

Audit Quality in Indonesian State-Owned Enterprises: The Influence of Audit Fees, Auditor Rotation, and Company Size

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Abstract

Objective: This study investigates the influence of audit fees, auditor rotation, and company size on audit quality in Indonesian SOEs listed on the IDX between 2018–2024.

Design/Methods/Approach: Using a quantitative approach, this study utilizes secondary data obtained from the annual reports of companies listed on the IDX. Logistic regression analysis is applied to examine the relationships between variables, with audit quality as the dependent variable (dummy: 1 = qualified opinion, 0 = others) and audit fees (logarithm of fees), auditor rotation (dummy: 1 = rotation, 0 = no rotation), and company size (logarithm of total assets) as the independent variables.

Findings: The results indicate that audit fees have a significant negative effect on audit quality (Sig. 0.029; Exp(B) = 0.254), contrary to the initial hypothesis. Company size, on the other hand, has a significant positive effect on audit quality (Sig. 0.047; Exp(B) = 2.801), while auditor rotation does not have a statistically significant impact (Sig. 0.292).

Originality/Value: This study contributes to the audit literature by highlighting the unique dynamics of State-Owned Enterprises (BUMN) in Indonesia, particularly the relationship between high audit fees and non-technical pressures such as agency conflicts. The study also emphasizes the importance of considering the scale of companies and the reputability of Public Accounting Firms (KAP) in the audit process.

Practical/Policy implication: The findings suggest that regulatory oversight of audit fee setting and consideration of KAP quality in auditor rotation are crucial for ensuring high audit quality. Policymakers and businesses should focus on improving audit practices by addressing the non-technical pressures associated with high audit fees and ensuring the use of reputable KAPs in auditor rotation.

Keywords: audit fees, auditor rotation, audit quality, BUMN, company size

JEL Classification: M42, L32, G32

Received: Juli 22, 2025; Received in revised form: Juli 30, 2025; Accepted: August 31, 2025

Introduction

State-owned enterprises (SOEs), or Badan Usaha Milik Negara (BUMN), in Indonesia are business entities predominantly funded and managed by the government. Government investment in BUMN aims to enhance performance and financial stability, as mandated by Indonesian Law No. 19/2003. The success of this effort is typically measured through management's financial reporting (Undang-Undang No. 19 Tahun 2003 tentang Badan Usaha Milik Negara, n.d.). The success of this effort is typically measured through management's financial reporting

Financial statements are essential tools for management accountability regarding the utilization of company resources. Prepared according to Financial Accounting Standards (PSAK, 2009), these statements deliver vital financial information to stakeholders for economic decision-making purposes. The reliability and credibility of such reports heavily depend on audit quality, an external oversight mechanism conducted by independent auditors.

Practically, the credibility of financial statements is closely linked to the quality of external audits. Audits assess the fairness and reliability of management disclosures and mitigate the risk of financial misrepresentation or profit manipulation. The increasing complexity of business transactions and transparency demands heightened concerns about audit quality. Past financial reporting scandals in Indonesia have notably raised questions about auditor integrity (Sulistiawan, 2011), reinforcing the need for rigorous auditing practices to protect stakeholders.

Several factors influence the credibility of audit processes, including audit fees and company size. Higher audit fees often indicate complex audit requirements or the necessity of additional resources to ensure reporting accuracy (Francis & Yu, 2009). Furthermore, frequent auditor rotation may enhance objectivity but can also limit auditors' comprehensive understanding of a company's specific risks (Febriyanti & Merta 2014). Larger companies typically exhibit greater operational complexity, requiring auditors to implement more systematic and detailed audit procedures in line with public accounting standards (SPAP, 2021).

Audit quality, in essence, is the auditor's capacity to detect and accurately report discrepancies within financial statements. In this research context, audit quality specifically relates to how audit fees, auditor rotation, and company size collectively impact the auditor's effectiveness.

Audit fees, representing compensation for auditors' services, are typically correlated with audit complexity, inherent risks, and the thoroughness of audit procedures (Nursiam, Andriani, & Hartadi 2021). Previous research by Kurniasih & Rohman (2014) stated that the greater the cost the auditor receives, the higher the quality of the audit produced, because the auditor has adequate resources to carry out a thorough audit. These findings are also supported by Ardani (2017) and DeAngelo (1981), which states that auditors who receive higher fees tend to seek to maintain their reputation and independence.

However, not all studies found a uniform effect. Studies conducted by Nursiam, Andriani, & Hartadi (2021) revealed that audit costs do not have a significant influence on audit quality in manufacturing companies in Indonesia. These findings indicate that the amount of compensation received by auditors does not always guarantee that the audit process is carried out to a high standard. Instead, research by (Harianja & Sinaga (2022) shows that audit costs have a significant effect on audit quality in state-owned companies. These differences in results confirm that industry context and entity characteristics play a significant role in influencing the relationship between audit costs and audit quality.

