

PROFESSIONAL SKEPTICISM, INTEGRITY, AND AUDIT QUALITY: TIME BUDGET PRESSURE AS A MODERATOR

Fariz Zulham^{1*}, Amrie Firmansyah²

¹Universitas Trisakti, Indonesia

²Universitas Pembangunan Nasional Veteran Jakarta, Indonesia

*Corresponding Author:

farizzulham90@gmail.com

Abstract

This study examines the influence of professional skepticism and integrity on audit quality, with time budget pressure as a moderating variable, among external auditors working at Public Accounting Firms in Greater Jakarta. The research employs a quantitative approach with primary data collected through questionnaires distributed to 59 auditors. Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4 software. The results indicate that professional skepticism does not significantly affect audit quality, suggesting that skeptical attitudes in this study reflect a more defensive orientation toward audit risk rather than contributing to quality improvement. Integrity has a significant positive effect on audit quality, confirming that auditors who uphold high integrity standards produce more reliable and credible audits. Time budget pressure does not moderate the relationship between professional skepticism and audit quality, nor between integrity and audit quality, indicating that internal auditor characteristics operate independently of time constraints. These findings highlight that integrity is a critical determinant of audit quality, while professional skepticism and time budget pressure play limited roles in the Indonesian audit context. The study contributes to the auditing literature by extending attribution theory to audit quality formation and provides practical implications for Public Accounting Firms in developing auditor integrity through ethics training and professional development programs.

Keywords: Audit Quality, Professional Skepticism, Integrity, Time Budget Pressure, Public Accounting Firm

1. Introduction

Users of financial statements tend to show a higher level of doubt about the auditor's opinion as various causes related to audit quality deterioration emerge. One relevant example is the sanction of Public Accountants Nunu Nurdiyaman and Jenly Hendrawan, as well as the Public Accounting Firm Kosasih, Nurdiyaman, Mulyadi Thahjo & Partners (KNMT) on January 23, 2023 (Respati & Sukmana, 2023). In this case, Nunu Nurdiyaman was prohibited from providing services to the financial services sector since February 28, 2023, while Jenly Hendrawan was subject to a similar ban since February 24, 2023. In addition, the KAP KNMT is also not allowed to receive new assignments from the date of the determination of sanctions. The imposition of this sanction is caused by the auditor's inability to identify indications of manipulation of financial statements in Wanaartha Life Insurance, especially related to savings plan type insurance products that have a high level of risk. The manipulation was carried out by the company's management and shareholders, but was not successfully disclosed in the audit process. As a result, the company's financial condition appears to meet the applicable regulations, thus reflecting

a failure to maintain audit quality (Sholeh & Widyastuti, 2025). The decline in public confidence in the reliability of financial statements is a real impact of a series of audit failures that failed to detect material manipulation, as happened in the case of sanctions against KAP Kosasih, Nurdiyaman, Mulyadi Tjahjo & Partners related to the Wanaartha scandal. The auditor's inability to identify manipulation schemes by management reflects a systemic audit quality deficit, which is exacerbated by the findings of the Audit Board (BPK) regarding hundreds of internal control weaknesses that actually continue to receive a Reasonable Without Exception opinion.

The urgency of this research is driven by several critical factors. First, audit quality in Indonesia remains a significant concern because various findings show weaknesses in the audit process. The Financial Audit Agency (BPK) found as many as 945 problems in the internal control system in the financial statements of ministries and institutions. The findings show that there are still many weaknesses in financial management that should be detected through the audit process. However, most financial statements still obtain a Fair Without Exception opinion (WTP), raising questions about whether the audit opinion provided truly reflects the actual conditions (www.bpk.go.id). This phenomenon is reinforced by various audit cases in Indonesia that show that auditors do not always succeed in adequately uncovering irregularities, which ultimately has an impact on declining public trust in the audit profession (Sulaeman et al., 2024). Second, the inconsistency of previous research findings regarding the influence of professional skepticism and integrity on audit quality indicates a research gap that needs to be addressed. Professional skepticism reflects a mindset of questioning and critical evaluation of audit evidence, which contributes positively to improving audit quality (Dwijayanti et al., 2025). Strong auditor integrity tends to lead to greater freedom of scrutiny and greater resistance to pressure, which directly improves audit quality (Monica et al., 2024). However, the role of time budget pressure as a moderating variable in these relationships has not been extensively studied, particularly in the Indonesian context. Third, the selection of professional skepticism and integrity as independent variables focuses on attribution theory, where professional skepticism describes how the behavior of an auditor who thinks skeptically includes factors from within or outside an auditor. The level of professional skepticism can be measured by the auditor's level of doubt about the audit evidence by critically evaluating the evidence and carrying out the task with diligence and care in collecting audit evidence (Dwijayanti et al., 2025). Meanwhile, satisfactory audit quality can only be achieved when an auditor can maintain high integrity, measured through honesty, courage, wisdom, and responsibility (Monica et al., 2024). Fourth, the inclusion of time budget pressure as a moderating variable represents a research gap, as optimally managed time budget pressure can improve the efficiency of audit implementation, ensure compliance with planned schedules, and still produce high-quality audit reports. However, time budget pressure also risks having negative consequences, especially on the level of professionalism and integrity in carrying out duties (Sholeh & Widyastuti, 2025).

The quality of the audit produced by the auditor can be influenced by several factors including professional skepticism, integrity, and time budget pressure. Audit services provided by Public Accounting Firms (KAP) are basically a form of service that relies heavily on trust. The level of trust given by clients and the public is the main factor that encourages them to choose and use certain KAP services. In other words, the reputation and credibility built through public trust play an important role in attracting the interest of the users of the audit service (Santoso et al., 2020). Conceptually, the quality of an

audit is largely determined by the auditor's ability to critically evaluate evidence, which is reflected in the attitude of professional skepticism, where the higher the auditor's skepticism, the more likely an error to be detected. In the midst of increasingly complex and uncertain global business dynamics, the public accounting profession has experienced a significant escalation. Auditors are no longer only required to give an opinion on the fairness of financial statements, but also bear a moral responsibility to detect indications of fraud or material errors that have the potential to mislead information users. However, the reality on the ground shows that the quality of audits is still often questioned. Cases of audit failure, both at the international and domestic levels, are often rooted in the weak application of professional skepticism and integrity when auditors face suspicious findings (Stuart Stevens et al., 2024). Time budget pressure can be a pressure faced by auditors due to strict time constraints during audits, which can affect audit quality. Auditors are required to manage budgets and time effectively by considering the limitations of available resources under various conditions, including profitability aspects, limited human resources, and funding constraints. If the budget and time that have been agreed with the client can be realized optimally, it has the potential to provide economic benefits. In addition, the audit schedule that has been set serves as the main reference in the implementation of audit procedures, as well as directing the auditor to achieve efficient and effective performance in completing audit assignments (Sholeh & Widyastuti, 2025).

