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Red Flags, Professional Scepticism, and Time Budget Pressure on Financial Statement Fraud Detection: The Moderating Role of Auditor Experience

Diah Darmayanti[1*], Adnyaswari Devi[2], Galang Pradnya[3], Kemala Vidyantari[4]
[1-4]Faculty of Economics and Business Universitas Warmadewa, Indonesia

*Correspondence: putu.kemalavidyantari@warmadewa.ac.id

Research aims: Financial statement fraud continues to impose substantial losses on capital markets and stakeholders globally. Despite growing scholarly interest, the simultaneous moderating effect of auditor experience on the relationships among red flags, professional scepticism, time budget pressure, and fraud detection remains insufficiently examined. This study addresses that gap by investigating how auditor experience conditions these relationships within the Indonesian public accounting context.
Design/Methodology/Approach: Using a quantitative survey design, data were collected from 76 auditors across 20 Public Accounting Firms (KAP) in Bali Province, Indonesia, registered with the Indonesian Institute of Certified Public Accountants (IAPI) in 2024 through purposive sampling. Hypotheses were tested using multiple linear regression and Moderated Regression Analysis (MRA).
Research findings: Red flags and professional scepticism exert a positive effect on fraud detection, while time budget pressure exerts a negative effect. Auditor experience significantly moderates the red flags to fraud detection relationship but does not moderate the effects of professional scepticism or time budget pressure.
Conclusion: The findings extend attribution theory to the audit context and provide actionable implications for public accounting firms regarding auditor training, workload allocation, and time-budget governance.
Keywords: Red Flags, Professional Scepticism, Time Budget Pressure, Auditor Experience, Financial Statement Fraud Detection

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INTRODUCTION

Fraudulent financial reporting remains one of the most corrosive threats to the integrity of capital markets. According to the Association of Certified Fraud Examiners (ACFE, 2022), organisations worldwide lose an estimated 5% of their annual revenues to fraud, especially with financial statement manipulation. In emerging market jurisdictions such as Indonesia, the consequences are amplified by investor protection institutions and growing public reliance on audited financial information to support investment and lending decisions. Yet high profile audit failures most notably the 2018 case of PT SNP Finance, in which the public accounting firm Satrio Bing Eny & Rekan failed to identify a systematic fraud scheme, leading to regulatory sanctions prohibiting the firm from auditing banking, capital-market, and non-bank financial-institution clients (CNN Indonesia, 2018) underscore the persistent gap between the theoretical mandate of the external audit and its practical execution.

The external auditor's ability to detect fraud is shaped by a confluence of cognitive, behavioural, and situational factors. Three constructs have attracted sustained scholarly attention : (1) red flags as observable warning signals embedded in financial statements or audit evidence that may indicate fraudulent manipulation (Albrecht et al., 2019); (2) professional scepticism a critical, questioning mindset mandated by International Standard on Auditing (ISA) 200 and ISA 240 that prompts auditors to scrutinise evidence rather than accept it at face value; and (3) time budget pressure the situational constraint arising from tight engagement timelines that may induce dysfunctional behaviour such as premature sign-off or

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the omission of required procedures. Empirical research on each factor individually is substantial, but inconsistent finding found while most studies confirm that heightened red-flag awareness and professional scepticism improve fraud detection, results regarding time budget pressure are inconsistent, and the boundary conditions governing these relationships remain underspecified (Indrasti & Karlina, 2020; Sari & Indrasti, 2018; Zakaria et al., 2023).

A theoretically plausible boundary condition is auditor experience. Drawing on Attribution Theory by Heider, experienced auditors possess higher cognitive schemas, more developed pattern-recognition capabilities, and greater familiarity with client business processes qualities that may strengthen their ability to process red-flag signals and sustain sceptical reasoning even under environmental pressure. However, whether experience actually amplifies the positive effects of red flags and scepticism on fraud detection, or whether it buffers against the detrimental effects of time budget pressure, has not been rigorously tested in a single integrated model. Existing studies have typically examined experience as an independent predictor rather than as a moderator, and those that do treat it as a moderator tend to examine only one relationship (Dewi et al., 2022; Gregori, 2022).

This study addresses interrelated gaps. First, the simultaneous moderation of the red flags, professional scepticism, and time budget pressure to fraud detection relationships by auditor experience has not been tested in an integrated framework. Second, prior studies have not classified the type of moderation to distinguish whether the moderator operates as a genuine conditional variable or merely as an additional predictor.

The study makes three contributions. Theoretically, it extends Attribution Theory to explain how internal attributes (scepticism, experience) and external pressures (red flags, time budget) interact to determine audit performance. Methodologically, it applies MRA to classify moderation types, providing more nuanced interpretation. Practically, the findings inform how public accounting firms should structure auditor staffing, training programmes, and engagement-time governance to maximise fraud-detection effectiveness.

