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The Effect of Audit Quality and Internal Audit Structures on a Firm's Performance: Empirical Study of Companies in the Jakarta Islamic Index

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Abstract. *Audit plays a crucial role in enhancing corporate governance transparency. In the context of emerging markets, especially Indonesia, where specific Islamic finance requirements apply, this control mechanism is of particular importance. The quality of audit services and the reliability of internal control structures have a direct impact not only on financial reporting but also on the overall performance of the firm. This study aims to empirically analyse and quantify how these two key elements affect the performance of companies included in the Jakarta Islamic Index, providing valuable information for investors, regulators and business leaders seeking sustainable development within the framework of Sharia principles. Audit quality measurement uses audit quality metric scores (AQMS). This research employs a causal comparative design with a quantitative approach. The study sample comprises 24 companies, and the data span the period from 2017 to 2024. Data were analysed using the data panel regression, as determined by the Lagrange Multiplier test. The results reveal that audit quality has a negative and significant effect on a firm's performance. In contrast, internal audit structures, measured by the frequency of internal audit meetings, have a negative but insignificant effect. However, audit quality and internal audit structures explain only 7.88% of the variance in a firm's performance, with the remaining 92.12% attributed to other factors not involved in this study. This situation arises for several reasons. The largest part of the firm's performance indicators (the same 92.12%) often depends on macroeconomic and market conditions that are not the subject of the audit (industry dynamics, economic cycle, competitive environment). The role of audit is to ensure transparency, reduce risks and comply with rules. It is not a driving force for innovation, sales or operational efficiency. The impact of an audit is often indirect, rather than direct. Thus, the result of 7.88% does not mean that the audit is unimportant. It means that fundamental economic and management decisions (such as strategy, marketing, innovation, and operations) have a significantly greater impact on the firm's performance than control and reporting mechanisms. Companies must place a greater emphasis on the quality of internal audits and integrated governance strategies to ensure that audits make a meaningful contribution to long-term performance.*

Keywords: *audit quality, Audit Quality Metric Score, internal audit structures, frequency of internal audit meetings, firm's performance, Tobin's Q.*

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Вплив якості аудиту та структур внутрішнього аудиту на ефективність діяльності фірми: Емпіричне дослідження компаній, що входять до Джакартського ісламського індексу

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Анотація. *Аудит відіграє вирішальну роль у підвищенні прозорості та ефективності корпоративного управління. У контексті ринків, що розвиваються, особливо таких як Індонезія, де діють специфічні вимоги ісламського фінансування, цей механізм контролю набуває особливого значення. Якість аудиторських послуг та надійність структур внутрішнього аудиту впливають не лише на фінансову звітність, але й на загальні показники діяльності фірми. Це дослідження має на меті емпірично проаналізувати та кількісно оцінити, як саме ці два ключові елементи впливають на ефективність компаній, включених до Джакартського ісламського індексу, надаючи цінну інформацію для інвесторів, регуляторів та керівників підприємств, які прагнуть до сталого розвитку в рамках принципів шаріату. Вимірювання якості аудиту здійснюється за допомогою показника якості аудиту (AQMS). Це дослідження є причинно-наслідковим, з використання кількісного підходу. Вибірка дослідження складається з 24 компаній, а дані охоплюють період з 2017 по 2024 рік. Аналіз даних проведено за допомогою панельної регресії даних. Результати показують, що якість аудиту має негативний та значний вплив на ефективність фірми, тоді як структури внутрішнього аудиту, виміряні частотою зустрічей служби внутрішнього аудиту, мають негативний, але незначний вплив. Однак, якість аудиту та структури внутрішнього аудиту пояснюють лише 7,88% відхилення в результатах діяльності фірми, а решта 92,12% пояснюються іншими факторами, які не враховані в цьому дослідженні. Така ситуація виникає з кількох причин. Найбільша частина показників, що впливають на ефективність діяльності фірми (ті самі 92,12%), часто залежить від макроекономічних та ринкових умов, які не є предметом аудиту (динаміка галузі, економічний цикл, конкурентне середовище). Роль аудиту полягає в забезпеченні прозорості, зниженні ризиків та дотриманні правил. Він не є рушійною силою інновацій, продажів чи операційної ефективності. Вплив аудиту часто є непрямим. Таким чином, результат 7,88% не означає, що аудит неважливий. Це означає, що фундаментальні економічні та управлінські рішення (такі як стратегія, маркетинг, інновації та операції) мають значно більший вплив на показники діяльності фірми, ніж механізми контролю та звітності. Компанії повинні приділяти більше уваги якості внутрішнього аудиту та інтегрованим стратегіям управління, щоб забезпечити вагомий внесок аудиту в довгострокову ефективність.*

