

## The Effect Of Operational Complexity, Business Risk, And Audit Committee On Audit Quality With Audit Delay As Moderation

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### **Keywords:**

*Operational Complexity,  
Business Risk, Audit  
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Audit Quality*

### **Abstract**

*This study aims to examine the effect of operational complexity, business risk (leverage) and audit committee on audit quality with audit delay as a moderating variable. The research method uses a quantitative method with the object of research being banking companies for the period 2019-2023. Data sources from the Indonesian Stock Exchange. The results of the study concluded that (a) Operational complexity has a positive effect on audit quality (b) Business risk (Leverage) has an effect on audit quality (c) The audit committee has a positive effect on audit quality (d) Audit delay cannot moderate the effect of operational complexity on audit quality (e) Audit delay cannot moderate the effect of company risk on audit quality and (f) Audit delay can moderate the effect of the audit committee on audit quality, meaning that audit delay weakens the positive effect of the audit committee on audit quality. The results of this study have positive implications for regulators, investors, the government and prospective investors as well as public accounting firms. Public trust in the implementation of transactions on the Stock Exchange is an important indicator to encourage national economic growth, therefore audit quality is the key to maintaining trust in companies that present financial reports, investors and prospective investors in making investment decisions, public accounting firms as audit implementers.*

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## INTRODUCTION

Audit quality refers to how well an audit is conducted in accordance with applicable professional standards and legal requirements, and the extent to which it provides reasonable assurance to users of the financial statements. Audit quality involves the auditor's detection and reporting of errors or irregularities in financial reporting, taking into account compliance with applicable auditing standards and the code of ethics for accountants. Auditing relate to the results of audit implementation based on professional standards, a strong quality management system, and applicable legal provisions, reflecting the auditor's ability to find and report material deviations or misstatements or deviations in the client's accounting system, by providing adequate assurance to users of financial statements that the financial statements have been presented fairly in accordance with applicable accounting standards.

Factors that influence audit quality related to the standards of competence (expertise) and the auditor's independence attitude, generally accepted auditing standards, such as those issued by the Indonesian Institute of Accountants, are indicators of quality, audit quality control procedures to ensure consistency in meeting standards, independent attitudes, both in terms of independence in attitude and appearance, are very important to maintain audit quality, auditor professionalism, which includes ethics, competence, and dedication, also contributes to audit quality. The quality

indicators of financial report audits relate to the level of compliance to follow auditing standards, including general standards, fieldwork standards, and reporting standards, a good understanding of the client's accounting system, thorough audit planning helps ensure that the audit is conducted effectively and efficiently, The audit evidence gathered must be sufficient and competent to support the audit findings, The audit report must be clear, concise, and easily understood by users of the report. The importance of audit quality protects auditors from legal liability, increases user confidence in financial reports and the auditing profession, and provides more reliable information for economic decision making.

Operational complexity refers to the degree of complexity of a system or process, especially in an organizational or business context. This can be seen from the number of units involved, the number of relationships between units, and the number of variations in the process being performed. Operational complexity can also mean the number of stages or steps involved in a process, as well as the number of factors that need to be considered. Operational complexity relates to how an organization is divided into departments, how work is distributed among those departments, and how the departments interact. The more departments, the more different types of work, and the more complex the interactions between departments, the higher the operational complexity.

The development of the company encourages awareness to improve audit quality. Audit quality is the auditor's ability to find and reveal errors or irregularities in financial statements.(Siregar & Machdar, 2024). Audit quality must be supported by auditors who have good competence and qualifications.(Mubaroq et al., 2024). In producing high audit quality, auditors must comply with International Standards on Auditing (ISA) in carrying out their audit duties. Auditors are also required to comply with the code of professional ethics, which regulates the behavior of auditors in their practice both with fellow members and with the general public.(Cahyani et al., 2022).