Panjaitan & Chariri (2014) emphasized that auditor specialization has a more significant influence on audit quality than just the size of a public accounting firm (KAP). This specialization reflects the auditor's expertise in a particular industry, allowing them to understand the characteristics and risks of the client's business in more depth. Meanwhile, auditor rotation is a policy that requires periodic changes of auditors to maintain independence and avoid long-term relationships that can reduce the objectivity of the assessment. Myers, Myers, & Omer (2003) argues that auditor rotation can improve the quality of audits because it brings a new perspective to the audit process. However, the findings of the Andriani & Nursiam (2017) and Treasure (2012) shows that auditor rotation does not always have a significant impact on audit quality, so the effectiveness of this policy is still a matter of debate among practitioners and academics.

Company size is one of the important variables that is often associated with audit quality. Large companies typically have more mature internal control systems and high operational complexity. In addition, large-scale companies tend to choose public accounting firms (KAPs) that are also large, which are associated with better audit quality (Muliawan & Sujana 2017). Another supporting factor is the

scrutiny from the public and regulators, so large companies have a stronger incentive to maintain the integrity of their financial statements.

However, the results of research on the influence of company size on audit quality are not always consistent. Sari, Diyanti, & Wijayanti (2019) found that the size of the company had no significant effect on audit quality. This is in line with several other studies that show that company size is not always the main determinant of audit quality, especially when compared to the size and reputation of the KAP that handles the audit.

The size of the KAP itself plays an important role because auditors from large KAPs, especially those who are members of the Big Four, are assumed to have more complete resources and stricter and more systematic audit procedures. Research Muliawan & Sujana (2017) emphasized that auditors' affiliation with the Big Four provides a guarantee of higher technical capabilities, so that it can significantly improve the quality of audits.

Audit rotation, which means the replacement of a Public Accounting Firm (KAP) by a company, is regulated in Government Regulation No. 20 of 2015 which limits the term of office of a Public Accountant to a maximum of five consecutive years. This auditor rotation policy aims to maintain independence and avoid long-term relationships that have the potential to reduce auditor objectivity. Myers & Omer (2003) argues that auditor rotation can improve audit quality because it presents a new perspective in the audit process. Although auditor rotation is expected to improve audit quality by preventing excessive familiarity between auditors and clients, previous research results have shown inconsistencies in their impact.

Some studies, such as those conducted by Andriani & Nursiam (2017) and Treasure (2012), concluding that audit rotation did not have a significant impact on audit quality. One of the reasons given is that the market tends to pay less attention to the status of auditor rotation as long as the opinion of the financial statements produced is still considered credible.

In Indonesia, maintaining audit quality remains challenging, highlighting the necessity for empirical studies identifying influential factors, particularly within publicly listed companies and strategic state-owned enterprises. Recent financial reporting issues have heightened public concerns about auditor integrity, reinforcing the urgency of comprehensive research in the Indonesian context.

The mixed findings in prior research regarding audit fees, auditor rotation, and company size demonstrate the complexity of these relationships. Variables such as organizational characteristics, industry type, regulatory environment, and internal oversight mechanisms critically affect audit quality. Therefore, further empirical studies simultaneously examining these variables in broader contexts over extensive periods are essential for gaining deeper insights into audit quality within Indonesia.

Literature Review and Hypotheses Development

1. Signaling Theory

Signaling theory explains that companies use certain information as signals to the market to demonstrate the quality of their audits. In conditions of information asymmetry, the management of companies that have deeper access to information seeks to reduce this imbalance by signaling to outside parties such as investors, creditors, and regulators. This concept was first developed by Spence (1973) emphasizing that management sends signals through actions or policies that can be observed by external parties to show the true quality of the company and distinguish companies with good performance from bad ones (Ross, 1973; Scott, 2006).

In the context of this study, audit costs and auditor rotation can be seen as signals that demonstrate the company's commitment to transparency and quality of financial statements. For example, a high amount of audit costs can be a signal that a company is serious about ensuring the accuracy of its financial statements, while auditor rotation can be seen as an effort to maintain audit independence and objectivity, which in turn increases market confidence in the company's financial statements.

In this study, signaling theory is very relevant to explain the relationship between key variables such as audit quality, audit costs, auditor rotation, and company size. The high quality of audits can be considered a signal that the company has a strong commitment to transparency and accountability, which in turn increases the trust of investors as well as other stakeholders. The large cost of the audit can also be interpreted as a signal that the company is willing to allocate more resources to ensure a thorough and professional audit process.

In addition, the regular implementation of auditor rotation signals that the company is working to maintain audit independence and avoid potential conflicts of interest that may arise due to long-term relationships between auditors and management. Company size is also closely linked to signaling theory, where large companies tend to be driven to give positive signals to the market through high-quality audits and good governance, given that they are under stricter public scrutiny and regulators (Spence, 1973).