Ключові слова: *якість аудиту, показник якості аудиту, структури внутрішнього аудиту, частота зустрічей служби внутрішнього аудиту, ефективність фірми, коефіцієнт Тобіна.*

INTRODUCTION

Auditing plays a vital role in strengthening the governance and sustainability of an organisation. Bamford et al. (2024) emphasise that sustainability is an important element of corporate strategy, ensuring long-term competitive advantage through social responsibility and resource efficiency. While management, in a general context, aims to integrate financial and non-financial objectives. In the operational context of external audits, sustainability means the consistency and continuity of audit quality over time. The role of the external auditor in the context of capital markets, allowing assurance on the financial reporting quality of public corporations, has been arguably criticised over the last several decades (Herusetya et al., 2013).

In 1999, as quoted from "The Internal Auditors" by Sawyer et al. (2005), internal audit was defined as an objective, systematic study conducted by internal auditors on different controls of operations to determine whether organisational goals are realised effectively. The internal auditing environment indicates when auditors are performing their functions according to the conditions of service, laws, and policies, as well as other organisational rules and regulations that integrate the auditing work (Eze, 2016). This competency is the primary factor that distinguishes professional auditors from general practitioners, as it determines the auditor's ability to assess risks, identify system flaws, and provide insightful recommendations for improvement (IIA Indonesia, 2020). In a limited context, the internal audit department is crucial to a corporation because it is considered the primary component in implementing accounting systems, which aids in assessing the department's performance (Al-Matari et al., 2014). The firm's internal audit structure is a fundamental element that connects the functions, environment, and competencies of internal auditors. For a public company, the function of internal audit has a strategic position in the corporate governance framework.

According to the Financial Services Authority (abbreviated as "OJK" in Indonesia), No 56/POJK.04/2015 about the Establishment and

Guidelines for the Preparation of Internal Audit Unit Charters, the internal audit structure must meet the following criteria: (1) The Internal Audit Unit (IAU) must be directly under the President Director, but also have a direct link to the Board of Commissioners and the Audit Committee. (2) The Board of Commissioners approves the appointment and dismissal of the Chief Audit Executive (CAE), who is head of the IAU, by the President Director. (3) The IAU must report audit findings to the President Director and report a summary of audit results to the Audit Committee periodically (OJK RI, 2015).

Internal audit adds value to corporations by acting as a deterrent and offering management consultation recommendations based on the assurance and consultation services provided by the internal audit function (Qu et al., 2020).

Therefore, a scientific approach to identifying problems, such as audit quality measurements, which are difficult to define with various types of measurements, requires empirical studies by adding components originating from both internal and external factors of the enterprise, which are then verified on a research model proposed (Husain & Syniuta, 2020). Research by Dzikrullah et al. (2020) indicates that the size of the internal audit team, as a monitoring mechanism, has a positive impact on the fees of PAF, auditor reputation, and audit quality. Consequently, a strong internal audit structure strengthens governance mechanisms and improves audit quality. Externally, the reputation and experience of an auditor's office are important indicators of audit quality. Auditors with high reputations, such as those in the Big 4 category, are perceived as more reliable and trustworthy, which impacts investor confidence and firm value (Ofoegbu & Ndubuisi, 2024). Almaqoushi and Powell (2021) and Daromes and Ng (2022) support this, showing that the use of Big 4 auditors and measuring audit quality using Audit Quality-Metric Scores (AQMS) are positively associated with quality of financial reporting and firm value based on Tobin's Q. However, this influence is not universal. Chinemerem et al. (2025) found that audit firm size has a positive impact on profitability, while auditor tenure can have a negative impact on it. El-Dyasty and Elamer (2021) also emphasised that while affiliation with a foreign audit firm can improve perceived audit quality, Big 4 auditors do not necessarily guarantee higher quality compared to non-Big 4 auditors. In the context of internal auditing, Hazea et al. (2020) and Ghaleb et al. (2020) demonstrated that internal audit team competence has a positive impact on financial performance and plays a role in suppressing real earnings management practices. Consequently, a strong internal audit function enhances the accuracy of financial reporting, strengthens the quality of external audits, and ultimately enhances firm value.