The research gap in this study lies in the limited understanding of how professional skepticism and integrity influence audit quality, with time budget pressure as a moderating variable. While individual studies have examined the direct effects of professional skepticism and integrity on audit quality, the role of time budget pressure as a moderating mechanism remains underexplored. Additionally, most previous studies have focused on developed markets or other contexts, leaving a significant gap in knowledge regarding the dynamics of audit quality in the Indonesian context. The inconsistency of previous research findings indicates that the influence of professional skepticism and integrity on audit quality may be contingent on contextual factors such as time budget pressure.

The novelty of this research lies in the integration of several aspects. First, this study focuses on the Indonesian audit context, which represents a unique environment characterized by various audit quality challenges and regulatory developments. Second, this study develops an integrative model that simultaneously examines the influence of professional skepticism and integrity on audit quality, with time budget pressure as a moderating variable. Third, this study positions time budget pressure as a moderating variable, enabling the examination of whether time constraints strengthen or weaken the relationship between professional skepticism, integrity, and audit quality. Fourth, this study contributes to the limited empirical evidence on audit quality determinants in Indonesia, providing insights into how professional skepticism, integrity, and time budget pressure influence audit quality.

The purpose of this study is to examine the influence of professional skepticism and integrity on audit quality, with time budget pressure as a moderating variable. Specifically, this research aims to: (1) analyze the effect of professional skepticism on audit quality; (2) analyze the effect of integrity on audit quality; and (3) analyze the moderating role of time budget pressure in the relationships between professional skepticism, integrity, and audit quality.

The contribution of this research is multifaceted. From a theoretical perspective, this research contributes to the enrichment of literature on audit quality by extending the application of attribution theory to the context of audit quality formation. The findings contribute to the understanding of how professional skepticism and integrity influence audit quality and how time budget pressure moderates these relationships. From a practical perspective, this study provides actionable insights for auditors, public accounting firms, and regulators in assessing and improving audit quality. The results are expected to provide practical benefits for auditors in maintaining professional skepticism and integrity in their work, for public accounting firms in managing time budget pressure effectively, and for regulators in developing policies to enhance audit quality in Indonesia. Furthermore, the research serves as a reference for future studies exploring the dynamics of audit quality in the Indonesian context.

2. Theoretical Background

2.1 Attribution Theory

Attribution theory, developed by Heider (1981), explains that individual behavior is influenced by both internal and external factors. In the context of auditing, attribution theory provides a framework for understanding how auditors' professional skepticism and integrity, as internal factors, interact with external pressures such as time budget pressure to influence audit quality. Attribution theory is understood as a cognitive process to identify the causes behind a behavior through fundamental questions such as "why" or "what is the background" of the action, either by oneself or by others. This process plays an important role in providing an understanding of the reasons underlying behavior, especially those related to individual attitudes and characteristics (Lannai et al., 2025). In auditing, the theory suggests that auditors' behavior and decision-making are shaped by their personal attributes (dispositional factors) as well as situational pressures (environmental factors). Professional skepticism is seen as an internal attribution inherent in the auditor's personality and competence, while time budget pressure is an external attribution factor that limits the auditor's room to maneuver (Hariani, 2019).

2.2 Professional Skepticism and Audit Quality

Professional skepticism is an essential element that must be inherent in every audit implementation. In SPAP (2001) (part SA 230 paragraph 230.2), professional skepticism of auditors is defined as an attitude characterized by a mindset that always questions and critically evaluates audit evidence. Auditors are required to obtain an adequate level of confidence through sufficient and relevant audit evidence to support the findings and conclusions produced (Lannai et al., 2025). Professional skepticism reflects a mindset of questioning and critical evaluation of audit evidence, especially when assessing management statements. The level of professional skepticism can be measured by the auditor's level of doubt about the audit evidence, the ability to evaluate the evidence empirically, and collect audit evidence in detail and adequately (Dwijayanti et al., 2025). Professional skepticism is the cognitive foundation for auditors in critically and in-depth evaluation of audit evidence. This attitude requires auditors not to simply accept management representations without adequate verification, thus directly contributing to improving the quality of audits through the detection of material misrepresentations and fraud (Agustin & Agoes, 2023).

Studies confirm a strong positive relationship between professional skepticism and audit quality. Puspitasari et al. (2019), Putranami and Sinabutar (2021), Simanjuntak and

Noormansyah (2024), and Dwijayanti et al. (2025) found that professional skepticism contributes positively to improving audit quality. In tight time conditions, the dependence of audit quality on auditors' skepticism becomes much greater than under normal conditions. Skeptical auditors will respond to time pressures by conducting a more selective but in-depth evaluation of the evidence, so that the quality of the audit is maintained or even improved by focusing on high-risk areas. Without strong skepticism, time pressure will actually trigger dysfunctional behavior that lowers the quality of audit results (Diana et al., 2025). Based on this description, it can be hypothesized that professional skepticism has a positive and significant influence on audit quality.

H1: Professional Skepticism has a positive effect on Audit Quality

2.3 Integrity and Audit Quality

Integrity is one of the fundamental qualifications that auditors must have in carrying out audits properly. This value requires auditors to uphold honesty and transparency, as well as demonstrate a courageous, thoughtful, and responsible attitude in every stage of the audit process (Hamidah et al., 2024). Integrity puts honesty as a key principle, even though it has the potential to cause discomfort in professional relationships. This shows that auditors with integrity are able to be open and objective, thus contributing to improving the quality of the audits produced. On the other hand, if the auditor hides information that should be disclosed in accordance with applicable regulations, it has the potential to reduce the quality of the audit and cause broader consequences, including the risk of future lawsuits (Santoso et al., 2020). Satisfactory audit quality can only be achieved when an auditor can maintain high integrity (Dwijayanti et al., 2025). Integrity is an internal attribute that underlies the honesty, courage, and responsibility of auditors in presenting objective reports (Monica et al., 2024).