2. Legitimacy Theory

The theory of legitimacy departs from the idea that companies not only focus on achieving economic goals, but also must gain recognition and acceptance from the social environment in order to survive and thrive. Legitimacy itself is defined as the public's perception that the actions, policies, and results achieved by the company are in line with the values, norms, and expectations that apply in society (Suchman, 1995). In practice, companies try to carry out various activities that can increase their social legitimacy, one of which is by ensuring that the financial statements presented have been independently audited and have good quality

The theory of legitimacy states that the company will try to carry out business practices that are in harmony with societal norms and expectations in order to remain socially acceptable. In the context of audits, companies that conduct high-quality audits, pay adequate audit fees, and implement periodic auditor rotations seek to gain legitimacy from the public, regulators, and other stakeholders. In addition, large companies typically face higher legitimacy demands, so they tend to pay more attention to audit quality as part of efforts to maintain public reputation and trust (Suchman, 1995).

The relationship between the theory of legitimacy and the variables in this study lies in how the company responds to pressures and demands from the external environment through the audit policies applied. Good audit quality is one of the ways for companies to gain recognition and acceptance from the public, regulators, and the capital market. Adequate payment of audit fees can be seen as a form of fulfilling external expectations for professional and credible audit implementation. In addition, the implementation of periodic auditor rotation is also a response to environmental demands so that the audit process remains independent and objective, so as to increase the company's legitimacy in the eyes of the public and regulators. Large-sized companies, which typically have higher exposure to public scrutiny and regulators, tend to pay more attention to the quality of audits and strict governance in an effort to maintain their legitimacy (Suchman, 1995).

3. Audit Quality

Audit quality is an important aspect in accounting and finance that determines the level of confidence of stakeholders in audited financial statements. The definition of audit quality has undergone development and has been widely put forward by experts. One of the most well-known definitions is of DeAngelo (1981), which states that audit quality is the auditor's probability of finding and reporting material violations or misrepresentations in the client's accounting system. This definition highlights two main aspects: the auditor's ability to detect material misrepresentations and the auditor's courage to report the findings independently without pressure from management

Arens, Elder, & Beasley (2017) Defines audit quality as the level of confidence that auditors have that the audited financial statements have been presented reasonably, in all material respects, in accordance with generally accepted accounting principles. The high quality of audits provides assurance to users of financial statements that the information presented is free from material misrepresentations, either caused by fraud or errors

The quality of audits is influenced by various internal and external factors, such as the competence and independence of auditors, the company's internal control system, and pressure from the company's management or owner. According to DeFond and Zhang (2014), good audit quality not only ensures compliance with accounting standards, but also increases market confidence and strengthens corporate governance. Therefore, audit quality is a crucial element in maintaining the integrity and credibility of financial statements, while supporting the creation of a transparent and accountable business environment.

Audit costs are a fundamental aspect of the external audit process that not only serves as a reward for the auditor's professional services, but also reflects the level of complexity, risk, and expertise required in conducting an audit. The amount of audit costs is influenced by several key factors, such as the level of risk of assignment, the complexity of the services provided, and the competence and experience of the auditor needed to adequately complete the audit (DeAngelo, 1981).

In the literature, there are two main views on the relationship between audit costs and audit quality. The first view states that the high cost of audits indicates that auditors are allocating more resources, time, and expertise to conduct thorough audits. DeAngelo (1981) supports this view by stating that the greater the audit fee the client pays, the greater the auditor's incentive to maintain the reputation and quality of his work. This finding is also strengthened by Kurniasih and Rohman (2014) and Adriani and Nursiam (2017), which show a positive relationship between audit costs and audit quality, where companies that pay more audit fees tend to obtain better quality audits because auditors are more careful and professional in carrying out their duties.

On the other hand, there are concerns that high audit fees can create auditors' financial dependence on clients, potentially threatening auditors' independence. This dependence can make auditors reluctant to report negative findings or material misrepresentations in order to maintain a long-term business relationship with the client (DeAngelo, 1981). However, the findings Wahyudi & Ardianto (2022) in financial sector companies, it shows that high audit costs are negatively correlated with discretionary accruals, which indicates that financial incentives can encourage auditors to work more carefully and reduce the level of manipulation of financial statements. On the other hand, research such as Dhimadhanu (2016) shows that the influence of audit costs on audit quality is not always significant, because auditors' independence can still be maintained even though the audit costs received are relatively low. Thus, the relationship between audit costs and audit quality still shows mixed results and requires further study in different contexts.

The contradiction of empirical findings regarding the relationship between audit costs and audit quality shows that the influence of audit costs is greatly influenced by the context, characteristics of the company, as well as the regulatory environment and professional ethics in each country or industry. In addition to internal factors, audit costs are also influenced by external pressures such as competition in the audit services industry, the level of regulatory oversight, and stakeholder expectations of corporate transparency and accountability (Hay et al., 2006).

Some studies have found that high audit costs correlate positively with audit quality because they reflect adequate resource allocation, auditor skill level, and complexity of audits handled (Ardani, 2017). However, there are also findings that show that high audit costs can threaten auditors' independence due to financial dependence on clients (Ramadhan & Laksito, 2018). On the other hand, low audit costs also do not necessarily mean that audit quality decreases, because the independence of auditors can be maintained (Dhimadhanu, 2016).