When companies incorporate sustainability as part of their management strategy, sustainability reporting and ESG performance become a critical part of the information that must be audited and reported; the external audit function becomes relevant and must evolve to assess non-financial aspects. Furthermore, the quality of the external audit supports management in implementing sustainability, as good audits ensure that sustainability disclosures are valid, reliable, and independent of manipulation, which in turn supports the firm's reputation and long-term performance. Governance is the meeting point for general management in supporting sustainability. In contrast, from the external audit perspective, governance (through the board of commissioners, auditor independence, and audit committee) supports audit quality and sustainability reporting. A gap identified is the paucity of research that examines explicitly internal audit structures in the context of publicly traded company reporting, along with the role of audit quality in general.

LITERATURE REVIEW

Audit Quality

Watkins et al. (2004) state that a large number of scholars concur that the application of quality audits must be predicated on the auditor's competence and independence, serving as a tool for assessing strength. Perceptions of audit quality can differ depending on the perspectives of the parties involved regarding how audit quality is dimensioned.

DeAngelo (1981) measured audit quality based on the PAF categorisation based on the Big 8; he determined audit quality based on audit fees using two main factors: total assets of the firm for large corporations, and total receivables for small companies (Chung & Lindsay, 1988). According to Behn et al. (2008), audit quality is crucial for the quality of financial reporting. The analytical approach of the audit offices, categorised as Big-5, leads to higher performance compared to those outside this category. Audit quality consists of a framework that includes audit professionals, processes and results (PCAOB, 2015).

The category of public accounting firm (PAF) can reflect the quality of services provided. Auditors are considered qualified when they meet Auditing Standards, as outlined in the Public Accountant Professional Standards. Larger companies will establish strong internal controls. Financial reports presented by management will be more complex, requiring highly qualified auditors, which can ultimately increase firm value and share price (Chalmers et al., 2019). The audit quality metric score (AQMS) is another method for quantifying audit quality measurement. AQMS is the sum of the scores of the five audit quality proxies that include the dimension of auditor competency (size of PAF, industry specialization, audit tenure) and the dimension of independence (client importance, going concern opinion and accuracy of the going concern opinion in reporting) (Herusetya et al., 2013). On the other hand, enterprises should focus more on motivating wider audit coverage, especially among companies with low reputations, to ensure the reporting of major audit issues and thereby improve audit quality (Zeng et al., 2021). Research findings over the last five years on audit quality indicators indicate several relationships between these two variables (Table 1).

Table 1. Matrix Variable Gap for Audit Quality and Firm's Performance

Researchers (Year)	Subject Research	Used Variable (*Proxy*)		Findings
		Audit Quality	Firm's Performance	
Ivungu et al. (2019)	Conceptual clarification of the audit quality and firm performance	Audit Firm by: • Size • Reputation • Opinion • Fees • Tenure • Independence	Firm Performance: *in terms of financial and market performance*	The impact of audit quality on firm performance can be either positive or negative. Some studies report a positive correlation between specific audit quality proxies and firm performance metrics, while others find a negative association between these variables. Additionally, most of the research reviewed hails from outside the Nigerian business landscape, and among those conducted in Nigeria, they rarely evaluate the effect of audit quality on performance in general, instead focusing on financial performance or market performance.
Monametsi and Agasha (2020)	Domestic financial and non-financial companies from the Botswana and Uganda Stock Exchange period of 2014-2018	• Auditor Size: *Big-4* • Audit Fees: *LNFE*	Firm Performance: *Return on Assets, Tobin's Q*	The results of the study indicate that audit quality is a negative but non-significant predictor of a firm's financial performance.
Ammar Zahid et al. (2022)	620 firms headquartered in Western Europe, including Austria, Belgium, France, Germany, Luxembourg, Monaco, the Netherlands, and Switzerland, for the period 2010-2019	• *Big-4 Auditor* • *Audit Fees*	Firm Performance Nexus: *Return on Assets, Rev (ln), Return on Equity, Price-to-Book*	Audit quality is a strategic catalyst that strengthens the link between sustainability responsibility (ESG) and corporate value. High audit quality not only enhances the credibility of financial reports but also enhances the effectiveness of sustainability performance in creating economic value.
Ahmeti et al. (2022)	22 insurance companies in Kosovo with the 6-month financial statements for the period of 2015-2021	• *IA Standard* • *Professional IA Competence* • *IA Independence* • *IA Efficiency*	Financial Performance: *Return on Assets*	The study's findings indicate that professional competence significantly enhances financial performance, whereas the effectiveness of internal audits has a negative impact on the financial performance of insurance companies.
Chinemerem et al. (2025)	9 consumer good firms listed on the Nigerian Exchange Group from 2015 to 2024	• Audit Firm Size: *Big-4* • Audit Tenure • Audit Committee Size	Financial Performance: *Net Profit Margin*	The size of the audit firm and auditor tenure have a significant positive and negative effect, respectively, on firms' profitability. In contrast, audit committee size showed a negative but insignificant effect on firms' profitability.