LITERATURE REVIEW

Theoretical Foundation: Attribution Theory

Attribution Theory, originally developed by Heider and subsequently formalized by Weiner, posits that individuals attribute observed behaviours or outcomes to either internal causes such as dispositions, abilities, attitudes, motivation, or external causes contain situational pressure, environmental difficulty, and luck (Graham, 2020). In the audit context, an auditor's capacity to detect financial statement fraud can be conceptualised as a performance outcome shaped by both internal attribute's professional scepticism, accumulated experience, and cognitive capability, and external conditions the presence of red flags in client evidence and the time pressure imposed by engagement budgets (Rafinda et al., 2020).

This dual-cause framework provides a coherent rationale for the study's model. Red flags and time budget pressure are operationalised as external attribution factors. They are environmental signals or constraints that the auditor encounters rather than creates. Professional scepticism and auditor experience, conversely, are internal attribution factors rooted in individual competence and disposition. Attribution Theory predicts that high-quality audit performance specifically, effective fraud detection results from a favourable configuration of both internal and external factors. The moderating role of auditor experience can be understood as an internal resource that amplifies favourable external conditions (red flags) while potentially mitigating unfavourable ones (time pressure).

Financial Statement Fraud Detection

Financial statement fraud refers to intentional misstatements or omissions in financial reporting intended to deceive users, typically to inflate asset values, understate liabilities, or overstate revenues (ACFE, 2022). Fraud detection is the process by which auditors uncover material misstatements arising from fraudulent acts during the course of an engagement (Prasmaulida, 2016). ISA 240 requires auditors

to maintain a mindset that acknowledges the possibility of fraud regardless of prior experience with the entity and to design procedures responsive to assessed fraud risks (Waromi et al., 2024).

The Fraud Triangle comprising pressure, opportunity, and rationalisation remains the dominant conceptual framework for understanding fraud occurrence and informs the design of fraud-responsive audit procedures. However, detection effectiveness depends not only on the structure of audit programmes but on the cognitive and behavioural factors the auditor brings to the engagement (Huang et al., 2017). Ningtyas et al. (2018) define fraud detection as the act of identifying and disclosing indicators of fraudulent activity within financial statements, while Anggriawan (2014) emphasises that the capability must be embedded across auditor ranks to ensure material misstatements whether arising from error or fraud are identified with reasonable assurance.

Red Flags and Fraud Detection

Red flags are observable anomalies in transactions, financial ratios, management behaviour, or audit evidence that signal an elevated risk of fraudulent reporting (Albrecht et al., 2019). ISA 240 enumerates a non-exhaustive list of fraud-risk indicators spanning management characteristics, industry conditions, and financial statement metrics. From an Attribution Theory perspective, red flags constitute external stimuli that, when correctly interpreted, should direct auditor attention and effort toward high-risk areas.

Empirical evidence overwhelmingly supports a positive relationship between red-flag awareness and fraud detection. Zakaria et al. (2023) found that a deeper understanding of red flags significantly improved auditors' ability to detect fraud, consistent with Achmad & Galib (2022) and Gizta et al. (2019). The mechanism is auditors who recognise warning signals allocate greater scrutiny to flagged accounts, apply more extensive substantive procedures, and arrive at more accurate assessments of fraud risk (Braun, 1994; Fitriawati, 2024; Masri et al., 2022; Oktaroza et al., 2022). Counterevidence from Sari & Indrasti (2018) reported a negative relationship that reflect methodological differences or sample-specific conditions rather than a genuine theoretical inconsistency. Accordingly, the following hypothesis is advanced:

H1: Red flags have a positive and significant effect on financial statement fraud detection.

Professional Scepticism and Fraud Detection

Professional scepticism is defined in ISA 200 as an attitude that includes a questioning mind, being alert to conditions that may indicate possible misstatement due to error or fraud, and a critical assessment of audit evidence. It represents a core internal attribution factor in the Attribution Theory framework because it is a dispositional characteristic of the auditor rather than a property of the engagement environment (Ta et al., 2022; Xu et al., 2023). A highly skeptical auditor interrogates management representations, corroborates evidence from independent sources, and is resistant to persuasion bias all of which are conducive to fraud detection (Ghani et al., 2022; Hussin et al., 2017; Yustina & Gonadi, 2019).

Consistent evidence from Indriyani & Hakim (2021) and Budiantoro et al. (2022) confirms that professional scepticism exerts a positive and significant effect on fraud-detection capability. Scepticism improves auditors' thoroughness in evaluating evidence and reduces the likelihood of accepting inflated or fictitious claims (Hussin et al., 2017; Yuliana & Puspita, 2025). The competing finding by Indrasti & Karlina (2020) showing no significant relationship may reflect measurement differences in the operationalisation of scepticism or moderating contextual factors. On balance, theory and the preponderance of evidence support the following hypothesis:

H2: Professional scepticism has a positive and significant effect on financial statement fraud detection.

Time Budget Pressure and Fraud Detection

Time budget pressure arises when the allocated audit hours are insufficient relative to the complexity and scope of the engagement (Yustina & Gonadi, 2019). As an external attribution factor, it represents a situational constraint imposed on the auditor by firm economics, competitive fee pressure,

and client expectations (Yuliana & Puspita, 2025). The dominant theoretical prediction supported by dysfunctional audit behaviour literature (Coram et al., 2004; Svanström, 2016) is that tight time budgets induce auditors to engage in quality-threatening behaviours such as reducing sample sizes, applying less rigorous procedures, or accepting client-provided explanations without independent corroboration. Each of these behaviours diminishes the probability of detecting concealed fraud (Holstrom, 2015; Raihan & Setiyawati, 2025).