In general, audit fees not only serve as compensation for the auditor's services, but also an important indicator in assessing the quality and integrity of the audit process conducted by independent auditors. Factors such as the size of the company, audit risk, complexity, and reputation of public accounting firms also affect the amount of audit costs and the quality of the audits produced (Muliawan & Sujana, 2017). Therefore, an understanding of the relationship between audit costs and audit quality must take into account the various contextual and environmental variables that surround the audit process.

4. Auditor Rotation

Auditor rotation is a governance mechanism designed to maintain auditor independence and prevent the formation of long-term relationships that can reduce the objectivity of auditors in examining their clients (Pramaswaradana & Astika, 2017). This policy is formally regulated in Government Regulation No. 20 of 2015, which limits the period of auditor assignment to one entity for a maximum of five consecutive years. With the turnover, new auditors are expected to bring fresh perspectives to the audit process, thereby reducing the risk of "familiarity threats", the tendency of auditors to be too lenient towards long-time clients. In addition, auditor rotation is believed to improve audit quality through a different approach and a more objective assessment of the company's internal control system and financial reporting.

A number of empirical studies show mixed results regarding the influence of auditor rotation on audit quality. Kurniasih&Rohman (2014) found that auditor rotation has a positive and significant influence on audit quality, indicating that regular auditor turnover can strengthen auditor independence and improve the effectiveness of external oversight of the company's financial statements. However, other studies such as those conducted by Andriani & Nursiam (2017) and Treasure (2012) indicates that auditor rotation does not always have a significant effect on audit quality. In the study, the market tends not to pay special attention to auditor rotation in annual financial statements, so rotation does not automatically guarantee an improvement in audit quality,

Several studies reveal that auditor rotation can pose new challenges, especially when the replacement auditor has not fully understood the client's business characteristics and internal control systems. This condition has the potential to reduce the effectiveness of audits, especially in the initial period of assigning new auditors. Therefore, the success of the auditor rotation policy is highly dependent on the proper implementation and quality and competence of the substitute auditors. Nonetheless, auditor turnover remains an important issue in corporate governance, especially in efforts to maintain the integrity, independence, and quality of external audits.

5. Company Size

Company size in the context of this study refers to the size of a Public Accounting Firm (KAP) which is used to measure the size of a KAP in providing audit services to its clients. The size of the KAP is one of the important factors that companies often pay attention to when choosing external auditors, especially for large companies that have more complex audit needs and a high level of public exposure (Aldona and Trisnawati, 2017). This phenomenon is reflected in the high demand for large-scale KAP services, especially those that have affiliations with foreign KAP or are members of international networks such as the Big Four. KAPs affiliated with the Big Four generally have more human resources, international experience, access to global audit methodologies, and a higher reputation in the eyes of markets and regulators.

Research conducted by Muliawan and Sujana (2017) and Aldona and Trisnawati (2018) show that the size of the KAP has a positive relationship with audit quality. This means that the larger the size of the KAP, the higher the quality of the audit produced. Large KAP is considered to be able to provide a more comprehensive, independent, and objective audit because it is supported by a better quality control system and reputational pressure that must be maintained at the international level. In addition, large companies generally prefer large KAP to maintain the credibility of their financial statements in the eyes of investors, creditors, and regulators. The classification of KAP based on affiliation with the Big Four or Non-Big Four is the main indicator in assessing the quality of the audits produced, where the Big Four KAP is often associated with a higher level of professionalism and audit quality than non-affiliated KAP.

However, the results of other studies such as those conducted by Febriyanti and Merta (2014) shows that the size of the KAP does not always have a significant effect on the quality of the audit. In some cases, other factors such as the individual competence of the auditor, the client's internal control system, and regulator supervision also affect the quality of the audits produced. This suggests that while KAP size can be an important indicator, audit success remains highly dependent on the implementation of audit standards, auditor integrity, and a supportive oversight environment. Thus, the size of the KAP is one of the relevant variables in assessing audit quality, but must be considered along with other factors that can affect the overall audit results (Febriyanti and Merta 2014; Muliawan and Sujana 2017).

6. Hypothesis Development

a. The Relationship Between Audit Costs and Audit Quality

This hypothesis refers to the fact that the greater the audit fee that a company pays to the auditor, the greater the resources, time, and expertise that the auditor can allocate in the process of auditing financial statements. DeAngelo (1981) stating that high audit costs can be an indicator of a more comprehensive audit, because auditors have an incentive to maintain their reputation and professionalism. Empirical research by Kurniasih and Rohman (2014) and Nursiam, Andriani, and Hartadi (2021) It also proves that there is a positive and significant relationship between audit costs and audit quality. This shows that companies that pay more audit fees tend to obtain more quality audits, because auditors will be more careful and thorough in carrying out their duties. Similar findings were also expressed by Ardhani (2017), who found that high audit costs were negatively correlated with discretionary accruals, indicating that auditors were more thorough in detecting and reporting material misrepresentations when the financial incentives received were greater.