Studies confirm a strong positive relationship between audit integrity and quality. Santoso et al. (2020), Hamidah et al. (2024), Khasanah et al. (2025), and Study et al. (2026) confirmed that the higher the integrity by an auditor, the better the quality of the audit produced. Attribution theory explains that when individuals face high situational stress, the quality of their behavior will depend heavily on the dispositional strengths or internal character they have. An auditor with solid integrity tends to attribute the success of his job to internal moral values, so even under tight time pressure, he will remain consistent on the standards of professionalism to maintain the quality of the audit (Hariani, 2019). When time is limited, auditors are faced with a dilemma between time efficiency or procedural effectiveness. Auditors with high integrity will view this pressure as a situational challenge that must be overcome without sacrificing the honesty of the audit results. Conversely, if auditor integrity is low, time pressure can be a justification for engaging in dysfunctional behavior that degrades audit quality (Sari et al., 2024). Based on this description, a hypothesis can be formulated that integrity has a positive and significant influence on audit quality.

H2: Integrity has a positive effect on Audit Quality

2.4 Time Budget Pressure as Moderation

Time budget pressure refers to the pressure conditions experienced by auditors due to strict time constraints in the implementation of audits, which ultimately has the potential to affect the quality of audit results. Auditors are required to manage budgets and time effectively by considering the limitations of available resources under various conditions, including profitability aspects, limited human resources, and funding constraints. If the

budget and time that have been agreed with the client can be realized optimally, it has the potential to provide economic benefits. In addition, the audit schedule that has been set serves as the main reference in the implementation of audit procedures, as well as directing the auditor to achieve efficient and effective performance in completing audit assignments (Sholeh & Widyastuti, 2025). Time budget pressure optimally managed can improve the efficiency of audit implementation, ensure compliance with planned schedules, and still produce high-quality audit reports. However, time budget pressure also risks having negative consequences, especially on the level of professionalism and integrity in carrying out duties (Sholeh & Widyastuti, 2025).

2.4.1 Time Budget Pressure Strengthens the Influence of Professional Skepticism on Audit Quality

Professional skepticism is the cognitive foundation for auditors in critically and in-depth evaluation of audit evidence. This attitude requires auditors not to simply accept management representations without adequate verification, thus directly contributing to improving the quality of audits through the detection of material misrepresentations and fraud (Agustin & Agoes, 2023). Lannai et al. (2025) state that attribution theory is understood as a cognitive process to identify the causes behind a behavior through fundamental questions such as "why" or "what is the background" of the action, either by oneself or by others. Attribution theory describes how individuals interpret the cause of an event or behavior. Professional skepticism is seen as an internal attribution inherent in the auditor's personality and competence. Instead, time budget pressure is an external attribution factor that limits the auditor's room to maneuver (Hariani, 2019). In tight time conditions, the dependence of audit quality on auditors' skepticism becomes much greater than under normal conditions. Skeptical auditors will respond to time pressures by conducting a more selective but in-depth evaluation of the evidence, so that the quality of the audit is maintained or even improved by focusing on high-risk areas. Without strong skepticism, time pressure will actually trigger dysfunctional behavior that lowers the quality of audit results (Diana et al., 2025). Based on this description, it can be hypothesized that time budget pressure strengthens the influence of professional skepticism on audit quality.

H3: Time Budget Pressure strengthens the positive influence of Professional Skepticism on Audit Quality

2.4.2 Time Budget Pressure Strengthens the Influence of Integrity on Audit Quality

Integrity is an internal attribute that underlies the honesty, courage, and responsibility of auditors in presenting objective reports. On the other hand, time budget pressure is situational pressure that arises due to limited time resources to complete audit procedures (Hamidah et al., 2024). Attribution theory explains that when individuals face high situational stress, the quality of their behavior will depend heavily on the dispositional strengths or internal character they have. An auditor with solid integrity tends to attribute the success of his job to internal moral values, so even under tight time pressure, he will remain consistent on the standards of professionalism to maintain the quality of the audit (Hariani, 2019). High time budget pressure serves as a "resilience test" for the integrity of the auditor. When time is limited, auditors are faced with a dilemma between time efficiency or procedural effectiveness. Auditors with high integrity will view this pressure as a situational challenge that must be overcome without sacrificing the honesty of the audit results. Conversely, if auditor integrity is low, time pressure can be a justification

for engaging in dysfunctional behavior that degrades audit quality (Sari et al., 2024). Therefore, time budget pressure strengthens the role of integrity as the main fortress in maintaining the quality of audit results; the greater the situational pressure exerted, the more crucial the role of internal integrity in ensuring that audit quality is maintained. Based on this description, it can be hypothesized that time budget pressure strengthens the influence of integrity on audit quality.

H4: Time Budget Pressure strengthens the positive influence of Integrity on Audit Quality

2.5 Conceptual Framework

Based on the theoretical foundation, review of previous research, and hypothesis development, the conceptual framework of this research is presented as follows:

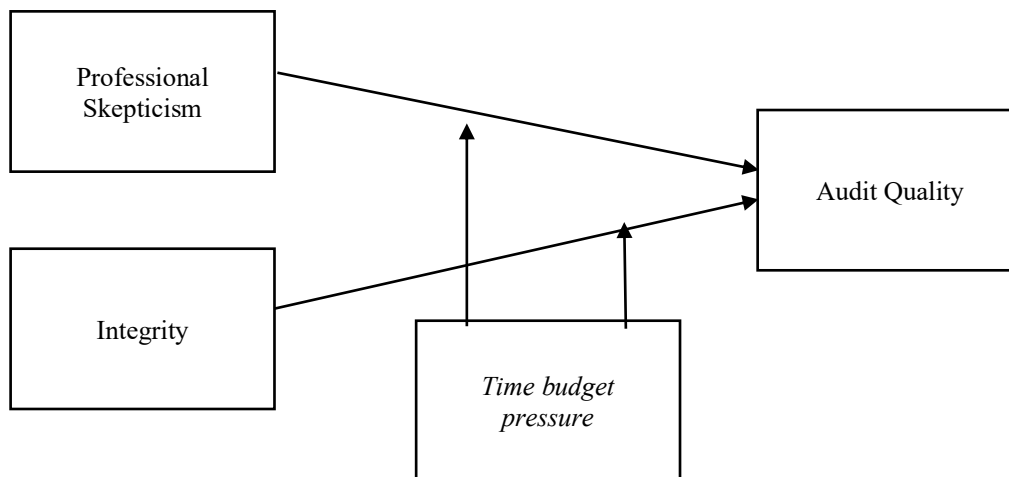


Figure 1. Conceptual Framework

3. Methods

3.1 Research Design

This study employs a quantitative approach using descriptive and verificative methods to examine the effect of professional skepticism and integrity on audit quality, with time budget pressure as a moderating variable. The quantitative approach is considered appropriate because the study aims to empirically test the proposed hypotheses using statistical analysis of numerical data derived from questionnaire responses. The verificative method is used to analyze the causal relationship between professional skepticism, integrity, and audit quality, as well as the moderating role of time budget pressure in these relationships. The explanatory research design enables the examination of causal relationships between independent variables (Professional Skepticism and Integrity), moderating variable (Time Budget Pressure), and dependent variable (Audit Quality). This study uses a cross-sectional approach, where the data collection process is carried out in a certain period of time so that it can describe the characteristics and conditions of respondents at the time the research is carried out.