Suciawati et al. (2022) and Subhan (2022) empirically confirm a negative and significant relationship between time budget pressure and fraud detection in Indonesian audit contexts. Oktavia & Helmy (2019) similarly document that pressure-induced dysfunctional behaviour significantly impairs audit quality. The minority finding of a positive relationship (Wahyuni & Isniawati, 2021) may reflect an inverted U dynamic in which moderate pressure improves effort but extreme pressure deteriorates quality a nuance that average effect models cannot capture. The preponderant evidence supports a negative main effect:

H3: Time budget pressure has a negative and significant effect on financial statement fraud detection.

The Moderating Role of Auditor Experience

Auditor experience operationalised through the duration of service and the number of completed audit engagements is a multidimensional internal resource that encompasses declarative knowledge of fraud schemes, procedural knowledge of audit techniques, and metacognitive awareness of personal vulnerabilities to judgment bias. Experience is central to the expertise-development literature, which holds that accumulated exposure to diverse client and fraud scenarios builds richer cognitive schemas that facilitate pattern recognition under ambiguity.

Regarding the interaction with red flags, experienced auditors have encountered a broader range of fraud-risk indicators across different industries and engagement types, making them more adept at recognising subtle or complex red flags that less-experienced counterparts may overlook (Sari et al., 2020). The moderating hypothesis is that experience amplifies the positive effect of red flags by enabling more accurate interpretation and prioritisation of warning signals.

H4: Auditor experience positively moderates the relationship between red flags and financial statement fraud detection.

Regarding professional scepticism, all auditors regardless of rank or tenure to maintain professional scepticism throughout the engagement (Holstrom, 2015; Yustina & Gonadi, 2019). If compliance with this standard is relatively uniform across experience levels as extensive training, then experience should not meaningfully condition the scepticism detection relationship. Gregori (2022) and Dewi et al. (2022) report non-significant moderation of this pathway, consistent with this reasoning.

H5: Auditor experience moderates the relationship between professional skepticism and financial statement fraud detection.

Regarding time budget pressure experienced auditors may be more efficient task performers, potentially better equipped to manage tight budgets without sacrificing procedural thoroughness. Susmiyanti & Rahmawati (2016) suggest that experienced auditors can allocate budgeted time more strategically. However, Rahmadini & Fauzihardani (2022) find no significant buffering effect, suggesting that institutional and economic constraints override individual-level adaptation when pressure is severe.

H6: Auditor experience moderates the relationship between time budget pressure and financial statement fraud detection.

METHODS

Research Design and Setting

This study employs a quantitative, cross-sectional survey design to test causal hypotheses regarding the determinants of financial statement fraud detection. The research setting is the population of Public Accounting Firms (Kantor Akuntan Publik, KAP) registered with the Indonesian Institute of Certified Public Accountants (IAPI) in Bali Province as of the 2024 membership directory. Bali Province was selected

because it constitutes a significant economic region with a diverse client base spanning hospitality, financial services, and state-owned enterprises, and because its KAP population is sufficiently concentrated to allow comprehensive survey coverage within a single province while remaining underexamined in the auditing literature.

Population and Sample

The target population comprised 127 registered public accountants across 20 KAPs in Bali Province. Purposive sampling was applied with two eligibility criteria: (1) currently employed as an auditor at a registered Bali Province KAP; and (2) possessing a minimum of one year of audit experience with at least five completed audit engagements. These criteria ensure respondents possess sufficient professional exposure to meaningfully assess red-flag recognition, scepticism, and time-budget management in practice.

A total of 127 questionnaires were distributed with 80 were returned (response rate: 63.0%). After excluding four questionnaires that failed to meet the sampling criteria, 76 usable responses were retained for analysis. The achieved sample size satisfies the minimum threshold recommended for regression-based studies (Hair et al., 2019).

Measurement of Variables

All variables were operationalised using established Likert scale instruments (1 = strongly disagree to 5 = strongly agree) adapted from validated prior studies. Table 1 summarises variable definitions and measurement sources.

Table 1. Variable Operationalisation and Measurement

Variable	Operationalisation	Items	Source
Fraud Detection (Y)	Auditor's reported ability to identify and disclose indicators of financial statement fraud	7	(Huang et al., 2017)
Red Flags (X_1)	Perceived intensity of fraud-risk indicators encountered during engagements (management, financial, operational signals)	7	(Braun, 1994; Fitriawati, 2024; Oktaroza et al., 2022)
Professional Scepticism (X_2)	Dispositional tendency to question, critically evaluate evidence, and resist management persuasion	7	(Hussin et al., 2017; Xu et al., 2023; Yuliana & Puspita, 2025)
Time Budget Pressure (X_3)	Perceived insufficiency of allocated audit hours relative to engagement scope	7	(Yustina & Gonadi, 2019)
Auditor Experience (M)	Cumulative audit tenure (years) and breadth of engagement types completed	7	(Anggriawan, 2014)

Source: Authors' compilation.