Audit quality is very important for stakeholders, to protect the interests of shareholders and creditors in decision making. Auditors are responsible for ensuring the company's financial performance information is open and transparent so as to avoid misleading decision making.Kustyadi et al., (2023). The audit results determine the perception of the financial statements, and companies need to use third parties who have a high level of independence and competence to examine the financial statements.

The phenomenon related to low audit quality in 2018 was the practice of systematic credit card data manipulation at PT Bank Bukopin Tbk. This practice occurred for several years and had a significant impact on the quality of the company's financial statements. Credit card data, such as accounts receivable and transaction balances, were deliberately changed or modified so that they looked better than they actually were. The number of credit cards modified was more than 100,000 credit cards. The negative impact was that the profit report was higher than the actual condition. In addition, the credit risk faced by the bank was greater than that revealed. In this case, the auditor failed to detect the data manipulation contained in Bank Bukopin's financial statements. This caused the information used by investors to make decisions, as well as other related parties, to lose its credibility.(Banjarnahor, 2018). Based on the above phenomenon, audit quality needs to be improved to maintain public trust. Although there is a code of ethics for auditor behavior, the fact is that auditor commitment and compliance still deviate in their audit practices.

Operational complexity has a significant impact on audit quality considering the many operational activities that occur between the parent company and its subsidiaries. This has an

impact on the quality of control and business decision-making and also affects the company's financial reporting. The larger the company, the greater the company's operational costs, which has an impact on the efficiency and effectiveness of the company's financial management, which has an impact on the quality of financial reporting.

The following factor that affects audit quality is the company's business risk, namely the level of external funding in the form of debt or loans. If the company is not careful in placing or managing loan funds, it will impact the company's performance, thereby disrupting the company's going concern. Business risk when associated with external funding is the comparison between the company's assets and debts. This ratio indicates the risk of the company's level of dependence on external funding sources. Business risk is usually determined based on various aspects, such as total assets, average assets, stock market value, total revenue/sales, average sales, total profit, number of employees, and others.(Arista et al., 2023). The greater the debt of a company, the higher the business risk.

Audit delays the time required for the auditor to complete the audit, which begins at the end of the fiscal year and ends when the audit report is issued. If the audit process is delayed due to time-consuming financial statement updates, the auditor may be considered incompetent and inexperienced in handling issues that arise during the audit.(Nurgina & Nurmalina, 2024). When the audit is not completed on time, it will have a negative impact on the perception and image of the company by stakeholders, especially investors, thus delaying decision making. Delays in financial reporting can reduce the quality of the audit for stakeholders.(Nursyamsiyah et al., 2024).

Business Risk According to Brigham and Houston (2001), business risk is the uncertainty regarding the estimated return on capital in the future, where the decision can be considered in the present. The risk assessment of a company by potential investors should detect what factors affect the company. Business risk can be measured by profitability and leverage. While leverage can be measured by total debt divided by total assets. Leverage shows how much the company is able to pay off all its obligations. The more assets owned, the greater the company's ability to meet its obligations

## METHODS

Auditing is a process that involves collecting and examining financial statement evidence related to the required data, then the results are reported to assess the level of conformity between the criteria and the collected data.(Kustyadi et al., 2023). According to DeAngelo(1981), Audit quality is the possibility that auditors detect and report material errors and violations in their clients' accounting systems. According to Handayani and Setiawan(2024), audit quality is the auditor's commitment to preventing accounting violations and misrepresentations of financial statements, and plays a role in maintaining public trust in the accuracy and reliability of audit results. So, it can be concluded that audit quality is the ability and commitment of the auditor to detect and report material errors or violations in the client's financial statements with high independence and accuracy. An audit can be considered quality if the results obtained are able to increase accountability and provide information that proves whether or not there are errors and deviations from applicable audit standards.(Handayani & Setiawan, 2024). A quality audit can only be achieved if the auditor who performs it is truly competent and independent. The auditor's competence affects his ability to find errors in the financial statements, which can be seen from expertise such as experience and specialization. Independence shows the auditor's ability to remain objective during the audit process and when providing an opinion.(Riyani et al., 2021).