Source: Authors' analysis (2025).

Prior research has yielded mixed results regarding the linkage between audit quality and a firm's performance, financial performance, or value. Most studies, such as Monametsi and Agasha (2020) and Chinemerem et al. (2025), still employ traditional measures, including Big-4, audit tenure, and audit fees, without incorporating composite measures like the Audit Quality Metrics Score (AQMS). Meanwhile, studies that have used Tobin's Q as a proxy for a firm's value, such as Ammar Zahid et al. (2022), have not directly integrated audit quality as a key variable influencing a firm's market value. Furthermore, studies such as Ahmeti et al. (2022) and Ivungu et al. (2019) still focus on accounting-based financial performance (ROA, ROE) and have not considered the market dimension. Thus, there is a research gap in the form of the need to examine the effect of audit quality as measured by AQMS towards a firm's performance as measured by Tobin's Q, especially in the context of developing countries such as Indonesia, to gain a comprehensive understanding of the role of audit quality in creating a firm's performance.

Internal Audit Structures

Although the definition of internal audit structure cannot be defined explicitly in International Standard Auditing (ISA) 610 (Revised), this concept is reflected in several standards. In particular, according to 12 CFR 30, Appendix A, the Comptroller's Handbook: Internal and External Audits, a system of internal controls is akin to a set of rules and tools within a corporation that help keep everything running smoothly and safely. These include special checks and computer systems. The way these rules and tools are created and utilised depends on the company's size and complexity, as well as the nature of its work. Different people are responsible for creating these rules, ensuring they work effectively, and performing the daily tasks necessary to keep everything running smoothly (OCC, 2019). This structure encompasses the position of the internal audit function (IAF) within the corporate hierarchy, its reporting lines to the board or audit committee, independence from operational management, auditor competency, and available resources (IIA Indonesia, 2020).

Internal audit quality refers to the internal audit function's capability to perform its duties effectively through qualified staff, an adequate organisational structure, and independent reporting that enhances the bank's financial performance (Hazaea et al., 2020). Although it does not use this term directly, as structure defines the internal audit function through structural and institutional dimensions, which are substantially identical to the concept of "Internal Audit Structure", it examines the IAF as part of the corporate governance mechanism (Ghaleb et al., 2020). Referring to Article 7, No. 56/POJK.04/2015, the internal audit unit is directly under the President Director, with direct access to the Board of Commissioners through the Audit Committee (OJK RI, 2015). Then, the firm's internal audit is required to collaborate closely with the audit committee and external auditors to establish good communication and coordination, thereby avoiding audit duplication and strengthening the quality of supervision. Research from the last five years has mapped several relationships between these two variables (Table 2).

Table 2. Matrix Variable Gap for Internal Audit Components and the Firm's Performance

Researchers (Year)	Subject Research	Used Variable (*Proxy*)		Findings
		Type of Internal Audit Components	Firm's Performance	
1	2	3	4	5
Al-Matari et al. (2014)	Conceptual Theoretical Model	• Qualification of CAE • Size of IA • Experience of IA • Qualification of IA	Firm Performance: *Return on Assets*	The characteristics and effectiveness of internal audit (including professionalism, experience, and department size) are important determinants in improving organizational performance, as well as contributing to stronger corporate governance and more reliable financial reporting.
Ghaleb et al. (2020)	1,056 observations from Malaysia, period of 2013-2016	• Investment in the internal audit function (IAF) • IAF sourcing	Real Earnings Management: *abnormal discretionary expenses, abnormal cash flow from operations and abnormal production costs*	Research evidence shows that robust internal investment and effective governance of the internal audit function (IIAF and in-house IAF) substantially curb real earnings management practices and enhance financial reporting quality in emerging markets, including Malaysia.

