the results suggest that users of financial statements, investors, and regulators should be cautious in relying on broad firm characteristics or auditor affiliation alone to assess the likelihood of reporting delays. The presence of a Big Four-affiliated auditor, a large asset base, strong profitability, or long listing history should not automatically be interpreted as an indicator of faster reporting in the manufacturing sector. Instead, greater attention may need to be given to more direct reporting-related indicators, such as audit report dates, prior reporting patterns, and issuer-specific reporting discipline.

This study has several limitations. First, the number of observations is relatively limited, which may reduce statistical power and make it more difficult to detect significant relationships. Second, timeliness is measured as a binary variable, which compresses variation in reporting delay into an on-time versus late classification and may reduce the sensitivity of the model. Third, the study focuses only on four explanatory variables and does not directly include operational or procedural factors that may be important in the manufacturing reporting environment.

Accordingly, future studies are recommended to use a continuous measure of timeliness, such as audit report lag, in order to capture variation in reporting delay more precisely. Further research may also expand the model by incorporating operational variables such as production complexity, inventory intensity, number of facilities, and

accounting system readiness. In addition, future studies may consider larger samples, longer observation periods, broader sectoral comparisons, and alternative estimation techniques such as probit regression, panel logistic regression, or duration-based models to strengthen the robustness and generalizability of the findings.

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