## RESULTS AND DISCUSSION

### **The Effect of Operational Complexity on Audit Quality**

Based on table 4.9, the regression coefficient value is 2.758 with a significance value of 0.05 equal to 0.05, so that the statement H1 is accepted, which means that the complexity of operations has a positive effect on audit quality. The results of this study indicate that the more subsidiaries owned, the more complex the organizational structure and operational scope of a business entity, so that it can encourage increased professionalism and deepen the audit process.

The results of this study are in line with research conducted by Qintharah(2020) which concludes that operational complexity has a positive effect on audit quality, because each subsidiary has different operational risk characteristics and accounting complexity, thus requiring a more in-depth audit strategy. Auditors also need to understand various business models, recognize the operational characteristics of each entity, and hone analytical skills in order to adapt to various industry contexts. Therefore, systematically operational complexity can improve audit quality by tightening information validation, deepening audit procedures, and implementing a deeper professional skepticism attitude. The results of this study are also in line with attribution theory, because the complexity of a company's operations is a situational factor that can influence auditor behavior. Auditors understand that success in producing a quality audit is influenced by the relationship between auditor ability (internal factor) and the company's operational conditions (external factor). This shows that operational complexity is not only a challenge, but also a catalyst for developing professional capacity.

### **The Influence of Business Risk on Audit Quality**

Based on table 4.9, the business risk regression coefficient value is 0.709 with a significance value of 0.013 which is greater than 0.05, so that the H2 statement is accepted, which means that business risk has an effect on audit quality. The results of this study indicate that regardless of the size of a company's business risk, auditors still perform their audits well.

The results of this study are in line with research by Pasali and Arief(2023), Ramadya et al(2023), Effendi and Ulhaq(2021) conclude that business risk affects audit quality, because large debts have a negative impact in the form of high interest costs, especially if debts are not managed properly, companies with debts that can be managed properly provide the main attention of auditors so that they can produce high-quality audits. In addition, in accordance with applicable audit standards, such as the Public Accountant Professional Standards (SPAP) or International Standards on Auditing (ISA) which strictly regulate audit procedures, auditors will maintain the good name of their profession by conducting quality audits. Auditors must follow the same audit procedures, such as substantive testing, risk analysis, and internal control evaluation, so that business risk does not directly determine audit quality. The results of this study are in line with attribution theory which assumes that business risk is the main factor that can encourage auditors to develop internal attributions in the form of audit competencies and strategies.

### **The Influence of the Audit Committee on Audit Quality**

Based on table 4.9, the audit committee regression coefficient value is 1.565 with a significance value of 0.017 which is smaller than 0.05, so that the H3 statement is accepted, which means that the audit committee has a positive effect on audit quality. The results of the study indicate that the existence of an effective audit committee can help auditors to conduct quality

audits.

The results of this study are in line with the research conducted by Kholik and Kuntadi(2024), Pasali and Arief(2023), which concludes that the audit committee has a positive effect on audit quality, because the audit committee has an important role in ensuring good audit quality by overseeing the financial reporting process, increasing transparency, maintaining auditor independence, and helping to ensure that audit procedures are carried out to high standards. The existence of an effective audit committee can increase trust in auditors to conduct reliable audits.

#### **Audit DelayModerating the Effect of Operational Complexity on Audit Quality**

Based on table 4.8, the regression coefficient value is 0.002 with a significance value of 0.547 which is greater than 0.05, so that the H4 statement is rejected, which means that audit delay cannot moderate the effect of operational complexity on audit quality. The results of this study indicate that even though the company has complex operational activities, the length of the audit delay does not directly affect how good the audit results are. A longer audit delay does not always indicate better audit quality, because what determines audit quality is the effective process and the auditor's ability to understand the complexity of the company, not just the additional time obtained. Too long a time without efficiency can cause external parties to have a negative view of the quality and reliability of financial statements. Thus, audit delay is not the main factor influencing the relationship between operational complexity and audit quality, because audit quality is more determined by the professionalism of the auditor.