H1: Audit Costs Have a Positive Effect on Audit Quality

b. The relationship between Auditor Turnover and Audit Quality

The second hypothesis (H2) states that auditor rotation has a negative effect on audit quality. Auditor rotation is a policy that aims to maintain the independence and objectivity of auditors by limiting the period of the auditor's assignment to one client in a certain period (Pramaswaradana & Astika, 2017). Although in theory, auditor rotation is expected to reduce the risk of long-term relationships that can pose a "familiarity threat", some studies have found that auditor rotation can have a negative impact on audit quality. This is because new auditors often need time to understand the client's business characteristics and internal control systems, so the effectiveness of audits in the early period of the assignment can decrease. Research by Andriani and Nursiam (2017) and Treasure (2012) Indicates that auditor rotation does not always have a significant effect on audit quality, and in some cases, may even degrade when the substitute auditor has not fully understood the client's environment.

H2: Auditor Rotation Negatively Affects Audit Quality

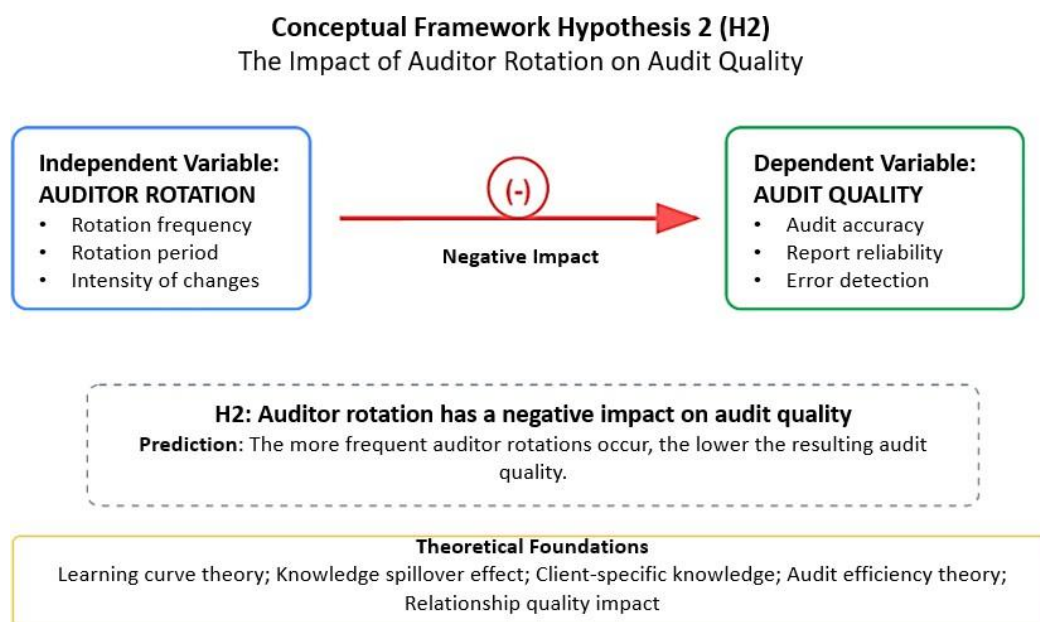


Figure 1. Conceptual framework Hypothesis 2

a. The Relationship Between Company Size and Audit Quality

The third hypothesis (H3) states that the size of the company has a negative effect on audit quality. Company size in this context refers to the size of the Public Accounting Firm (KAP) used by the company. Some studies have found that large companies tend to choose large-scale KAPs, especially those affiliated with international networks such as the Big Four, to maintain the credibility and reputation of their financial statements (Muliawan & Sujana, 2017). However, other studies such as Febriyanti and Merta (2014) found that the size of the KAP did not always have a significant effect on audit quality. In fact, in some cases, large companies face the challenge of high audit complexity and the potential for greater management pressure, so auditors can experience difficulties in maintaining audit quality consistently. Therefore, the H3 hypothesis originates from the argument that the larger the size of the company, the higher the challenges faced by auditors in maintaining audit quality, which can ultimately have a positive impact on the results of the audit produced.

H3: Company Size Positively Affects Audit Quality.

Method

1. Population and Sample

This study uses secondary data, which refers to information obtained from existing sources, rather than being collected directly by the researcher. In this case, the data consists of the financial statements of the parent companies of State-Owned Enterprises (SOEs) listed on the Indonesia Stock Exchange (IDX) from 2020 to 2024. These financial statements are publicly available through the official IDX website www.idx.co.id.

The population for this study includes state-owned holding companies listed on the IDX during the period 2020–2024. The sample was selected using purposive sampling, with the following criteria:

- The company must be a state-owned holding company listed on the IDX between 2020 and 2024.
- The company must publish an audited annual report each year within the 2020–2024 period.
- The company's financial statements must be reported in rupiah.

2. Audit Quality Dependent Variables

The dependent variable (Y) in this study is audit quality. Audit quality is the level of reliability of financial statements produced through the audit process, including the auditor's ability to detect material errors (detection risk) and his willingness to report such errors (independence) (DeFond & Zhang, 2014). In this study, audit quality was measured using a dummy variable approach, namely by classifying the audit opinions provided by independent auditors on the company's financial statements. If the financial statements obtain an unqualified opinion, then the audit quality variable is given a value of 0. On the other hand, if the financial statements obtain opinions other than reasonable without exceptions (such as reasonable with exceptions, unreasonable, or not giving opinions), then the audit quality variable is given a value of 1 (Nugroho, 2018).

