## "Determinants influencing fraud detection: Role of internal auditors' quality"

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# DETERMINANTS INFLUENCING FRAUD DETECTION: ROLE OF INTERNAL AUDITORS' QUALITY

#### **Abstract**

Frequent occurrences of fraud take place due to poor fraud prevention and detection. The purpose of this study is to ascertain the impact of internal audit effectiveness and continued professional commitment to fraud detection with internal auditors' quality as a moderating variable. Seventy-eight questionnaires were distributed to internal auditors and supervisors at the Inspectorate of Riau City, Indonesia, who had at least two years of experience. Structural equation modeling (SEM) 3.0 software was used for the data analysis. According to the study's findings, the effectiveness of internal control ( $\beta=-0.932;\,p<0.05$ ) and the effectiveness of internal auditors ( $\beta=1.149;\,p<0.05$ ) both have an impact on fraud detection. However, ongoing professional commitment ( $\beta=0.069;\,p>0.05$ ) has no impact. Quality of internal auditors does not affect the relationship between the effectiveness of internal audits ( $\beta=-0.190;\,p>0.05$ ), the effectiveness of internal control ( $\beta=0.114;\,p>0.05$ ), continued professional commitment ( $\beta=0.018;\,p>0.05$ ), and fraud detection. The findings of this study can be used as guidance for management to enhance the performance of internal auditors and for considerations and assessments for fraud detection in the public sector.

**Keywords** internal audit, internal control, professional

commitment, Indonesia, SEM

JEL Classification D23, M40, M41, M42

#### INTRODUCTION

In many nations, including Indonesia, fraud charges or fraud-related offenses are widespread. Mass media outlets continue to cover numerous fraud incidents. Unfortunately, the number of fraud cases in Indonesia has not diminished, and it happens frequently throughout the country. Corruption is one form of fraud that the Indonesian government still has to fight with. Corruption has a wide range of effects, particularly on losses to state finances, slowing the rate of national development and lowering the living standards. The Indonesian Fraud Survey (IFS), conducted in 2019 by the Association of Certified Fraud Examiners (ACFE), revealed that corruption cases accounted for 64.4% of all fraud cases in Indonesia, followed by misappropriation of assets by the government or a company at 28.9% and financial statement fraud at 6.7% (ACFE Indonesia, 2020). Transparency International (2021) indicated that Indonesia had a Corruption Perceptions Index (CPI) of 38 in 2021, up from the previous year. The index places Indonesia at position 98.

Various industries, both public and commercial, are susceptible to this fraudulent activity. This does not necessarily happen in the central government environment in the public sector; it can also happen in the local government environment. According to Indonesia Corruption

Watch (ICW, 2021b), there were 209 corruption incidents in the first semester of 2021, resulting in state losses of Rp. 26.8 trillion, bribes of Rp. 96 billion, and illegal taxes of Rp. 2.5 billion. In the same survey, ICW discovered that 162 State Civil Apparatuses (ASN), or roughly 33.4%, were responsible for the bulk of corruption offenses, while 103 individuals from the private sector, or around 21.6%, occupied the position of second-rank offenders. In addition, the majority of corruption cases – 62 in total – occurred in the village government. East Java Province had the most cases, followed by East Nusa Tenggara (ENT) Province, with 17 corrupt practices (ICW, 2021b).

Fraud in government organizations can be committed not just by individuals in powerful positions but also by their subordinates. The types of fraud that frequently take the shape of financial statement manipulation, document erasure, mark-up expenses, and revenue realization theft can affect state and regional finances (Solichin, 2020). Limitations in the audit cannot be avoided although it was prepared and carried out in compliance with rules. Therefore, significant misstatements in the financial accounts can be undetected. It is critical to conduct continuing fraud detection as the amount of fraud grows.

### 1. LITERATURE REVIEW

The Auditing Standards Board (ASB), an arm of the American Institute of Certified Public Accountants (AICPA), was created to amend the Statement on Auditing Standards (SAS). Prior to SAS No. 1, an auditor was only accountable for the financial statements' compliance with the applicable laws; as a result, the auditor was not accountable for any discovered mistakes or fraudulent activity. Regarding Fraud Considerations in the Audit of Financial Statements (SAS No. 99 was changed in 1997 to SAS No. 82 and then changed back in 2002), "The auditor has a responsibility to obtain reasonable assurance about whether the financial statements are free from material misstatements or recordings, both those arising from errors or fraud, in the planning and carrying out of audit activities." Fraud is a clever act of lying and dishonesty that is committed by an individual, a group, or an organization with the intention of gaining something for themselves at the expense of other people (Narayana & Ariyanto, 2020).

Attribution theory focuses on how people explain what can cause a person's behavior, whether it comes from internal factors that are in a person's nature, such as personality, character, nature, self-understanding, commitment, motivation, or ability (Heider, 1958). Additionally, environmental variables and other social values can be used to identify external influences that originate from outside the person, such as being exposed to stressful events or certain conditions that may have an impact on behavior. A hypothesis regarding how

to explain causes is known as attribution theory. Typically, a person acts in accordance with his/her own or other people's behavior. A behavioral decision-making model can be easily connected to the attribution process (Agustina et al., 2021).