Data Analysis Technique

Data were analysed using SPSS version 29 through a sequential procedure: 1) Descriptive statistics to characterise the distribution of each variable; 2) Instrument validation: Validity was assessed via Pearson item-total correlations (threshold $r \geq 0.30$), reliability via Cronbach's alpha (threshold $\alpha \geq 0.70$);

3) Classical assumption tests: normality (Kolmogorov-Smirnov test), multicollinearity (Variance Inflation Factor, VIF < 10; Tolerance > 0.10), and heteroscedasticity (Glejser test, significance level > 0.05); 4) Hypothesis testing via two regression equations:
Equation 1 Multiple Linear Regression (main effects):

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon \quad \dots (1)$$

Equation 2 Moderated Regression Analysis (MRA):

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4(X_1{\times}M) + \beta_5(X_2{\times}M) + \beta_6(X_3{\times}M) + \varepsilon \quad \dots (2)$$

Where:

Y = fraud detection;

α = constant;

X_1 = red flags;

X_2 = professional scepticism;

X_3 = time budget pressure;

M = auditor experience;

β = regression coefficients;

ε = error term.

Moderation types were classified quasi moderation, the moderator significant in both the predictor-only and interaction model and predictor moderation, the moderator significant in the predictor-only model but the interaction term is not (Kollenburg & Croon, 2022).

RESULTS AND DISCUSSION

Descriptive Statistics

Table 2 presents the descriptive statistics for all variables. The mean values for fraud detection (M = 4.29), red flags (M = 4.05), professional scepticism (M = 4.24), and auditor experience (M = 4.46) all exceed their respective standard deviations, indicating relatively low data dispersion and concentrated high-end perceptions of these internal and contextual factors. Time budget pressure (M = 2.92, SD = 0.69) exhibits a lower mean, suggesting that respondents generally perceived moderate-to-low time pressure a finding that may partly explain the moderate magnitude of its negative effect on fraud detection.

Table 2. Descriptive Statistics

Variable	N	Min	Max	Mean	SD
Fraud Detection (Y)	76	3.14	5.00	4.29	0.432
Red Flags (X_1)	76	3.00	5.00	4.05	0.467
Professional Skepticism (X_2)	76	3.29	5.00	4.24	0.416
Time Budget Pressure (X_3)	76	1.86	4.43	2.92	0.691
Auditor Experience (M)	76	4.00	5.00	4.46	0.361

Source: Primary data, processed (2026).

Validity and Reliability

All indicator items exceeded the minimum Pearson item total correlation threshold ($r \geq 0.30$), confirming convergent validity. Table 3 reports Cronbach's alpha coefficients for each scale and all values exceeded the 0.70 threshold (Hair et al., 2019), confirming acceptable internal consistency reliability. The highest reliability was observed for auditor experience ($\alpha = 0.877$) and fraud detection ($\alpha = 0.873$), while professional scepticism, though at the lower bound ($\alpha = 0.770$), remains within acceptable parameters.

Table 3. Reliability Statistics (Cronbach's Alpha)

Variable	Cronbach's Alpha	Assessment
Fraud Detection (Y)	0.873	Reliable
Red Flags (X_1)	0.837	Reliable
Professional Scepticism (X_2)	0.770	Reliable
Time Budget Pressure (X_3)	0.826	Reliable
Auditor Experience (M)	0.877	Reliable

Source: Primary data, processed (2026).

Classical Assumption Tests

Normality was evaluated via the Kolmogorov-Smirnov test. Both Equation 1 (Asymp. Sig. = 0.200) and Equation 2 (Asymp. Sig. = 0.187) yielded significance values above the 0.05 threshold, confirming normally distributed residuals. Multicollinearity was assessed for Equation 1, all Tolerance values exceeded 0.10 (0.698–0.960) and VIF values fell below 10 (1.042–1.432), indicating no multicollinearity among predictors. Multicollinearity testing is not applicable to Equation 2 as interaction terms are mathematically collinear with their constituent variables by design (Kim & Jung, 2024). Heteroscedasticity was tested via the Glejser method; all significance values exceeded 0.05 in both equations (0.129–0.988), confirming homoscedastic residuals. The data satisfy all classical regression assumptions, supporting the validity of the subsequent hypothesis tests.

Hypothesis Testing: Main Effects (Equation 1)

Table 4 reports results from the multiple linear regression testing H1 through H3. The overall model is statistically significant (F-test p = 0.000) with an Adjusted R^2 of 0.268, indicating that red flags, professional scepticism, and time budget pressure jointly explain 26.8% of the variance in fraud detection.

Table 4. Multiple Linear Regression Results (Equation 1)

Variable	B	Std. Error	β (Standardised)	t	Sig.	Decision
(Constant)	2.419	0.488	—	4.951	0.000	—
Red Flags (X_1)	0.232	0.109	0.250	2.117	0.038	H1 Supported
Prof. Skepticism (X_2)	0.338	0.121	0.325	2.792	0.007	H2 Supported

Time Budget Pressure (X_3)	−0.171	0.063	−0.273	−2.708	0.008	H3 Supported

Note: Adjusted R^2 = 0.268; F-test Sig. = 0.000; N = 76.
Source: Primary data, processed (2026).