#### **Audit DelayModerating the Effect of Business Risk on Audit Quality**

Based on table 4.8, the regression coefficient value is-0.001with a significance value of 0.15 greater than 0.05, so that the statement H5 is rejected, which means that audit delay cannot moderate the influence of business risk on audit quality. This shows that the length of time to complete the audit does not strengthen or weaken the relationship between business risk and audit quality. Large companies usually have larger debts that can affect the audit process, so that the resulting audit quality will be more complicated than small companies. On the other hand, small companies audited by independent auditors with a high level of professionalism can still produce quality audits(Ramadya et al., 2023). Audit delay is the duration of time required from the end of the fiscal year to the issuance of the audit report. A long audit delay does not necessarily indicate poor audit quality, but the audit process requires additional time to complete the various procedures required and better reflects the technical challenges faced in the audit process.

#### **Audit Delay Moderates the Influence of the Audit Committee on Audit Quality**

Based on table 4.8, the regression coefficient value is -0.002with a significance value of 0.021smaller than 0.05, so that the statement H6 is accepted, which means that audit delay weakens the positive influence of the audit committee on audit quality. This shows that, although the audit committee has an important role in improving audit quality, delays in the audit process can reduce the effectiveness of supervision and transparency expected from an audited financial report. Delays in the audit process can reflect obstacles in supervision and communication between auditors and management. The audit committee has an important role in ensuring the effectiveness of the audit process through independent supervision, coordination with external auditors, and the implementation of good corporate governance. However, if an audit delay occurs, the effectiveness of the audit committee's function in maintaining audit quality can be

reduced because the audited financial information becomes less relevant due to delays in presenting the report. (Jans & Utomo, 2024). In addition, audit delays may indicate obstacles in the delivery of transparent information from management to auditors, which may ultimately hamper the role of the audit committee in ensuring that the audit process runs smoothly and in accordance with professional standards.

## CONCLUSION

Based on the test results and discussion, it can be concluded that:

1. Operational complexity has a positive effect on audit quality, meaning that the more subsidiaries owned, the more complex the operations, which encourages increased auditor professionalism.
2. Business risk does not affect audit quality, meaning that regardless of the size of the business risk, the auditor will still perform the audit well.
3. The audit committee has a positive influence on audit quality, meaning that the existence of an effective audit committee can help auditors to conduct quality audits.
4. Audit delay cannot moderate the effect of operational complexity on audit quality, meaning that audit delay cannot strengthen or weaken the effect of operational complexity on audit quality.
5. Audit delay cannot moderate the influence of business risk on audit quality, meaning that audit delay cannot strengthen the influence of business risk on audit quality.
6. The audit delay variable can moderate the influence of the audit committee on audit quality, meaning that audit delay weakens the positive influence of the audit committee on audit quality.

## REFERENCE

- Ahmed, AAA, & Hossain, M. S. (2010). Audit Report Lag: A Study of the Bangladeshi Listed Companies. *ASA University Review*, 4(2), 49-56.
- Akbar, R., & Hermi. (2024). The Effect of Company Size, Audit Committee, and Financial Report Integrity on Audit Quality in Food and Beverage Sub-Sector Companies Listed on the IDX. *Initiative: Journal of Economics, Accounting and Management*, 3(1), 415–434.
- Angruningrum, S., & Wirakusuma, MG (2013). The Influence of Profitability, Leverage, Operation Complexity, KAP Reputation and Audit Committee on Audit Delay. *E-Journal of Accounting*, 5(2), 251-270.
- Apriyanti, A., & Santosa, S. (2015). The Influence of Company Attributes and Audit Factors on Audit Delay in Companies Listed on the Malaysia Stock Exchange. *Journal of Accounting and Finance*, 16 (2), 74-87.
- Arista, D., Kuntadi, C., & Pramukty, R. (2023). The Effect of Audit Tenure, Company Size, and Audit Rotation on Audit Quality (Internal Audit Literature Review). *Jurnal Economina*, 2(6), 1247–1257. <https://doi.org/10.55681/economina.v2i6.594>
- Ariyani, D., & Budiarta, IK (2014). The Influence of Profitability, Company Size, Company Operation Complexity and KAP Reputation on Audit Report Lag in Manufacturing Companies. *E-Journal of Accounting*, 8 (2), 217-230.