3.2 Population and Sample

The population in this study consists of external auditors working at Public Accounting Firms in Greater Jakarta. The sample selection was carried out using purposive sampling technique, with the criteria that respondents are external auditors who have worked at Public Accounting Firms in Greater Jakarta and have audit experience of at least one year.

The data used is primary data obtained through the distribution of questionnaires to external auditors working at Public Accounting Firms in Greater Jakarta, both in the form of softcopy and hardcopy. The purposive sampling approach ensures that the selected respondents possess the characteristics necessary to adequately address the research objectives, particularly regarding their experience as external auditors and their understanding of professional skepticism, integrity, time budget pressure, and audit quality.

3.3 Data Collection Techniques

Primary data were collected through a survey method using a structured questionnaire as a research instrument. The questionnaire contains questions related to professional skepticism, integrity, time budget pressure, and audit quality, with the aim of obtaining relevant information about these variables. Each indicator was measured using a six-level Likert scale ranging from strongly disagree (1) to strongly agree (6) to assess respondents' level of approval of the statement submitted. The questionnaire was distributed through various channels, including direct distribution and online platforms, to reach a wide range of respondents across different Public Accounting Firms in Greater Jakarta. The research instrument was developed based on validated scales from previous studies and modified to fit the context of external auditors in Indonesia.

3.4 Operational Definition of Variables

Table 1. Operational Definition and Measurement of Variables

Variable	Type	Definition	Indicators	Scale	References
Audit Quality (Y)	Dependent	The extent to which auditors are able to detect and report material misstatements in financial statements, thereby providing reliable assurance to stakeholders	1. Level of compliance with audit procedures	Likert 1–6	Putranami & Sinabutar (2021)
			2. Use of proper audit techniques		
			3. Auditor's ability to identify fraud risks		
			4. Complete and adequate audit documentation		
			5. Implementation of effective internal quality control		
			6. Compliance with the code of ethics of the auditor profession		

Professional Skepticism (X ₁)	Independent	An attitude characterized by a mindset that always questions and critically evaluates audit evidence	1. Personal Quality 2. Auditor's Attitude 3. Auditor expertise 4. Ability to critically evaluate evidence and assess its adequacy and suitability 5. An attitude that is not easy to believe and always asks about suspicious things	Likert 1–6	Putranami & Sinabutar (2021)
Integrity (X ₂)	Independent	The fundamental qualification that requires auditors to uphold honesty, transparency, courage, wisdom, and responsibility in every stage of the audit process	1. Auditor's Honesty 2. The courage of the auditor 3. Auditor's Wise Attitude 4. Professional responsibilities 5. Firmness in principle	Likert 1–6	Sitorus & Kusumastuti (2025)
Time Budget Pressure (Z)	Moderating	Pressure conditions experienced by auditors due to strict time constraints in the implementation of audits	1. Time constraints in task completion 2. Meet time targets during assignments 3. Focus on time-constrained tasks 4. Time budget communication 5. Efficiency in	Likert 1–6	Khulsum et al. (2025)

the audit
process
6. Performance
appraisal from
superiors
7. Time budget
is an absolute
decision from
the boss

Source: Developed for this research (2026)

3.5 Data Analysis Techniques

Data analysis in this study is conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) with the assistance of SmartPLS 4 software. PLS-SEM is a multivariate statistical method suitable for analyzing relationships between variables, particularly when multiple independent and dependent variables are involved with complex models and moderation effects. PLS-SEM was selected because it is robust for complex models with multiple constructs, does not require multivariate normal distribution assumptions, and is appropriate for predictive and exploratory research.

The analysis stages include:

- 1) Descriptive Statistics: Descriptive statistics are employed to describe the characteristics of respondents and the pattern of answer distribution in each research indicator, including mean, standard deviation, minimum, and maximum values for all variables examined in the study.
- 2) Measurement Model (Outer Model) Evaluation: Conducted to ensure the quality of the instruments used. The test includes:
 - a. Convergent Validity: Assessed through Loading Factor values (> 0.70 ideal, $0.50-0.60$ acceptable) and Average Variance Extracted ($AVE > 0.50$)
 - b. Discriminant Validity: Tested to ensure the differences between constructs using cross-loadings and the Fornell-Larcker criterion
 - c. Reliability: Tested using Composite Reliability and Cronbach's Alpha (> 0.70)

Table 2. Rule of Thumb for Measurement Model Evaluation

Validity and Reliability	Parameter	Rule of Thumb
Convergent Validity	Loading Factor	> 0.70
	Average Variance Extracted (AVE)	> 0.50
Discriminant Validity	Cross Loading	> 0.70 for each variable
	Square Root of AVE and Latent Variable Correlations	Square Root of AVE $>$ Correlation between latent variables
Reliability	Cronbach's Alpha	> 0.70
	Composite Reliability	> 0.70

Source: Hair et al. (2022)

- 3) Structural Model (Inner Model) Evaluation: Conducted to assess the model's ability to explain the relationships between constructs. This evaluation includes:
 - a. Coefficient of Determination (R^2): To measure the model's explanatory power on endogenous variables (0.67 = strong, 0.33 = moderate, 0.19 = weak)
 - b. Effect Size (f^2): To measure the magnitude of the effect of each construct on endogenous variables
 - c. Predictive Relevance (Q^2): To assess the model's ability to produce relevant predictions
- 4) Hypothesis Testing: Conducted using bootstrapping to obtain path coefficient estimates, t-statistics, and p-values on each relationship tested. This test includes the influence of Professional Skepticism and Integrity on Audit Quality, as well as the influence of interaction between Professional Skepticism and Time Budget Pressure, and Integrity and Time Budget Pressure on Audit Quality as a form of testing for moderation variables. The moderation effect is declared significant when the coefficient of the interaction path shows a level of significance that meets the established test criteria, indicated by a t-statistic > 1.96 and p-value < 0.05 (Hair et al., 2022).