Hypothesis Testing: Moderated Effects (Equation 2)

Table 5 presents MRA results for H4 through H6. The full model is statistically significant (F-test p = 0.000) with an Adjusted R^2 of 0.407, representing an increase of 13.9 percentage points over Equation 1. This incremental variance is attributable to the inclusion of the moderating variable and its interaction terms, confirming that auditor experience contributes meaningful explanatory power beyond the main effects.

Table 5. Moderated Regression Analysis Results (Equation 2)

Variable	B	Std. Error	B	t	Sig.	Decision	Moderation Type
(Constant)	2.707	0.461	—	5.878	0.000	—	—
Red Flags (X_1)	−2.879	1.119	−3.112	−2.573	0.012	—	—
Prof. Skepticism (X_2)	2.039	1.165	1.961	1.750	0.084	—	—
Time Bdgt Pressure (X_3)	0.990	0.840	1.584	1.179	0.243	—	—
$X_1 \times M$ (H4)	0.708	0.253	4.364	2.797	0.007	H4 Supported	Quasi Moderator
$X_2 \times M$ (H5)	−0.417	0.260	−2.719	−1.607	0.113	H5 Rejected	Predictor Moderator
$X_3 \times M$ (H6)	−0.246	0.187	−1.724	−1.314	0.193	H6 Rejected	Predictor Moderator

Note: Adjusted R^2 = 0.407; F-test Sig. = 0.000; N = 76.
Source: Primary data, processed (2026).

Discussion

Red flags are positively and significantly associated with fraud detection (β = 0.250, p = 0.038), supporting H1. This finding is consistent with Attribution Theory, the presence of salient external signals directs auditor attention and effort, leading to more rigorous investigation of suspicious accounts (Harvey & Weary, 1984). Auditors who identify more warning signals are better positioned to design targeted audit procedures, thereby increasing the probability of uncovering concealed manipulation (Masri et al., 2022). The result aligns with Achmad & Galib (2022), Zakaria et al. (2023), and Gizta et al. (2019), who document similar positive effects across diverse Indonesian audit populations. From a practical standpoint, these findings reinforce the importance of structured red-flag checklists in engagement planning and risk assessment, as auditors who systematically apply such frameworks are more likely to recognise early indicators of fraudulent activity.

Professional scepticism is positively and significantly associated with fraud detection (β = 0.325, p = 0.007), the strongest standardised coefficient among the three predictors, supporting H2. This result aligns with the internal attribution perspective of Attribution Theory, skepticism, as a stable dispositional

characteristic, exerts a more consistent and powerful influence on audit performance than contextual signals whose salience may vary across engagements (Hussin et al., 2017; Robinson, 2011; Ta et al., 2022). Sceptical auditors are less susceptible to anchoring on management narratives and more likely to seek corroborating evidence independently (Hurtt et al., 2013; Indriyani & Hakim, 2021). The magnitude of the coefficient (β = 0.325) exceeds those of red flags (β = 0.250) and time budget pressure (β = −0.273), underscoring that individual cognitive disposition is the single most influential factor in the model a finding with direct implications for auditor selection and professional development.

Time budget pressure exerts a negative and significant effect on fraud detection (β = −0.273, p = 0.008), supporting H3. Under Attribution Theory, this is an external attribution factor: the time constraint is imposed on the auditor, independent of personal capability or disposition (Yustina & Gonadi, 2019). The dysfunctional audit behaviour literature (Coram et al., 2004; Svanström, 2016) provides the theoretical mechanism: auditors under severe time pressure prioritise procedural efficiency over thoroughness, reducing sample sizes, skipping corroborating steps, or accepting client explanations without independent verification. Each of these shortcuts diminishes the auditor's probability of detecting carefully concealed fraud. The result is consistent with Suciawati et al. (2022) and Subhan (2022). The practical implication is that public accounting firms must recognise that excessively tight time budgets do not merely increase efficiency they systematically reduce audit quality in precisely the domain where quality matters most: fraud detection.

The interaction term $X_1 \times M$ is positive and significant (β = 4.364, p = 0.007), supporting H4. Moderation classification reveals a quasi-moderation pattern: auditor experience functions both as an independent predictor and as a genuine amplifier of the red flags–detection relationship. This finding is theoretically coherent, experienced auditors have accumulated diverse exposure to fraud-risk indicators across multiple clients, industries, and engagement types, enabling them to interpret red-flag signals with greater accuracy and prioritise their investigative effort accordingly (Robinson, 2011; Yuliana & Puspita, 2025; Yustina & Gonadi, 2019). In practice, the quasi-moderation finding implies that the diagnostic value of red-flag awareness programmes is greatest when deployed among experienced auditors, who can most effectively convert awareness into action. Junior auditors may possess conceptual awareness of red flags but lack the contextual knowledge to translate signals into targeted procedures. This contrast points to the importance of mentorship structures that allow junior auditors to interpret warning signals under the guidance of experienced peers.