Table 2 (continued)

1	2	3	4	5
Hazea et al. (2020)	42 auditors working in Yemeni commercial banks in 2019	• Independence and adherence to international standards • Followed the governance principles • Size of IA and its meeting frequency • Internal audit effectiveness	Financial Performance: *Return on Assets*	Findings indicate that adherence to internal audit standards, independence of internal auditors, and strong quality governance have a substantial influence on banks' financial performance, whereas the size of internal audit committees and their meeting frequency exhibit only an insignificant positive effect on banks' performance.
Almaqoushi and Powell (2021)	Principal Component Analysis (PCA) of 82 audit committee (AC) characteristic variables using the US dataset for the period 2002-2012 (AC Quality Indices)	Financial Reporting Quality: • *Audit Fees* • *Audit opinion* • *Auditor quality changes* Internal Control Quality: • *Accounting issue* • *Financial restatement*	Firm Performance: *Tobin's Q*	This study demonstrates that high-quality audit committees, in terms of independence, expertise, and composition, are positively related to the quality of financial reporting, internal control effectiveness, and increased firm value. Conversely, weak audit committees increase the risk of earnings management, auditor dependence, and internal control problems.
Odunko (2022)	Secondary data that were sourced from the Nigeria Stock Exchange (NSE) Fact Book and Daily Official List	Internal Control Quality: • *Cash control* • *Risk assessment* • *Inventory control*	Firm Performance: *Return on Assets*	The study concludes that internal control exerts a positive influence on firm performance in Nigeria. Consistent with the objectives and findings, it is recommended that cash control likewise has a positive and significant impact on firm performance in Nigeria.

Source: Authors' analysis (2025).

Prior research has yielded mixed results regarding the linkage between internal audit components, real earnings management, and firm or financial performance. Most studies, such as Al-Matari et al. (2014), emphasise that the structure of the internal audit function, including its size, resources, and the intensity of communication and regular meetings, contributes to the effectiveness of supervision and the improvement of company performance. The more frequently internal auditors hold meetings, the stronger the independent oversight of managerial activities, thereby minimising conflicts of interest and increasing reporting accountability (Hazaea et al., 2020). In terms of resources, regular meetings help optimise audit personnel and technology and accelerate follow-up on audit recommendations (Dzikrullah et al., 2020).

Frequent meetings encourage compliance with audit professional standards and enable continuous risk assessment, which in turn reduces earnings management practices and improves financial reporting quality (Ghaleb et al., 2020). Frequent meetings also strengthen the coordinating relationship with the audit committee, the quality of which reveals a positive impact on reporting and the firm's value (Almaqoushi & Powell, 2021). Overall, this mechanism enhances governance effectiveness and has a positive impact on company performance, both financially and in terms of market value (Odunko, 2022). Thus, there is a research gap in the form of a need to test the influence of internal audit activities (meeting frequency) as part of the internal audit structure on increasing a firm's performance by enhancing the effectiveness of supervision, risk control, and transparency of financial reports.

Firm's Performance

Wernerfelt and Montgomery (1988) define a firm's performance as the firm's capability to create market value that exceeds the replacement cost of its assets, which is represented by the Tobin's Q ratio. A key quantifying of a firm's performance because it combines market and economic perspectives, reflecting how a company's strategy, asset structure, and focus translate into value recognised by capital markets. Tobin's Q is also a comprehensive indicator of company performance, seeing that it combines market-based performance and accounting-based performance (Lang & Stulz, 1994). According to (Singh et al., 2018), the formula for calculating Tobin's Q coefficient is as follows:

$$Tobin's\ Q = \frac{Market\ Value\ of\ Equity + Book\ Value\ of\ Debts}{Book\ Value\ of\ Total\ Assets}$$

Tobin's Q not only reflects historical financial performance (based on accounting), but also market expectations regarding corporate governance effectiveness, strategy, and oversight quality, including audit mechanisms. The higher the Tobin's Q score, the more effective internal and external oversight (including audits) is in increasing market confidence and the firm's value. Conversely, a low Tobin's Q score may indicate operational inefficiencies, weak internal control systems, or poor audit quality, which could impact investor confidence. Additionally, Tobin's Q employed this alternative ratio measurement to calculate the proxy. The financial market's return on investment, as estimated by current data, makes this ratio a highly valuable concept. The MV-Equity and total debt compared to the total assets is how Tobin's Q proxy is computed (Ado et al., 2020).