3. Independent Variables of Audit Costs

The first independent variable in this study is audit costs. Audit fees are financial compensation paid by the company to the Public Accounting Firm (KAP) in exchange for financial statement audit services. These costs reflect the complexity of the audit, the inherent risks, and the resources required to complete the audit task (Hay et al., 2006). In this study, measurements were based on the nominal value reported in the company's financial statements or annual reports. Audit cost data can be expressed in rupiah units or expressed in the form of natural logarithms to reduce skewness and improve data distribution, by common practice in accounting and audit research (Kurniasih & Rohman, 2014). This approach is used to make the results of the analysis more robust and can be compared with previous studies.

$$\text{Audit Fee} = \ln (\text{Audit Fee})$$

4. Independent Variables of Auditor Rotation

The second independent variable in this study is auditor rotation. Auditor rotation is the replacement of the KAP or audit partner who is in charge of examining the company's financial statements after a certain period. The goal is to minimize threats to auditor independence, such as familiarity threats or client retention bias (EU Regulation No. 537/2014). Messier et al. (2021) explain that auditor rotation can be mandatory or voluntary, arguing that mandatory rotation prevents long-term collusion between auditors and management. Auditor turnover in this study was measured as a dummy variable, namely by giving a value of 1 if the company changes external auditors (auditor rotation) in the current year, and a value of 0 if there is no change of auditors in that year (Kurniasih and Rohman 2014).

5. Independent Variables of Company Size

The third independent variable is the size of the Company. Company size is the operational scale of an entity, which is usually measured by total assets, revenue, or the natural logarithm of total assets. Large companies tend to have complex operating structures and better internal control systems (DeAngelo, 1981). Brigham & Houston (2021) also stated that large companies tend to have complex organizational structures, more resources, and different risks than small companies. In the context of auditing, the size of the company affects the cost of audits, the risk of detection. Company size is measured based on the company's total assets at the end of the reporting year, which is expressed in natural logarithms to reduce the skewness of the data (Muliawan and Sujana 2017):

$$\text{Company Size} = \ln (\text{Total Assets})$$

Hypothesis Analysis and Testing Methods

The analysis method used in this study is a logistic regression analysis method which aims to test three independent variables against bound variables. The processing of research data uses the SPSS (Statistical Package for Social Sciences) program. To test the hypothesis, logistic regression analysis was used with the following model:

$$KA = \alpha + \beta_1 FA + \beta_2 RA + \beta_3 UK + \varepsilon$$

Model Description:

KA : Quality Audit

FA : Audit Fee

RA : Auditor Rotation

UK : Company Size

α : Constant

$\beta_1, \beta_2, \beta_3$: Regression coefficient

ε : Error term:

Result and Discussion

Result

The results of the research are presented in the form of graphs, tables, or descriptives. Analysis and interpretation of these results are necessary before they are discussed. The results of the research are written in the form of flowing paragraphs that are written in a systematic, critical, and informative manner.

Table 1. Descriptive Statistics
Descriptive Statistics

N		Minimum	Maximum	Mean	Std.Deviation
AUDIT FEE	45	20.44	24.47	22.4936	1.18136
AUDITOR ROTATION	45	0	1	0.40	0.495
COMPANY SIZE	45	31.61	35.43	33.1769	1.37124
AUDIT QUALITY	45	0	1	0.42	0.499
Valid N (listwise)	45				

Source: created by author, 2025

Based on the results of descriptive analysis of 45 observation data, it is known that the Audit Fee variable has a minimum value of 20.44 and a maximum of 24.47, with a mean of 22.49 and a standard deviation of 1.18, which shows that the X1 data is quite scattered but still in a relatively reasonable range. The Auditor Rotation variable, which is a dummy variable (0 = no rotation, 1 = rotation), has an average of 0.40, which indicates that about 40% of the companies in the sample experience auditor rotation, while 60% do not. Furthermore, the Company Size variable has a minimum value of 31.61 and a maximum of 35.43, with an average of 33.18 and a standard deviation of 1.37, indicating a significant variation in company size in the sample. Meanwhile, the Audit Quality variable, which is also a dummy variable (0 = low quality, 1 = high quality), has an average of 0.42, indicating that about 42% of companies in the sample use high-quality auditors. Overall, all variables had the same amount of valid data (Valid N), which was 45 observations, indicating that no data was missing in this analysis.

Table 2. Hosmer and Lemeshow Test Results

Hosmer and Lemeshow Test			
Step	Chi-square	Df	Sig.
1	8.730	7	0.273

Source: created by the Author, 2025

Based on the results of the Hosmer and Lemeshow test, a Chi-square value of 8.730 was obtained with a degree of freedom (df) of 7 and a significance value (Sig.) of 0.273. Because the significance value is greater than 0.05, it can be concluded that the logistic regression model is in accordance with the data. This means that there is no significant difference between the observed data and the data predicted by the model, so the model is considered feasible for use in further analysis.