The interaction term $X_2 \times M$ is non-significant (p = 0.113), and the moderation type is classified as predictor moderation meaning that auditor experience functions as an independent predictor rather than a genuine moderator of the scepticism detection relationship, rejecting H5. This result requires all auditors regardless of experience level to maintain professional scepticism throughout the engagement. The standard effectively normalises scepticism as a baseline professional requirement, reducing the scope for experience to condition its effect. Gregori (2022) and Dewi et al. (2022) report analogous null moderation findings. The implication is that professional scepticism is a universally required competency that must be instilled through training and ethical standards rather than acquired solely through experience. This reinforces the importance of incorporating scepticism related learning objectives into entry level audit training programmes.

The interaction term $X_3 \times M$ is non-significant (p = 0.193), classified as predictor moderation, rejecting H6. Auditor experience does not buffer the negative effect of time budget pressure on fraud detection. This finding challenges the intuitive expectation that experienced auditors can manage tight budgets more effectively. A plausible explanation is that time budget pressure, at institutionally imposed levels, creates absolute constraints that even expert performance cannot overcome: when procedural steps are budgetarily precluded, accumulated experience cannot substitute for the missing procedures (Yuliana & Puspita, 2025). Rahmadini & Fauzihardani (2022) reach the same conclusion in a comparable Indonesian context. The practical implication is significant: assuming that experienced auditors are immune to time pressure risks is a strategic error for audit firm management. Instead, realistic time

budgets must be established at the engagement-planning stage, informed by engagement complexity rather than competitive fee pressure, regardless of the assigned auditor's experience level.

CONCLUSION

This study examined the effects of red flags, professional scepticism, and time budget pressure on financial statement fraud detection, and the moderating role of auditor experience, among 76 auditors in Bali Province, Indonesia. The principal findings are red flags positively and significantly enhance fraud detection, professional scepticism is the strongest positive predictor of fraud detection, time budget pressure significantly impairs fraud detection, auditor experience functions as a quasi-moderator that amplifies the positive effect of red flags, and auditor experience does not moderate the effects of professional scepticism or time budget pressure, operating only as a predictor in those pathways. Collectively, these results extend Attribution Theory by demonstrating that effective fraud detection requires a favourable alignment of internal (scepticism, experience) and external (red flags, manageable time pressure) attribution factors.

Theoretically, this study contributes to the audit literature by providing an integrated Attribution Theory model that simultaneously accounts for internal and external fraud-detection antecedents, differentiating quasi moderation from predictor moderation, offering a more nuanced understanding of how experience conditions audit performance, and offering contextualised empirical evidence from the Indonesian public accounting environment, enriching the generalisability of the global audit quality literature.

Practically, the findings carry three implications for public accounting firm management and professional bodies. Audit engagement teams should incorporate structured red-flag assessment protocols in engagement planning, and experienced auditors should be strategically assigned to supervise or review the red-flag evaluation process to maximise its diagnostic value. Professional scepticism development must not be treated as a competency that emerges organically with experience; it requires deliberate, ongoing training investment for auditors at every career stage, embedded in ethics education and professional development programmes. Time budget construction must reflect realistic engagement complexity management cannot assume that experienced auditors are insulated from the quality-degrading effects of severe time pressure. Regulators and audit oversight bodies may consider incorporating time-budget adequacy reviews into quality-control inspections.

This study has several limitations that future research should address. First, the geographic restriction to Bali Province limits external validity, replication across other Indonesian provinces or comparative cross-country designs would enhance generalisability. Second, the cross-sectional design precludes causal inference, longitudinal designs tracking auditor performance across multiple engagement cycles would strengthen causal claims. Third, self-reported survey measures introduce social desirability bias, particularly for scepticism future research might complement surveys with experimental designs or archival audit-quality proxies (e.g., audit adjustments, restatements). Fourth, other potentially influential variables auditor independence, professional ethics, task complexity, and personality traits were not included in the model, and future studies should examine these as additional predictors or boundary conditions.

Author Contributions

Conceptualization, D.D. and K.V.; Methodology, D.D. and A.D.; Software, G.P.; Validation, A.D. and G.P.; Formal analysis, D.D.; Investigation, D.D. and G.P.; Data curation, G.P.; Writing – original draft, D.D. and A.D.; Writing – review and editing, A.D. and K.V.; Visualization, G.P.; Supervision, K.V.; Project administration, D.D. All authors have read and agreed to the published version of the manuscript.

Conflict of Interest

The authors declare no conflict of interest. No financial, professional, or personal relationships influenced the design, analysis, or reporting of this study.

Declaration of Generative AI Use

The authors did not use generative AI or AI-assisted technologies in the preparation of this manuscript.

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REFERENCES

ACFE. (2022). *Report to the Nations: 2022 Global Study on Occupational Fraud and Abuse*. Association of Certified Fraud Examiners.

Achmad, F. A., & Galib, S. (2022). Pengaruh red flags, independensi, dan skeptisme profesional terhadap kemampuan auditor dalam mendeteksi fraud. *Jurnal Ilmiah Akuntansi Kesatuan*, *10*(2). https://doi.org/10.37641/jiakes.v10i1.1420

Albrecht, W. S., Albrecht, C. O., Albrecht, C. C., & Zimbelman, M. F. (2019). *Fraud Examination* (6th ed.). Cengage Learning.