4. Results and Discussion

4.1 Descriptive Statistics

Table 3. Descriptive Statistics and Normality Test

Construct	Item Code	Mean	Median	Min	Max	Std. Dev.
Audit Quality	KA1	5.441	6.000	2.000	6.000	0.743
	KA2	5.441	6.000	3.000	6.000	0.743
	KA3	5.254	5.000	3.000	6.000	0.653
	KA4	5.390	6.000	1.000	6.000	0.883
	KA6	5.661	6.000	4.000	6.000	0.571
Professional Skepticism	SP1	5.542	6.000	4.000	6.000	0.646
	SP2	5.458	6.000	4.000	6.000	0.646
	SP3	5.356	6.000	4.000	6.000	0.776
	SP4	5.407	6.000	4.000	6.000	0.692
	SP5	5.593	6.000	4.000	6.000	0.556
Integrity	ITG1	5.627	6.000	4.000	6.000	0.517
	ITG2	5.407	6.000	4.000	6.000	0.667
	ITG3	5.458	6.000	3.000	6.000	0.721
	ITG4	5.678	6.000	4.000	6.000	0.502
	ITG5	5.627	6.000	4.000	6.000	0.608
Time Budget Pressure	TBP1	5.237	5.000	3.000	6.000	0.788
	TBP4	5.237	5.000	4.000	6.000	0.767
	TBP5	5.339	5.000	4.000	6.000	0.704
	TBP6	5.153	5.000	3.000	6.000	0.879

Source: Processed data (2026)

Note: KA = Audit Quality, SP = Professional Skepticism, ITG = Integrity, TBP = Time Budget Pressure

Table 3 shows the descriptive statistics and normality test results for all research variables. The data from the questionnaire results shows that on average each item answered by the respondent has a value range from 5.153 to 5.678. This indicates that most of the respondents who responded tended to agree with the items proposed, especially in the Audit Quality (KA), Professional Skepticism (SP), Integrity (ITG), and Time Budget Pressure (TBP) constructs. From the statistical data, it can be seen that the average mean value is smaller than the median value, indicating that the data obtained has a distribution pattern skewed to the left (Negative Skewed).

4.2 Structural Equation Modelling (SEM)

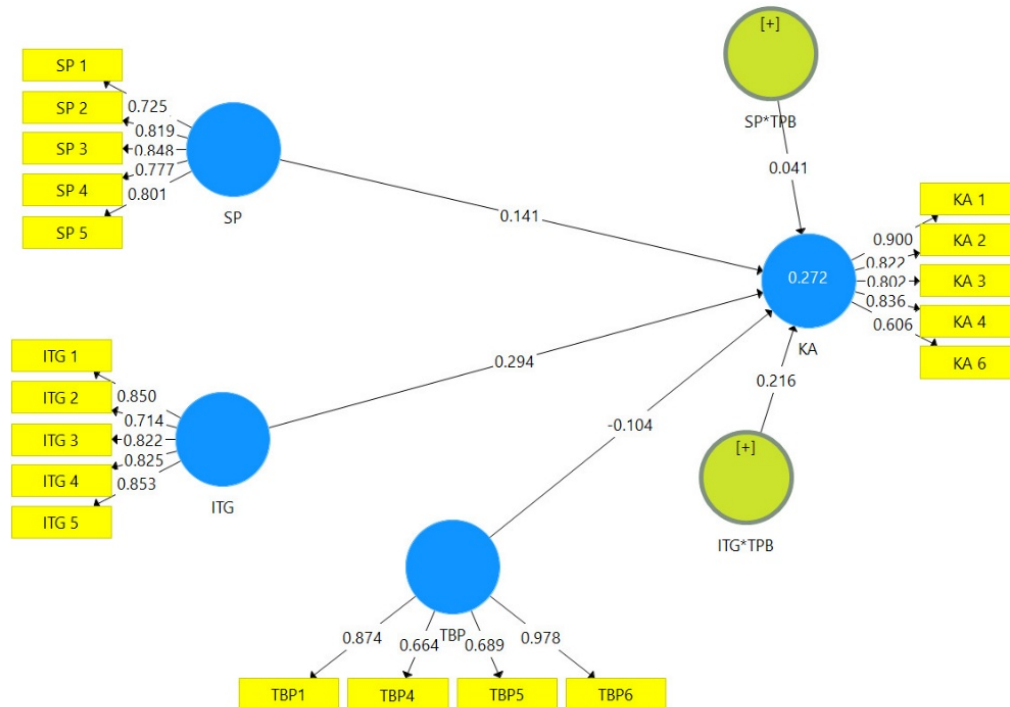


Figure 2. PLS-SEM Path Model using SmartPLS 4.1.1.8
Source: Processed data (2026)

4.3 Measurement Model Assessment: Construct Validity and Reliability

In this study, 2 types of validity and reliability test models were used, namely convergent validity (outer loading, composite reliability, average variance extracted, and Cronbach's Alpha) and discriminant validity (HTMT and Fornell-Larcker Criterion).

4.3.1 Convergent Validity

In this study, the model will be accepted if the validity test results for outer loading and Average Variance Extracted (AVE) are greater than 0.5. Furthermore, the reliability test values for Composite Reliability (CR) and Cronbach's Alpha were greater than 0.7, respectively. Table 4 shows the results of convergent validity values that have been processed using SmartPLS 4.1.1.8 and the results are obtained in each validity and reliability test to meet the standards that have been set. So it can be concluded that the model that has been built is valid and reliable.

Table 4. Convergent Validity Results

Construct	Item Description	Outer Loading	Cronbach's Alpha	CR	AVE
Audit Quality			0.854	0.897	0.640

Construct	Item Description	Outer Loading	Cronbach's Alpha	CR	AVE
Professional Scepticism	The audit procedures carried out are sufficient to support the audit opinion given	0.900	0.854	0.896	0.632
	The results of the resulting audit can be trusted by the users of the financial statements	0.822			
	The audit process at my KAP resulted in relevant and value-added findings	0.800			
	The resulting audit report reflects the actual condition of the audited entity	0.836			
	The audit conducted has been carried out in accordance with the applicable audit standards	0.606			
Integrity	I always submit the results of the audit according to the actual conditions	0.725	0.872	0.908	0.664
	I dare to disclose the audit findings even though it risks causing conflicts	0.819			
	I stick to my professional principles despite pressure from other parties	0.848			
	I carry out audit duties honestly and responsibly	0.777			
	I will not change the results of the audit for any particular interest	0.801			
	I always submit the results of the audit according to the actual conditions	0.850			

Construct	Item Description	Outer Loading	Cronbach's Alpha	CR	AVE
Time Budget Pressure	I dare to disclose the audit findings even though it risks causing conflicts	0.714			
	I stick to my professional principles despite pressure from other parties	0.822			
	I carry out audit duties honestly and responsibly	0.825			
	I will not change the results of the audit for any particular interest	0.853			
			0.890	0.883	0.659
	The time given to complete an audit is often not enough	0.874			
	I am under pressure to complete audit work quickly	0.664			
	I often feel chased by deadlines in audit work	0.689			
	I feel like the workload isn't worth the time available	0.978			

Source: Processed data (2026)

Note: KA = Audit Quality, SP = Professional Skepticism, ITG = Integrity, TBP = Time Budget Pressure

4.3.2 Discriminant Validity

In this study, the model will be accepted if the discriminant validity value between variables for the Heterotrait-Monotrait Ratio of Correlations (HTMT) is less than 0.9 and the square root value of the AVE for each construct (diagonal table) is greater than the correlation value of the constructs with each other on the Fornell-Larcker Criterion. Table 5 and Table 6 indicate HTMT values and Fornell-Larcker Criterion values obtained from SmartPLS 4.1.1.8.