Proposed Research Model

Figure 1 presents the model of this study.

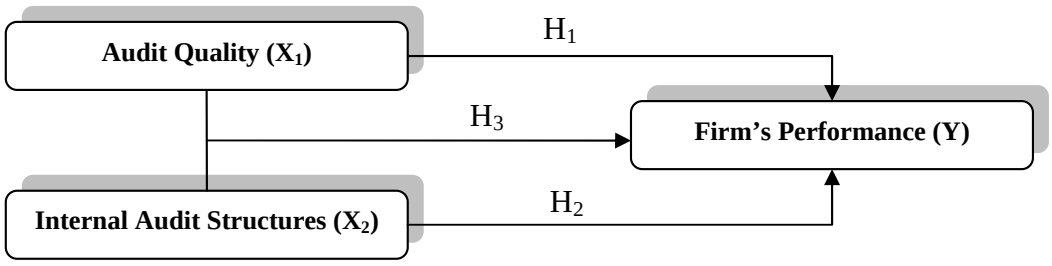

Figure 1. Research Model

Source: Proposed by the authors (2025).

This study is built on the following alternative research hypotheses:

H_1: There is an influence of audit quality on the firms' performance registered at Jakarta Islamic Index (JII).

H_2: There is an influence of internal audit structures on the firms' performance registered at Jakarta Islamic Index (JII).

H_3: There is a simultaneous influence of audit quality and internal audit structures on the performance of firms registered at Jakarta Islamic Index (JII).

Thus, this study aims to investigate the effect of audit quality and internal audit structures on the performance of firms listed on the Jakarta Islamic Index (JII), using Tobin's Q as a proxy.

RESEARCH METHODOLOGY

The research method is an ex ante assessment. Anthony G. Picciano (2004) defines it as a type of causal comparison research, a method for discovering cause-and-effect relationships between independent and dependent variables. The research population comprises 30 firms registered at the Jakarta Islamic Index (JII) from 2017 to 2024. To collect data, researchers conducted an observation of the annual and financial reporting. The purposive sampling criterion is as follows:

(i) to select firms listed on the Jakarta Islamic Index that have consistently reported in their annual and financial reports from 2017 to 2024, and

(ii) to include firms with complete data reporting (supporting calculation of the Audit Quality Metrics Score or AQMS and the Internal Audit Section of Corporate Governance in the Annual Report).

Data Collection

Data collection techniques involve conducting a literature review and browsing articles from various sources and publishers. Study documentation methods are based on secondary data gathered from official sources: annual reports, www.idx.co.id, and individual corporate web pages. Based on these criteria, a sample of 24 observed firms was selected. The following exposition calculates the total measurement of variables using the ratio scale, with a description of the operationalization of the variables (Table 3).

Table 3. Operationalization of Research Variables

Variable	Dimension	Symbol Abb.	Sign (+/–)	Variable Description	
				Sub-Indicator	Reference
Audit Quality	*Audit Quality Metric Score*	AQMS	+	The total scores of the five audit quality proxies for the public accounting firm's client ị in year t (Big 4 + SPCL + TENURE + CI + RQA), weighted by the highest AQMS score, which is 5.	(Herusetya et al., 2013)
Internal Audit Structures	*Frequency of Internal Auditor Meetings*	FreqIA	+	The frequency of meetings in a year	(Hazaea et al., 2020)
Firm's Performance	Tobin's Q	TQ	+	$\frac{MVE + BV\ of\ Debts}{BV\ of\ Total\ Assets}$ MVE is the market value of equity BV is book value	(Singh et al., 2018)

Source: Developed by the authors (2025).

Analysis Methods

This study employs the following analysis methods: descriptive statistics, panel data analysis, and hypothesis-testing model verification. The regression equation has the following form:

$$TQ: \alpha + \beta_1 SPCL + \beta_2 FreqIA + e \ldots [i]$$

The coefficients of independent variables produced an output of an equation regression (Ghozali & Ratmono, 2017). This method tests the technique of panel data analysis. For understanding the data panel analysis, the problem of omitting variables can be significantly reduced by including information related to these variables (Gujarati, 2013). Simultaneous testing (F-test) and individual parameter testing (t-test) are the commands for decision-making in panel data analysis after determining the choice of the estimation model.

RESULTS AND DISCUSSION

Analysis Findings

Table 4 summarizes descriptive statistics from output programs.