Anggriawan, E. F. (2014). Pengaruh pengalaman kerja, skeptisme profesional, dan tekanan waktu terhadap kemampuan auditor dalam mendeteksi fraud (studi empiris pada Kantor Akuntan Publik di DIY). *Jurnal Nominal*, *3*(2), 101–116.

Braun, R. L. (1994). *The effect of time pressure on auditor attention to red flags in a dual-task environment*. Louisiana State University and Agricultural & Mechanical College.

Budiantoro, H., Nurrahmah, M., & Lapae, K. (2022). Pengaruh beban kerja, skeptisme profesional, dan pengalaman auditor dalam mendeteksi kecurangan dengan pelatihan audit kecurangan sebagai variabel moderasi. *Journal of Business and Economics Research (JBE)*, *3*(3), 342–349. https://doi.org/10.47065/jbe.v3i3.2330

Coram, P., Ng, J., & Woodliff, D. (2004). The effect of risk of misstatement on the propensity to commit reduced audit quality acts under time budget pressure. *Auditing: A Journal of Practice & Theory*, *23*(2), 159–167.

Dewi, N. P. R. C., Rasmini, N. K., & Wirasedana, I. W. P. (2022). Kemampuan pengalaman auditor memoderasi pengaruh red flags, skeptisisme profesional, dan kompetensi pada pendeteksian kecurangan. *E-Jurnal Akuntansi*, *32*(4).

Fitriawati, R. (2024). Pengaruh Red Flags, Time Pressure Dan Audit Tenure Terhadap Kemampuan Auditor Dalam Mendeteksi Kecurangan. *KONTAN: Jurnal Ekonomi, Manajemen Dan Bisnis*, *3*(2).

Ghani, E. K., Jabal, Z. A., Zandi, G., & Hye, Q. M. A. (2022). *Effects of knowledge, time pressure and personality on professional skepticism among government auditors*.

Gizta, A. D., Khairani, S., & Andriana, I. (2019). Pengaruh red flag dan pelatihan terhadap kemampuan auditor mendeteksi fraud dengan skeptisisme profesional sebagai variabel intervening. *Journal Economic, Accounting, Scientific (CASH)*, *1*(2), 11–22.

Graham, S. (2020). An attributional theory of motivation. Contemporary Educational Psychology, 61, 101861. https://doi.org/10.1016/j.cedpsych.2020.101861

Gregori, A. S. (2022). Pengaruh skeptisisme profesional, kompleksitas tugas, dan tekanan anggaran waktu terhadap kualitas audit dengan pengalaman kerja auditor sebagai variabel moderasi.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis* (8th ed.). Cengage Learning.

Harvey, J. H., & Weary, G. (1984). Current issues in attribution theory and research. *Annual Review of Psychology*, *35*(1), 427–459.

Holstrom, T. (2015). *The effect of time pressure on professional skepticism levels exhibited by student auditors*.

Huang, S. Y., Lin, C.-C., Chiu, A.-A., & Yen, D. C. (2017). Fraud detection using fraud triangle risk factors. *Information Systems Frontiers*, *19*(6), 1343–1356.

Hurtt, R. K., Brown-Liburd, H., Earley, C. E., & Krishnamoorthy, G. (2013). Research on auditor professional skepticism: Literature synthesis and opportunities for future research. *Auditing: A Journal of Practice & Theory*, *32*(Supplement 1), 45–97.

Hussin, S. A. H. S., Iskandar, T. M., Saleh, N. M., & Jaffar, R. (2017). Professional Skepticism And Auditors'assessment Of Misstatement Risks: The Moderating Effect Of Experience And Time Budget Pressure. *Economics & Sociology*, *10*(4), 225–250.

Indonesia, C. N. N. (2018). OJK sanksi dua akuntan publik kasus SNP Finance. *CNN Indonesia*. https://www.cnnindonesia.com

Indrasti, A. W., & Karlina, B. (2020). Determinants affecting the auditor's ability of fraud detection: Internal and external factors. *Advances in Economics, Business and Management Research*, *127*.

Indriyani, S., & Hakim, L. (2021). Pengaruh pengalaman audit, skeptisme profesional, dan time pressure terhadap kemampuan auditor mendeteksi fraud. *Jurnal Akuntansi Dan Governance*, *1*(2). http://jurnal.umj.ac.id/index.php/jago

Kim, Y., & Jung, G. (2024). Understanding Linear Interaction Analysis With Causal Graphs. *British Journal of Mathematical and Statistical Psychology, 78(2)*, 486–499. https://doi.org/10.1111/bmsp.12369

Kollenburg, G. v., & Croon, M. A. (2022). How to Define and Test an Indirect Moderation Model: The Missing Link in Regression-Based Path Models. Methodology, 18(3), 164–184. https://doi.org/10.5964/meth.9473

Masri, I., Munandar, A., & Dewi, M. W. (2022). Pendeteksian kecurangan laporan keuangan: Tinjauan faktor-faktor yang mempengaruhinya. *Jurnal Akuntansi Kontemporer*, *14*(1).