Table 5. Heterotrait-Monotrait Ratio of Correlations (HTMT)

Construct	ITG	KA	SP	TBP
ITG				
KA	0.513			
SP	0.917	0.466		
TBP	0.139	0.117	0.182	

Source: Processed data (2026)

Note: KA = Audit Quality, SP = Professional Skepticism, ITG = Integrity, TBP = Time Budget Pressure

Based on Table 5, it can be seen that the HTMT value obtained is less than 0.9, with the largest value being 0.917 and the smallest value 0.076. This shows that each construct in this study is completely unique and different from the others.

Table 6. Fornell-Larcker Criterion

Construct	ITG	KA	SP	TBP
ITG	0.815			
KA	0.442	0.800		
SP	0.794	0.399	0.795	
TBP	-0.125	-0.146	-0.139	0.812

Source: Processed data (2026)

Note: KA = Audit Quality, SP = Professional Skepticism, ITG = Integrity, TBP = Time Budget Pressure

The same is also shown by **Table 6** which reinforces that each construct in this study is really unique and different from other constructs can be seen that the value on the diagonal of the table is greater than the correlation value below it.

4.4 Structural Model Assessment: Hypothesis Testing

The next step of analysis is to test the hypothesis using the bootstrapping method with a one-way (1-tailed) approach at a significance level of $p < 0.1$. The hypothesis will be accepted if the t-statistic value is greater than 1.28 and the p-value is less than 0.1. Table 7 shows the results of 4 hypotheses that have been developed previously.

Table 7. Hypothesis Testing Results

Hypothesis	Path	Std. Beta	Std. Error	t-Value	P-Value	Confidence Interval		Results
						10%	90%	
H1	SP → KA	0.141	0.176	0.671	0.251	-0.090	0.441	Rejected
H2	ITG → KA	0.294	0.277	1.333	0.091	0.001	0.546	Accepted
H3	TBP*SP → KA	0.041	0.131	0.182	0.428	-0.152	0.414	Rejected
H4	TBP*ITG → KA	0.216	0.125	0.942	0.173	-0.157	0.416	Rejected

Source: Processed data (2026)

Note: KA = Audit Quality, SP = Professional Skepticism, ITG = Integrity, TBP = Time Budget Pressure

Table 8 shows the values of the Coefficient of Determination (R^2), Predictive Relevance (Q^2), and Effect Size (f^2). Based on the R^2 value, it can be concluded that 27.2% in the Audit Quality variant can be explained by the variables of Professional Skepticism and Integrity with Time Budget Pressure acting as a moderation variable. Furthermore, judging from f^2 , the effect of interaction from Integrity on Audit Quality has a direct impact on the medium category (0.041).

Table 8. Coefficient of Determination (R^2) and Effect Size (f^2)

Construct	R^2	Q^2
Audit Quality	0.272	0.203
Path	f^2	Category
SP → KA	0.010	Small

ITG → KA	0.041	Medium
TBP*SP → KA	0.001	Small
TBP*ITG → KA	0.021	Medium

Source: Processed data (2026)

Note: KA = Audit Quality, SP = Professional Skepticism, ITG = Integrity, TBP = Time Budget Pressure

4.5 Discussion

4.5.1 The Influence of Professional Skepticism on Audit Quality

Based on the results of data analysis and hypothesis testing results, it shows that the influence of Professional Skepticism has a positive effect on audit quality. Thus, the hypothesis does not show that the effect of professional skepticism has a positive effect on the meaning of audit quality, this means that professional skepticism does not affect audit quality, which can be explained by the characteristics of auditor skepticism which in this study reflects more defensive attitude towards audit risk. Auditors tend to show a high level of skepticism as a form of anticipation of potential errors or mistakes that can have consequences in the future. This condition indicates that increased professional skepticism oriented towards risk avoidance does not necessarily contribute to improving audit quality, and even potentially lowers it. So this is in line with attribution theory that explains whether the skeptical auditor's behavior is a factor from within or outside of an auditor, the level of professional skepticism can be measured by the auditor's level of doubt about the audit evidence, the ability to evaluate the evidence empirically, and collect audit evidence in detail and adequately (Dwijayanti et al., 2025).

The results of this study are in line with the explanation that the higher the level of professional caution and skepticism that the auditor has in carrying out the audit procedure, the greater his ability to detect and understand the actual conditions of the object of examination, which can ultimately improve the quality of the audit (Sari et al., 2024). The results of this study are in accordance with the research conducted where auditor skepticism has not been proven to affect audit quality because this attitude has become an inherent characteristic in the implementation of audits (Sambo et al., 2025). Auditors in general have understood that various problems that require professional skepticism are part of the job responsibilities that must be handled effectively to achieve audit objectives.

4.5.2 The Influence of Integrity on Audit Quality

Based on the results of data analysis and hypothesis testing results, it shows that the influence of Integrity has a positive effect on audit quality, thus the hypothesis is accepted. These results show that auditors who uphold high integrity standards are better able to produce audits that are reliable, credible, and useful for decision-making. Strong integrity encourages auditors to carry out the audit process consistently in accordance with applicable professional standards and moral values. This condition allows the auditor to evaluate audit evidence impartially and disclose the audit results openly and credibly. This is in line with attribution theory which explains that Integrity serves as a moral foundation that shapes auditors' behavior in assessing various information obtained during the audit process. The honest, objective, fair, and firm attitude shown by auditors with high integrity allows for more reliable audit execution and contributes to improving audit quality to support integrity as an internal factor of the auditor, so that satisfactory

audit quality can only be achieved if the auditor maintains high integrity (Dwijayanti et al., 2025).