Table 4. Descriptive Statistics Summary

Observations (n = 192)	X_1 (AQMS)	X_2 (FreqIA)	Y (TQ)
Minimum Score	0	1	0.432433
Maximum Score	4	80	22.23284
Mean Score	1.864583	7.854167	2.192589
Std. Dev. Score	0.939196	9.932506	2.760581

Source: Data processed (2025).

Table 4 summarizes the descriptive statistics, including the lower and upper scores, the c- and standard deviation counts, and the normality assumptions for the 192 data observations. In addition, the audit quality metric score (AQMS) has a mean score of 1.864583 and a standard deviation of 0.939196, indicating that both the average and standard deviation scores are very high (exceeding 1 point). The minimum and maximum scores for internal audit structures range from 1 to 80. The average score of the frequency of internal audit meetings is 2.192589, which is almost 80 percent of the standard deviation (2.760581), indicating sufficient variation. Furthermore, the firm's performance (TQ) is decomposed, with a score of Tobin's Q of 1.864583, implying that the index of the linkage between market capitalisation and debt is divided by total assets. The deviation score is 0.939196; this indicates that it is highly significant (greater than 100 percent).

Table 5. Results of Panel Data Analysis

	Assumption Methods	
	Chow-Test	Hausman's Test
Testing Criteria	*Common Effect* (OLS) ↔ *Fixed Effect*	*Fixed Effect* ↔ *Random Effect*
Results	*F* = 19.171439; *Prob. cross section (*< 0,05) is 0.0000, than it is selected "Fixed Effect"*	*Chi-Square (Stats.) is 0.343052; Prob. is 0.8424 (higher than 0.05)*, inferred as "Random Effect"^
*) no testing, because from estimations inferred "Fixed-Effect" model testing was verified Lagrange Test ^) *Fixed-Effect ⊃⊂ Random-Effect*		

Source: Data processed (2025).

Table 5 summarises the predictions from the panel data analysis, as output by the Chow programs. The proposed regression equation models result in appropriate F-scores of 19.171439, respectively, with a Prob. cross-section is 0.0000. The panel data analysis estimates from the output programs of the Hausman test yield a statistical score of 0.343052, with a chi-square probability higher than 0.05, i.e., 0.8424. Thus, the Chow test specified is assumed to have a fixed effect. But the Hausman test has not been tested in this forecast. Mathematical calculations were then made to obtain the following Lagrange Multiplier (LM) statistical score:

$$\text{LM-Stats.} = \frac{(24 \text{ x } 8)}{2\,(24-1)} x \frac{(8 \text{ x } 1412.357)^2 - 1^2}{1412.357^2} = 4{,}1739\ x\ (8-1)^2 = 4{,}1739\ x\ 49 = 204{,}5211$$

Based on the calculations of the LM-test, the score of 204.5211 is greater than the score of (>) the Chi-Square table (df-1) of 3.84146^. For this reason, the LM-test for estimating the common effect (OLS) was verified. To perform the data panel analysis separately for the common effect (t-test) and the simultaneous (F-test) methods, we measured the pooled EGLS (cross-section weights) and the pooled OLS as follows, as shown in Table 6. Table 6 indicates a very low contribution of model fit, with an Adjusted R^2 of 0.078788. This suggests that audit quality and internal audit structures explain only 7.88% of the variance in firm performance, with the remaining 92.12% related to another factor not involved in this study.

Table 6. EGLS Methods – Pooled (cross-section weights)

t-Stats (Prob) | Goodness of Fit	Adjusted R^2 = 0.078788

Source: Data processed (2025).

Table 7. Regression Results

	β	Earned Value / Conclusion	
		t/F-Stats | sig.	Results of Hypothesis
AQMS → TQ	–0.259923	–3.58628 | 0.0004	H_1 Accepted
FreqIA → TQ	–0.009197	-1.723552 | 0.0864	H_2 Rejected
AQMS; FreqIA → TQ		9.167723 | 0.000158	H_3 Accepted

Source: Data processed (2025).

Table 7 presents the findings of the hypotheses testing, where the first and third alternative hypotheses are declared 'Accepted' partially and simultaneously. It follows that the audit quality, i.e. the audit quality metric scores (AQMS), is of high importance, albeit a negative one. At the same time, internal audit structures do not affect the firm's performance.