Ningtyas, M. N., Subroto, B., & Andayani, W. (2018). Pengalaman dan skeptisme profesional auditor dalam mendeteksi kecurangan: Bukti eksperimen. *Jurnal Riset Akuntansi Indonesia*, *21*(1).

Oktaroza, M. L., Purnamasari, P., Hartanto, R., & Rahmani, A. N. (2022). Red flag effectiveness in public sector audit using fraud pentagon theory. *Universal Journal of Accounting and Finance*, *10*(1), 338–347.

Oktavia, M. E., & Helmy, H. (2019). Pengaruh time budget pressure dan skeptisisme profesional auditor terhadap kualitas audit. *Jurnal Eksplorasi Akuntansi*, *1*(4).

Prasmaulida, S. (2016). Financial statement fraud detection using perspective of fraud triangle adopted by SAS No. 99. *Asia Pacific Fraud Journal*, *1*(2), 317–335.

Rafinda, A., Suroso, A., & Gal, T. (2020). Predictive Power of Situational Factor and Individual Factor on Misreporting Behaviour. *International Review of Management and Marketing*, *10*(1), 84–90. https://doi.org/10.32479/irmm.8969

Rahmadini, Y., & Fauzihardani, E. (2022). The moderating role of auditor experience on time budget pressure and fraud detection. *Jurnal Akuntansi Bisnis*, *15*(1).

Raihan, A. D., & Setiyawati, H. (2025). Audit Quality: Competence, Professional Skepticism, Workload, and Auditor Time Pressure. *Riset: Jurnal Aplikasi Ekonomi Akuntansi Dan Bisnis*, *7*(1), 15–28.

Robinson, S. N. (2011). *An experimental examination of the effects of goal framing and time pressure on auditors' professional skepticism*. University of North Texas.

Sari, C. N., & Indrasti, A. W. (2018). Pengaruh professional skepticism, pengalaman auditor, whistleblowing, dan red flags terhadap kemampuan pendeteksian kecurangan. In *Globalisation of Corporate Social Responsibility and its Impact on Corporate Governance* (pp. 51–75). Springer. https://doi.org/10.1007/978-3-319-69128-2_3

Sari, R. P., Ghozali, I., & Achmad, T. (2020). The effect of auditor experience on fraud detection with red flags as a mediating variable. *Jurnal Akuntansi*, *24*(3), 356–370.

Subhan. (2022). Professional skepticism, audit experience, time pressure and fraud detection. *Advances in Auditing Research*, *1*(1), 46–57.

Suciawati, D. P., Astari, N. P. A., & Bagiada, I. M. (2022). Pengaruh kompetensi, skeptisisme profesional, dan time budget pressure terhadap kemampuan mendeteksi fraud. *Jurnal Riset Terapan Akuntansi*, *6*(1).

Susmiyanti, & Rahmawati, D. (2016). The effect of audit fee, time budget pressure, and task complexity on audit quality with auditor experience as moderating variable. *Jurnal Profita*, *7*.

Svanström, T. (2016). Time pressure, training activities and dysfunctional auditor behaviour: Evidence from small audit firms. *International Journal of Auditing*, *20*(1), 42–51.

Ta, T. T., Doan, T. N., Pham, D. C., & Tran, H. N. (2022). Factors affecting the professional skepticism of independent auditors in Viet Nam. *Cogent Business & Management*, *9*(1), 2059043.

Wahyuni, N., & Isniawati, A. (2021). Analisis faktor-faktor kemampuan auditor mendeteksi kecurangan dengan memoderasi etika profesi. *Journal of Business and Information Systems*, *3*(2), 75–86. https://doi.org/10.36067/jbis.v3i2.102

Waromi, J., Salle, A., & Fonataba, N. A. (2024). The Effect of Whistleblowing and Professional Skepticism on Fraud Detection Fraud and Fraud Audit Training as a Moderating. International Journal of Accounting & Finance in Asia Pasific, 7(1), 92–109. https://doi.org/10.32535/ijafap.v7i1.2911

Xu, G., Yang, C., & Fukofuka, P. T. (2023). Professional skepticism in practice: An analysis of auditors' stories. *Auditing: A Journal of Practice & Theory*, *42*(4), 157–178.

Yuliana, D., & Puspita, A. F. (2025). The Effect Of Professional Skepticism And Auditor Experience On The Ability To Detect Fraud With Time Pressure As A Moderating Variable. *Jurnal Akuntansi Bisnis*, *18*(2), 272–290.

Yustina, A. I., & Gonadi, S. A. (2019). The negative effect of time budget pressure to auditor independence and professional skepticism. *Jurnal Akuntansi Dan Keuangan*, *21*(1), 38–48.

Zakaria, F., Oktoriza, L. A., Setyahuni, S. W., & Anandita, R. (2023). Pengaruh pemahaman red flags terhadap deteksi kecurangan dengan pengalaman auditor sebagai variabel moderasi. *Jurnal Akuntansi, Keuangan Dan Auditing (JAKA)*, *4*(1), 195–204.