Table 3. Model Fit Test Results (Initial -2LL)

Iteration History, b,c			
Iteration	-2	Log likelihood	Coefficients
			Constant
Step 0	1	61.290	-0.311
	2	61.290	-0.314
	3	61.290	-0.314

a. Constant is included in the model.

b. Initial -2 Log Likelihood: 61.290

c. Estimation terminated at iteration number 3 because parameter estimates changed by less than .001.

Source: created by the Author, 2025

The initial -2 Log Likelihood (-2LL) value in Table 1.3 indicates the model's fit before the independent variables are included. At the initial step, the -2LL value of 61.290 signifies that the model contains only a constant without any predictors, and therefore, it has not yet adequately explained the dependent variable. The model estimation stopped at the third iteration because the parameter changes became minimal, indicating that the model had reached convergence. The subsequent decrease in -2LL values demonstrates an improvement in the model's fit after incorporating the independent variables. Thus, this initial -2LL value serves as an important benchmark for assessing the model's enhancement in predicting audit quality in state-owned enterprises.

Table 4. Model Fit Test Results (-2LL Akhit)

Iteration History, b,c,d						
Iteration	-2	Log likelihood	Coefficients			
			Constant	AUDIT FEE	UDITOR ROTATION(1)	COMPANY SIZE
Step 1	1	51.637	-1.638	-0.833	0.685	0.596
	2	50.665	-3.398	-1.208	0.732	0.898
	3	50.586	-4.125	-1.353	0.729	1.016
	4	50.585	-4.209	-1.369	0.729	1.030
	5	50.585	-4.210	-1.369	0.729	1.030

Method: Enter

Constant is included in the model.

Initial -2 Log Likelihood: 61.290

Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Source: created by Author, 2025

Based on the results of the Model Fit Test, it is known that the initial -2 Log Likelihood (LL) value in step 0 (Step 0) is 61.290, which is a model with only constants without independent variables. After incorporating independent variables such as Audit Fee (X11), Auditor Rotation, and Company Size into the model in step 1 (Step 1), the value of -2LL decreased to 50.585, indicating an increase in model feasibility. This decrease in the value of -2LL shows that the logistic regression model with predictive variables is better at explaining the dependent variable than the initial model (with only constants). The estimation process ended in the 5th iteration because the change in parameter estimation was already very small (less

than 0.001), which indicates that the model has achieved statistical convergence and is suitable for further analysis.

Table 5. Coefficient of Determination
Model Summary

Step	-2	Log likelihood	Cox Square	Snell	R	Nagelkerke R Square
1	50.585a		0.212			0.285

Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Source: created by Author, 2025

Based on the results of the Model Summary, a value of -2 Log Likelihood (LL) of 50.585 was obtained, which shows the level of accuracy of the model in predicting dependent variables; The lower this value, the better the model. The value of Cox & Snell R Square of 0.212 and Nagelkerke R Square of 0.285 indicates that the independent variables in the model are able to explain about 21.2% to 28.5% of the variation that occurs in the dependent variables. Thus, this logistic regression model has quite good explanatory capabilities. The estimation process stopped on the 5th iteration because the change in parameter values was already very small (less than 0.001), which indicates that the model had achieved statistical convergence.

Table 6. Classification Table
Table Classification
Predicted

QUALITY AUDIT Observed			Percentage Correct
	0	1	
	20	6	76.9
	7	12	63.2
			71.1

a. The cut value is .500

Based on the results of the Classification Table, the logistics regression model in Step 1 was able to classify the data with a fairly good level of accuracy. Of the total data with the actual value of Audit Quality = 0, 20 cases were correctly predicted, while 6 cases were misclassified, resulting in an accuracy rate of 76.9% for this category. Meanwhile, for data with an actual value of Audit Quality = 1, 12 cases were successfully classified correctly, and 7 cases were misclassified, resulting in an accuracy rate of 63.2%. Overall, the model's accuracy in predicting Audit Quality was 71.1%, which indicates that this model has a fairly good classification ability in distinguishing between low-quality and high-quality audits. The cut-off value used is 0.500, which means the probability of ≥ 0.5 is classified as 1, and < 0.5 as 0.

Table 7. Logistic Regression Results

Variables in the Equation							
B		S.E.	Wald	Df	Sig.	Exp(B)	
Step 1a	AUDIT FEE	-1.369	0.626	4.778	1	0.029	0.254
	ROTATION AUDITOR (1)	0.729	0.691	1.110	1	0.292	2.072
	SIZE COMPANY	1.030	0.518	3.957	1	0.047	2.801
	Constant	-4.210	8.276	0.259	1	0.611	0.015

a. Variable(s) entered on step 1: AUDIT FEE, AUDITOR ROTATION, COMPANY SIZE.