Discussion

The panel regression (Table 7) yields a finding that audit quality has a significant negative effect on the firm's performance, as measured by audit quality metric scores (AQMS). The statistical score has a probability of less than 0.05, which is 0.0004, and is the sum of the components. Thus, the first hypothesis is accepted. The measure of audit quality, as indicated by a negative regression coefficient, is 0.259923 for the AQMS test of public companies listed on the Jakarta Islamic Index (JII) for the period from 2017 to 2024. The inferences supporting the first hypothesis are supported by a previous study by Ivungu et al. (2019) Chinemerem et al. (2025) for all components to formulated audit quality

metric score, but did not evaluate the overall impact of audit quality on firm's performance; instead, they analysed it in terms of financial performance or market performance, finding a significant positive effect on profitability and a significant negative effect on firms' profitability, respectively. The high audit quality in this research has a real implication for the firm's market value, as evidenced by a decrease in Tobin's Q and earnings. This may be due to the observation data used, which covers the period before and after the COVID-19 pandemic; this often occurs in developing countries, where market efficiency is still relatively low.

Internal audit structures, represented in this study by the frequency of internal audit meetings, do not affect the firm's performance. The statistical score has a probability of more than 0.05 and is 0.0864. Thus, the second hypothesis is rejected. The measure, which has internal audit structures, as indicated by a negative regression coefficient, is 0.009197 for the frequency of internal audit meetings of public companies listed on the Jakarta Islamic Index (JII) for the period from 2017 to 2024. These findings support a study by Hazaea et al. (2020), which found that frequent internal audit meetings have a positive impact, albeit one that is statistically insignificant in the context of banking performance. However, Al-Matari et al. (2014) and Dzikrullah et al. (2020) state that the characteristics and effectiveness of internal audit (including professionalism, qualification, experience, and department size) are important determinants in improving organisational performance and sustainability. This condition suggests that the intensity of internal audit meetings has not been fully effective in enhancing market perception (Tobin's Q value), possibly because the meeting results do not directly influence investor decisions or have not been disclosed openly.

The audit quality and internal audit structures, represented in this study by the simultaneous influence, do affect the firm's performance. The statistical score has a probability of less than 0.05 and is 0.000158. Thus, the third hypothesis is accepted. The regression results show that although the Adjusted R^2 score is only 0.078788, the variables Audit Quality (AQMS) and Internal Audit Structures (frequency of internal audit meetings) have an essential role as governance mechanisms that can influence a firm's performance (Tobin's Q), both directly and through increasing credibility and effectiveness of supervision. Companies with high audit quality and active internal audits of ongoing meeting activities tend to have a higher market value; however, their influence is comparatively small compared to other external factors.

CONCLUSIONS

The results from analysis using the EGLS panel data method on firms listed in the Jakarta Islamic Index (JII) period of 2017-2024 indicate that audit quality proxied by audit quality metric scores (AQMS) has a negative and significant effect on a firm's performance (Tobin's Q proxy) with a coefficient of -0.259923 and a probability of 0.0004. This implies that a rise in audit quality is actually followed by a decrease in the company's market value, possibly because the observation period coincides with the COVID-19 pandemic. Internal audit structures, proxied by the frequency of internal audit meetings, have a negative and insignificant implication (probability of 0.0864), indicating that the frequency of internal audit meetings is not a determining factor in improving the firm's performance. Companies must place a greater emphasis on internal audit quality, risk communication, and integrated governance strategies to ensure that audits make a meaningful contribution to long-term performance.

At the same time, as our research shows, audit quality and internal audit structures explain only 7.88% of the variance in a firm's performance, with the remaining 92.12% attributed to another factor not involved in this study. This situation arises for several reasons:

The largest part of the firm's performance indicators (the same 92.12%) often depends on macroeconomic and market conditions that are not the subject of the audit (industry dynamics, economic cycle, competitive environment).

The role of audit is to ensure transparency, reduce risks and comply with rules. It is not a driving force for innovation, sales or operational efficiency. A high-quality audit is a necessary condition for a healthy business, but its presence does not guarantee high profits. The absence of an audit can lead to collapse, but its ideal quality does not guarantee market leadership.

The impact of an audit is often indirect, rather than direct. A quality audit leads to better risk management, which in turn enables better-informed management decisions, ultimately improving performance. A direct statistical relationship may be weak.

Thus, a result of 7.88% does not mean that auditing is unimportant. It means that fundamental economic and management decisions (such as strategy, marketing, innovation, and operations) have a significantly greater impact on the firm's performance than control and reporting mechanisms.

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