The results of this study are in line with previous research where integrity requires auditors to carry out their duties honestly and openly, without waiving the responsibility of maintaining the confidentiality of client information (Santoso et al., 2020; Sari et al., 2024; Dwijayanti et al., 2025). Auditors with integrity will act based on the principles of truth and justice, so that they are able to maintain public trust while consistently meeting the ethical demands of the profession.

4.5.3 The Moderating Role of Time Budget Pressure on Professional Skepticism and Audit Quality

Based on the results of the hypothesis test, it is shown that time budget pressure is not able to strengthen the influence of professional skepticism on audit quality. Thus, the hypothesis that time budget pressure strengthens the relationship between professional skepticism and audit quality is rejected. Although auditors are required to maintain a critical attitude and always question the adequacy and reliability of audit evidence, the limited time available can reduce the auditor's opportunity to conduct audit procedures in greater depth. In these conditions, auditors tend to focus on completing work according to the set deadline so that the application of professional skepticism cannot be carried out optimally. This is in line with attribution theory which explains how individuals interpret the cause of an event or behavior. Professional skepticism is seen as an internal attribution inherent in the auditor's personality and competence. Instead, time budget pressure is an external attribution factor that limits the auditor's room to maneuver (Hariani, 2019). The results of this study show that the quality of audits is determined more by the auditor's ability to consistently apply professional skepticism than by the level of time budget pressure faced during the audit process. Thus, the existence of time budget pressure does not make a significant contribution to strengthening the influence of professional skepticism on audit quality.

4.5.4 The Moderating Role of Time Budget Pressure on Integrity and Audit Quality

Based on the results of the hypothesis test, it is shown that time budget pressure is not able to strengthen the influence of integrity on audit quality. Thus, the hypothesis that time budget pressure strengthens the relationship between auditor integrity and audit quality is rejected. Integrity is an internal characteristic formed from the professional values, principles, and commitment of auditors, so that its influence on audit quality does not depend on the level of time pressure given by the organization. In other words, auditors who have high integrity will still strive to produce quality audits both under low and high time pressure conditions. This is not in line with attribution theory which explains that when individuals face high situational stress, the quality of their behavior will depend heavily on the dispositional strengths or internal character they have. An auditor with solid integrity tends to attribute the success of his job to internal moral values, so even under tight time pressure, he will remain consistent on the standards of professionalism to maintain the quality of the audit (Hariani, 2019). The results of this study show that time budget pressure does not play a role as a factor that strengthens the relationship between audit integrity and quality. The quality of audits is more influenced by the auditor's consistency in applying integrity principles during the audit process than by the time budget pressures faced. Therefore, integrity remains an important factor in

producing quality audits, but this influence does not become stronger when auditors are under high time budget pressure.

5. Conclusion

This study examines the influence of professional skepticism and integrity on audit quality, with time budget pressure as a moderating variable, among external auditors working at Public Accounting Firms in Greater Jakarta. Using Partial Least Squares Structural Equation Modeling (PLS-SEM) on 59 auditors, the results show that professional skepticism does not significantly affect audit quality, which can be explained by the characteristic of auditor skepticism reflecting a more defensive attitude towards audit risk rather than contributing to audit quality improvement. Auditors tend to show a high level of skepticism as a form of anticipation of potential errors or mistakes that can have consequences in the future, and this attitude has become an inherent characteristic in audit implementation. Integrity has a significant positive effect on audit quality, confirming that auditors who uphold high integrity standards are better able to produce audits that are reliable, credible, and useful for decision-making, as integrity encourages auditors to carry out the audit process consistently in accordance with applicable professional standards and moral values. Time budget pressure does not moderate the relationship between professional skepticism and audit quality, indicating that the quality of audits is determined more by the auditor's ability to consistently apply professional skepticism than by the level of time budget pressure faced during the audit process. Time budget pressure also does not moderate the relationship between integrity and audit quality, suggesting that integrity is an internal characteristic formed from professional values, principles, and commitment, so its influence on audit quality does not depend on the level of time pressure given by the organization.

The theoretical implications of this study contribute to the enrichment of literature on audit quality by extending the application of attribution theory to the context of audit quality formation in Indonesia. The non-significant effect of professional skepticism on audit quality challenges the traditional assumption that higher skepticism always leads to better audit quality, suggesting that the relationship may be contingent on how skepticism is applied in practice. The significant positive effect of integrity on audit quality supports attribution theory, confirming that internal factors such as integrity serve as a moral foundation that shapes auditors' behavior and contributes to improving audit quality. The non-significant moderating role of time budget pressure indicates that external pressures do not necessarily strengthen the influence of internal auditor characteristics on audit quality, suggesting that integrity and professional skepticism operate independently of time constraints.

From a practical perspective, Public Accounting Firms should prioritize the development and maintenance of auditor integrity through ethics training, professional development programs, and clear codes of conduct, as integrity has been proven to significantly influence audit quality. Firms should recognize that professional skepticism alone may not be sufficient to improve audit quality, and should focus on how skepticism is applied in practice through structured audit procedures and quality control mechanisms. Time budget pressure should be managed effectively to prevent negative consequences on audit quality, although it does not serve as a strengthening factor for auditor characteristics. Regulators, particularly the Financial Services Authority (OJK) and the Indonesian Institute of Certified Public Accountants (IAPI), should consider strengthening ethics requirements and professional standards that emphasize integrity as

a core competency for auditors. Investors and financial statement users should consider auditor integrity as an important factor in assessing audit quality and the reliability of financial statements.

This study has several limitations. First, the analysis is limited to auditors in Greater Jakarta, which may restrict the generalizability of findings to other regions with different characteristics and working conditions. Second, the sample size of 59 auditors may limit the statistical power and generalizability of findings. Third, the study focuses solely on professional skepticism, integrity, and time budget pressure, without considering other potential determinants of audit quality such as auditor competence, experience, independence, or organizational culture. Fourth, the measurement of variables using self-reported questionnaires may introduce response bias, as respondents may provide socially desirable answers. Fifth, the cross-sectional design captures auditor perceptions at a single point in time, which may not reflect dynamic changes in auditor characteristics and audit quality over time.

Future research should broaden the scope by including auditors from other regions or cross-country comparisons to enhance generalizability and capture variations in audit quality determinants across different regulatory and cultural contexts. It would also be valuable to integrate additional variables—such as auditor competence, experience, independence, organizational culture, and audit firm size—to provide a more comprehensive understanding of audit quality determinants. Employing larger sample sizes or mixed-method approaches could strengthen causal inference and provide deeper insights into the mechanisms through which auditor characteristics influence audit quality. Future studies may further examine the moderating role of other contextual factors, such as audit firm culture, regulatory enforcement, or organizational support, in the relationships between professional skepticism, integrity, and audit quality. Finally, qualitative research approaches, such as interviews or case studies with auditors and audit firm partners, could provide richer insights into the decision-making processes underlying audit quality and the practical application of professional skepticism and integrity in audit engagements.