- Dewi, AAC, & Ramantha, IW (2019). The Influence of Professionalism and Time Budget Pressure on Audit Quality with Audit Fee as a Moderating Variable. *E-Journal of Accounting*, 26, 563. <https://doi.org/10.24843/eja.2019.v26.i01.p21>
- Effendi, E., & Ulhaq, RD (2021). The Influence of Audit Tenure, Auditor Reputation, Company Size and Audit Committee on Audit Quality (Empirical Study on Mining Companies Listed on the Indonesia Stock Exchange in 2015-2018). *MEA Scientific Journal (Management, Economics, and Accounting)*, 5(2), 1457–1504.
- Hashim, F., Hashim, F., & Jambari, A. R. (2013). Relationship between Corporate Attributes and Timeliness in Corporate Reporting: Malaysian Evidence. *Humanics*, 64(2).
- Ibrahim, A., & Adli. (2024). The Influence of Audit Committee, Audit Tenure and Auditor Reputation on Audit Delay with Gearing Ratio as a Moderating Variable. *Journal of Business Research*, 7(2), 189–208.
- Indriyani, RE, & Supriyati, S. (2012). Factors Affecting Audit Report Lag of Manufacturing Companies in Indonesia and Malaysia. *The Indonesian Accounting Review*, 2 (02), 185-202.
- Jans, BF, & Utomo, RB (2024). The Effect of Company Size, Company Operation Complexity and Audit Committee on Audit Delay in 2020-2021. *JSMA (Journal of Management Science and Accounting)*, 16(1), 8–23. <https://doi.org/10.37151/jsma.v16i1.164>
- Khasharmeh, H. A., & Aljifri, K. (2010). The Timeliness of Annual Reports in Bahrain and the United Arab Emirates: An Empirical Comparative Study. *The International Journal of Business and Finance Research*, 4(1), 51-71.
- Kholik, MFR, & Kuntadi, C. (2024). The Influence of Audit Committee, Auditor Specialization, and Audit Tenure on Audit Quality. *Scientific Journal of Economics, Management, Business and Accounting*, 1(1), 11–25. <https://doi.org/10.61722/jemba.v1i1.49>
- Kirana, GC, & Assafiq, MA (2021). The Influence of Audit Fee, Company Size, Audit Tenure on Audit Quality (Empirical Study on Manufacturing Companies Listed on the Indonesia Stock Exchange for the Period 2014-2018). *Liability Journal*, 6(1), 106–121. <https://doi.org/10.54964/liabilitas.v6i1.74>
- Kurnia, RF, Mukti, AH, & Sianipar, PBH (2024). The Effect of Audit Tenure, Company Size, and Audit Committee on Audit Report Lag. *Journal of Social Technology*, 2(1), 17–29. <https://doi.org/10.59188/jurnalsostech.v3i4.681>
- Kuslihaniati, DF (2016). The Influence of Corporate Governance Practices and Company Characteristics on Audit Report Lag. *Journal of Accounting Science and Research*, 5 (2).