The fraud diamond theory explains the variables that may influence a person's decision to commit fraud. The fraud diamond hypothesis, according to Wolfe and Hermanson (2004), is a development of Donald Cressey's fraud triangle theory by including a capacity factor. The fraud diamond, according to Wolfe and Hermanson (2004), is made up of pressure, opportunity, rationalization, and capability. Pressure is a circumstance that puts pressure on a person to conduct deception. Employees and management frequently use this pressure as justification for fraud. The amount of pressure that a person is under, whether it be financial or not, can influence him/her to commit fraud. In addition, they are unable to disclose the financial pressure that they are under (Tuanakotta, 2019). According to SAS No. 99, circumstances that can put someone or a group under pressure to commit fraud are financial stability, outside pressure, and individual financial requirements (Ramos & West, 2003). Opportunity is a circumstance that presents an opportunity for fraud to be committed or one that creates such an opportunity. According to Cressey (1973), there are two conceptions of opportunities. Conditions mean that the fraudster feels free to perpetrate fraud without having to answer for his activities because he is in a high position and is trusted. Technical knowledge means that the fraudster's competence or particular capabilities support his fraud.

By rationalizing their actions, people can behave consciously and purposefully to commit fraud. Rationalization is an act or behavior that leads someone to commit fraud. Fraudsters believe that their actions justify more unethical behavior. Fraudsters have traits connected to the aspect of capability, according to Wolfe and Hermanson (2004). These traits include positioning - having a high position with significant authority and influence. Naturally, intelligence necessitates a strong ability to exploit the company's internal control deficiencies in addition to position. With convincing evidence or ego, the criminal has a strong conviction that the fraud he committed is impenetrable. Coercion involves convincing and inviting people to participate in dishonest activity.

A set of actions is taken as part of fraud detection to stop the acquisition of money or property under false pretenses (Nwaobia et al., 2021). Fraud detection is the first step in obtaining accurate initial fraud findings and limiting the movement and opportunity of fraud perpetrators (Narayana & Ariyanto, 2020). Since fraud detection is an unstructured endeavor, auditors must consider alternate approaches and gather extra data, documents, and information from diverse sources (La Ode et al., 2020).

Finding clues to fraud in an organization, such as signals, signs, indicators, or abnormalities, can help with fraud detection (Agustina et al., 2021; Umar et al., 2019). An auditor must comprehend each criterion and sign because each fraud has a particular set of requirements (Umar et al., 2019). The most crucial parts of financial fraud are vigilance and ongoing inquiry, looking at all organizational activities, and taking appropriate action if a violation is discovered. Financial fraud has several aspects that stretch deep into diverse activities (Drogalas et al., 2017). Fraud detection, in the opinion of Narayana and Ariyanto (2020), is the first step in obtaining accurate fraud results and limiting the mobility and opportunities for fraudsters. The need for ongoing fraud detection is driven by the rise in fraud acts.

The most efficient way to detect fraud in Indonesia, according to IFS survey data from ACFE Indonesia (2020), is through the hotline/whistle-blower system mechanism, which accounts for 22.6% of cases, and consistency in the application of anti-

fraud policies in organizations, which accounts for 13.8% of cases. Internal audits are fourth with a 9.6% rate. This demonstrates that the contribution of internal audits to fraud detection in Indonesia is still weak. Although the results of the audit in various regions were unqualifiedly endorsed, the regional head in question was embroiled in a corruption investigation (Solichin, 2020).

Effectiveness is a metric that indicates how established organizational objectives have been accomplished (Arens & Elder, 2011). An internal audit is an unbiased assurance and consultation process intended to evaluate and enhance an organization's operations (IIA, 2004). Internal audit can aid firms in achieving their objectives by using a methodical and organized approach to assessing and enhancing the efficiency of risk-based management, control, and governance procedures (IIA, 2004). Internal audits can examine all business operations that might have an impact on a company's long-term viability (Kontogeorgis, 2018).

The Committee of Sponsoring Organizations of the Treadway Commission (COSO, 2019) defines internal control as a procedure intended to give reasonable assurance about the accomplishment of goals related to operations, reporting, and compliance. An entity's board of directors, management, and other personnel influences this process. Internal control is a procedure created and influenced by those in charge of management, governance, and authority to provide sufficient assurance that the procedure will achieve the entity's goals with regard to the accuracy of financial records, the usefulness and proficiency of the procedure, and compliance with the principles, rules, and regulations (Haladu, 2018). The control environment, risk assessment, control operations, communication, and monitoring information are the constituent parts of internal control (COSO, 2019).