References

- Agustin, R. D., & Agoes, S. (2023). The Influence of Auditor Experience, Time Pressure and Independence on Audit Quality With Professional Skepticism Moderator. *Contemporary Journal of Accounting*, 5(2), 366–382.
- Diana, N., Maslichah, Adhikara, M. F. A., & F, D. D. (2025). How Time Budget Pressure , Competence , and Independence Affect Audit Quality Through Professional Skepticism ? *Amkop Management Accounting Review (AMAR)*, 5(2), 1417–1430. <https://doi.org/10.37531/amar.v5i2.3512>
- Dwijayanti, N., Ahzar, F. A., Aisyiah, H. N., & Rosadi, S. (2025). The Influence of Professional Skepticism, Inegrity, and Accountability on Audit Quality with Auditor Ethics as a Moderation Variable. *Journal of Science and Social Research*, 8(3), 5242–5251.
- Hair, J. F., Hult, G. T. M., & Ringle, C. M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)*. SAGE.
- Hamidah, Idsni, N., Hakimah, S., Sonia, & Muhsin. (2024). The Effect of Integrity, Auditor Competence, and Audit Risk on Audit Quality with Auditors' Professional Skepticism as a Moderation Variable. *JAAKFE UNTAN*, 13(2), 138–152. <https://doi.org/10.26418/jaakfe.v13i2.67964>

- Hariani, S. (2019). Impact of Time Budget Pressure , Locus of Control , Independence , Professional Skepticism and Audit Judgement on Audit Quality in Indonesian. *European Journal of Business and Management*, 11(27), 93–100. <https://doi.org/10.7176/EJBM>
- Heider, F. (1981). The psychology of interpersonal relationships. *The Psychology of Interpersonal Relationships*, 1–531. <https://doi.org/10.4324/9781315663074>
- Juliyanti Sidik Tjan, Muslim, M., Andriani Alimin, Muh Yamin Noch, & Yaya Sonjaya. (2024). Independence, Professional Skepticism, And Audit Quality: The Moderating Role Of Audit Fees. *Journal of Accounting*, 28(1), 40–60. <https://doi.org/10.24912/ja.v28i1.1698>
- Khasanah, M. R., Haryono, & Kurniawan, R. (2025). The influence of independence, auditor work experience, and integrity on audit quality with professional skepticism as a moderation variable. *Journal of Innovation in Management, Accounting and Business*, 4(2), 398–410.
- Khulsum, U., Suryanto, T., Ali, J., & Yudha, H. (2025). Breaking barriers in audit quality : The dynamic interactions of competence , time budget pressure , complexity , and motivation in Indonesia landscape. *Social Sciences & Humanities Open*, 12(February), 101905. <https://doi.org/10.1016/j.ssaho.2025.101905>
- Lannai, D., Hajering, & Ahmad, H. (2025). Audit Quality Model Moderated by Professional Skepticism: Determinants of Professional Ethics and Auditor Experience Darwis. *ASERS Publishing*, XVI(1 (33)). <https://doi.org/https://doi.org/10.14505/tpref>
- Monica, Y., Sutrisno, & Atmini, S. (2024). Does integrity moderate emotional intelligence, competence, and independence to audit quality. *Journal of the Academy of Accounting*, 7(3), 395–414. <https://doi.org/10.22219/jaa.v7i3.33640>
- Puspitasari, A., Baridwan, Z., & Rahman, A. F. (2019). The Effect Of Audit Competence, Independence, And Professional Skepticism On Audit Quality With Auditor's Ethics As Moderation Variables. *International Journal of Business, Economics and Law*, 18(15), 135–144.
- Putranami, J., & Sinabutar, R. (2021). The Influence of Auditors' Professional Skepticism on Audit Quality (Empirical Study on 3 KAP in Jakarta 2021). *Journal of Economics (Adventist University of Indonesia)*, 14(3), 102–114.
- Sambo, E. M., Sufianti, S., & Edyson, L. (2025). The Effect of Professional Skepticism, Work Experience and Time Budget Pressure on Audit Quality. *E-Journal*, 21(1), 312–326.
- Santoso, R. D., Budi Riharjo, I., & Kurnia, K. (2020). Auditor Independence, Integrity, and Competence on Audit Quality with Professional Skepticism as the Moderation Variable. *Journal of Accounting Science*, 4(2), 36–56. <https://doi.org/10.21070/jas.v4i2.559>
- Sari, S. B., Haryono, Muhsin, Rusliyawati, & Karpriana, A. P. (2024). The Effect of Skepticism, Expertise, Integrity and Time Budget Pressure on Audit Quality with Auditor Ethics Moderation. *Scientific Journal of Management Accounting*, 7(2), 186–199. <https://doi.org/10.35326/jiam.v7i2.6490>
- Sholeh, iqbal najmudin, & Widyastuti, S. (2025). Professionalism, Independence, and Audit Quality are moderated by Time Budget Pressure. *Journal of Accounting: A Scientific Review of Accounting*, 12(1), 93–108.
- Simanjuntak, R., & Noormansyah, I. (2024). The Influence of Competence and Independence on Audit Quality with Auditor Ethics as. *Journal of Competitive*

- Accounting*, 7(1), 2622–5379. <https://doi.org/10.15408/akt.v17i2.44630>
- Sitorus, P. A., & Kusumastuti, R. (2025). The Influence of Audit Tenure , Emotional Quotient , Time Budget Pressure and Professional Skepticism on Audit Quality at Public Accounting Firms in Jambi , Palembang and Pekanbaru. *Asian Journal of Management Analytics (AJMA)*, 4(1), 1–16.
- Study, A. C., The, A., & City, B. (2026). Auditors' Professional Integrity and Skepticism Towards Audit Quality (A Case Study At The Bandung City Inspectorate). *Advances in Management & Financial Reporting*, 4(1), 185–200.
- Sulaeman, A., Ismail, T., & Mulyasari, W. (2024). The Influence of Competency, Professionalism and Auditor Independence on Audit Quality with Integrity as a Moderation Variable at DKI Jakarta Public Accounting Firm (Empirical Study at The Public Accounting Office of DKI Jakarta Province). *Journal of Applied Business, Taxation and Economics Research*, 3(5), 487–503. <https://doi.org/10.54408/jabter.v3i5.287>