- Kustiyadi, G., Hidayatullah, A., Indayani, L., Putri, D., Setyawan, AN, & Ariyanto, T. (2023). The Effect of KAP Rotation, Audit Tenure and Company Size on Audit Quality in Manufacturing Companies. *International Journal of Advanced Engineering and Management Research*, 08(06), 98–109. <https://doi.org/10.51505/ijaemr.2023.8608>
- Lekok, W. (2013). Factors Affecting Audit Report Lag. *Journal of Business and Accounting*, 15(1a), 129-140.
- Lestari, P. (2015). The Effect of Company Size, Profitability, and Operational Complexity on Audit Delay in Banking Companies on the Indonesia Stock Exchange in 2008-2012. Thesis, Sebelas Maret University, Surakarta.
- Nurianti, RP, Sosiady, M., & Ermasnyah. (2024). The Effect of Company Size, Company Operation Complexity, Auditor Reputation, and Financial Distress on Audit Delay. *Journal of Economics*, 2(3), 234–244. <https://doi.org/10.32795/hak.v2i1.1494>
- Pangaribuan, D., Marundha, A., & Mulyadi, M. (2022). The Impact of Tax Avoidance and Audit Quality on Tax Amnesty Program. *Journal of Management of Small and Medium Enterprises (SMEs)*, 15(3), 445–464. <https://doi.org/10.35508/jom.v15i3.6595>
- Pangaribuan, D., Rely, G., & Aditia, D. (2023). The Effect of Bonus Compensation and Leverage on Earnings Management Moderated by Company Size Variables (Empirical Study of Food and Beverage Sub-Sector Companies Listed on the Indonesia Stock Exchange for the 2018-2021 Period). *BALANCE: Journal of Accounting, Auditing and Finance*, 20(2), 130–153.
- Pasali, GS, & Arief, A. (2023). The Effect of Audit Tenure, Auditor Reputation, Audit Committee, Company Size, and Audit Rotation on Audit Quality in LQ-45 Stock Companies in 2020-2022. *Trisakti Economic Journal*, 3(2), 2873–2882. <https://doi.org/10.25105/jet.v3i2.17660>
- Ramadya, AP, Murtanto, & Hasnawati. (2023). The Effect of Audit Fee, Audit Tenure, Auditor Specialization, and Company Size on Audit Quality. *MUQADDIMAH: Journal of Economics, Management, Accounting and Business*, 2(1), 257–269. <https://doi.org/10.59246/muqaddimah.v2i1.630>
- Riswandi, P., Yuniarti, R., & Subandrio. (2024). The Influence of Audit Committee and Audit Fee on Audit Quality in State-Owned Enterprises in Indonesia. 5(13), 216–233.
- Riyani, FF, Maidani, Setyawati, NW, & Husadha, C. (2021). The Effect of Audit Tenure, Audit Rotation and Head Reputation on Audit Quality. *Journal of Research in Business, Economics, and Education*, 3(3), 1832–1842. <http://e-journal.stie-kusumanegara.ac.id>



- Rustiarini, NW (2012). Corporate Governance, Ownership Concentration and Enterprise Risk Management Disclosure. *Accountability*, 11 (2).
- Santosa, REWA, Kristiana, I., & Faturachmah, S. (2024). Determinants of Audit Quality According to Attribution Theory. *Journal of Applied Business Accounting*, 7(1), 105–119.
- Subekti, I., & Widiyanti, NW (2004). Factors Affecting Audit Report Lag in Indonesia. VII National Accounting Symposium Denpasar-Bali. 2-3 December. Pp. 991-1001.
- Syah, E., & Mayangsari, S. (2024). The Effect of Audit Tenure, Auditor Switching, and Company Size on Audit Quality with Audit Committee as a Moderating Variable. *Trisakti Journal of Economics*, 4(2), 947–956. <https://doi.org/10.25105/v4i2.20386>
- Winda, & Hadiwibowo, I. (2023). The Effect of Firm Reputation, Audit Tenure, Company Size, and Auditor Rotation on Audit Quality. *Proaksi Journal*, 10(1), 70–84. <https://doi.org/10.32534/jpk.v10i1.3734>
- Yasodhara, S., & Anggraeni, RD (2024). The Effect of Audit Tenure, Audit Delay and Audit Fee on Audit Quality in Food and Beverage Sector Companies Listed on the Indonesia Stock Exchange in 2018-2022. *Economics Synchronization*, 1(1). <https://doi.org/10.31253/aktek.v15i1.2013>