Source: created by Author, 2025

Based on the results of the logistics regression in Step 1, two independent variables have a significant effect on the Audit Quality because of their significance value (Sig.) < 0.05 , namely Audit Fee (X11) and

Company Size. The Audit Fee variable has a regression coefficient of -1.369 with a significance value of 0.029 and an Exp(B) of 0.254, which indicates that every increase in one unit of the logarithm of audit fees will reduce the company's chances of obtaining a high-quality audit by 74.6%. In contrast, the Company Size has a coefficient of 1.030 with a significance value of 0.047 and an Exp(B) of 2.801, which indicates that the larger the size of the company, the opportunity to obtain a high-quality audit increases by 180.1%. Meanwhile, the Auditor Rotation variable has a positive coefficient of 0.729, but it has no significant effect on audit quality because its significance value is 0.292 (> 0.05), so it cannot be concluded that auditor rotation has a real influence in this model.

Discussion

1. The Effect of Audit Costs on Audit Quality

The results of the logistic regression analysis in this study revealed that there was a correlation between audit costs, audit rotation, company size, and audit quality in state-owned companies in Indonesia. Findings that audit costs have a significant negative effect on audit quality (Sig. 0.029; Exp(B) = 0.254) is in contrast to several previous studies, such as Kurniasih and Rohman (2014) and Ardani (2017), which stated that high costs are positively correlated with audit quality. This contradiction can be explained through the theory of agency conflict and the specific context of BUMN. The high cost of auditing BUMN may not fully reflect the allocation of resources for a comprehensive audit procedure, but rather is influenced by non-technical factors such as political pressure or the interests of certain parties in maintaining a reasonable opinion without exception. This is in line with Dhimadhanu's (2016) criticism that auditor independence can be compromised despite high audit costs, especially in state-run entities with ownership and regulatory complexity.

1. The Effect of Auditor Rotation on Audit Quality

Audit rotation showed no significant effect (Sig. 0.292), although the coefficient was positive. These results confirm the inconsistency of previous findings, such as the research of Andriani and Nursiam (2017) which stated that rotation has no impact on audit quality. In the context of BUMN, the rotation mandated by the regulation (PP No. 20/2015) may not be implemented optimally. The replacement of auditors that is formal—without being accompanied by an increase in the competence of the replacement auditor—has the potential to reduce the continuity of understanding of the company's risk profile, as stated by Ishak et al. (2015). In addition, the characteristics of BUMN that tend to have a structured internal control system may reduce the urgency of auditor rotation as a tool for quality improvement.

2. The Effect of Company Size on Audit Quality

The size of the company was proven to have a significant positive effect (Sig. 0.047; Exp(B) = 2.801), which is consistent with the resource-based view theory and research of Muliawan and Sujana (2017). Large-scale BUMN tend to have complex operational structures, so they need a highly reputable Public Accounting Firm (such as the Big Four) that has adequate technical capacity and resources. Affiliation with this large KAP enhances the credibility of audits due to its rigorous standards of procedure and experience in dealing with public sector-specific risks. However, these findings need to be interpreted with caution, given that the company size variables in this study are measured through total assets, which do not fully represent business complexity or the level of corporate governance.

Conclusion and future direction

This study reveals that audit costs and company size have a significant effect on audit quality in state-owned companies listed on the IDX for the 2018-2024 period. The findings suggest that increased audit costs are negatively related to audit quality, indicating that high costs do not necessarily warrant better audits, but may reflect complexity or risks that require greater resource allocation. On the other hand, the size of the company has a significant positive influence, where large companies tend to use auditors from highly reputable KAPs, thereby improving the quality of audits. Auditor turnover did not show a significant effect, suggesting that auditor turnover does not necessarily improve objectivity or understanding of a company's risk profile. The theoretical implications of this study reinforce the signal theory that a company's commitment to transparency can be reflected through audit practices, while its practical implications emphasize the importance of considering company characteristics in determining audit strategies.

Involvement

Theoretical Implications: This study contributes to the theoretical understanding of audit quality by examining the effects of audit fees, auditor rotation, and company size in the context of Badan Usaha Milik Negara (BUMN) in Indonesia. The findings challenge existing assumptions about the relationship between audit fees and audit quality, showing a significant negative effect of audit fees on quality, which suggests potential non-technical pressures such as agency conflicts in BUMN. Additionally, the positive effect of company size on audit quality emphasizes the role of reputable Public Accounting Firms (KAP) in enhancing audit practices. These results offer new insights into the dynamics of audit quality, especially within the unique context of Indonesian BUMN, and encourage further exploration of how corporate size and fees impact audit outcomes.

Managerial Implications: The research findings provide valuable insights for managers, particularly those in BUMN, in setting audit fees and selecting Public Accounting Firms. The significant negative relationship between high audit fees and audit quality highlights the potential risks associated with non-technical pressures and the need for careful regulation of audit fee structures. Additionally, the study underscores the importance of engaging reputable KAPs, particularly for larger companies, to ensure high-quality audits. Managers can use these insights to make informed decisions on auditor rotation and fee setting, contributing to improved audit practices and organizational transparency.

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