Professional continuity commitment happens when an employee requires the company or the place where he/she is now employed due to the money, benefits, and other advantages gained. However, sometimes an employee cannot find a position that pays as much or loses money if he leaves the company (González & Guillén, 2008; Pura, 2021). An individual's close connection to his or her profession is referred to as professional

commitment. Strongly committed accountants often feel a strong moral need to perform honorably and advance their profession, such as by reporting other people's suspect behavior (Mansor et al., 2020). Allen and Meyer (1990) identified three elements of professional commitment. The first is affective commitment, which refers to a situation in which people stick with a company because they genuinely want to be a part of it. Employees who remain in an organization because they depend on it are said to have a continuity commitment, which is an occurrence related to the degree to which they must remain with the organization. It can be necessary for income and other perks, or it might be because the employee is unable to find employment elsewhere. Normative commitment is derived from the ideals held by workers. Employees remain a part of an organization because they are aware that the necessary action is to demonstrate a commitment to it.

According to the Head of BPKP's Regulation PER-211/K/JF/2010 about Auditor Competency Standards (Standar Kompetensi Auditor, 2010), auditors must conduct themselves professionally in order to carry out their duties and responsibilities. Audit quality is improved by internal auditors' expertise and credentials (Bubilek, 2017). Education, knowledge, broad insight, expertise, skills, experience, and other requirements needed to perform their duties, such as collective nature (professional abilities needed by the auditor to perform duties), are the qualifications needed by the auditor to conduct an audit (Agustina et al., 2021). Qualified and competent internal auditors can frequently handle complex problems in the audit department. According to Aswar et al. (2021), Aswar et al. (2020), and Zainudin et al. (2021), auditors need specialized knowledge to help them be more effective at spotting financial statement fraud.

Members of APIP who are internal auditors are required to develop a more independent mindset in accordance with any applicable rules and procedures for audit responsibilities (Aswar et al., 2021; Risanti et al., 2021). Independence can have a big impact on fraud detection (Hamilah et al., 2019; Octavia et al., 2021). The relationship between internal audit and fraud detection can be moderated by independence (Nwaobia et al., 2021). According to Umar et al. (2019), independence does not im-

prove audit quality or fraud detection. The ability to detect internal auditor fraud cannot be directly impacted by auditor independence (Agustina et al., 2021). Nwaobia et al. (2021) produced results of internal auditor quality that may be used to reduce the impact of internal audits on fraud detection. These results were measured by competence, auditor experience, and independence. In addition to following the applicable audit standards, the auditor must possess specific qualities, such as competence, experience, independence, integrity, and proper professional care (Kertarajasa et al., 2019). This argument suggests that internal auditors can assist external auditors in enhancing the quality of their audits, hence facilitating fraud prevention.

## 2. AIM AND HYPOTHESES

This study aims to examine the moderating effect of internal auditor quality on determinant factors of fraud detection. Specifically, the study hypothesizes that:

- $H_1$ : The effectiveness of internal audits has a significant influence on fraud detection.
- $H_2$ : The effectiveness of internal control has a significant influence on fraud detection.
- *H*<sub>3</sub>: Continuing professional commitment has a significant influence on fraud detection.
- H<sub>4</sub>: The quality of internal auditors moderates the relationship between the effectiveness of internal audit and fraud detection.
- *H<sub>5</sub>:* The quality of internal auditors moderates the relationship between the effectiveness of internal control and fraud detection.
- *H*<sub>6</sub>: The quality of internal auditors moderates the relationship between continuing professional commitment and fraud detection.

#### 3. METHODOLOGY

Internal auditors from Riau City's Inspectorate made up the study's population. For primary data collection, questionnaires were used. In order to

**Table 1.** Measurement of research variables

Variable	Indicator	Scale	Number of Statements	Source
Fraud Detection	Detect employee fraud, transactions, and falsification of financial statements	Likert	4	Drogalas et al. (2017)
Internal Audit Effectiveness	Consequences of discipline, adequate number of internal auditors, and improvement of the internal audit system	Likert	4	Drogalas et al. (2017)
Internal Control Effectiveness	Control environment, risk assessment, control activities, information and communication, and monitoring	Likert	13	Shonhadji and Maulidi (2022)
Continuing Professional Commitment	The auditor's assumptions and actions he takes in his profession	Likert	6	Hikmayah and Aswar (2020)
Internal Auditor Quality	Competence and independence	Likert	14	Aswar et al. (2021)

assess and test the variables, data were collected from samples that met the criteria using the questionnaire approach. This study utilizes measurements from earlier research utilizing a five-point Likert scale, from one (strongly disagree) to five (strongly agree). Internal auditors and supervisors who met the minimum requirement of two years of employment at the Riau City Inspectorate made up 78 samples. Table 1 shows a list of the measurement tools utilized in this study.

## 4. RESULTS AND DISCUSSION

Descriptive statistics refer to a thorough analysis performed to explain the collected data. Descriptive statistical data were gathered after analysis using PLS version 3 (Table 2).

Table 2 reveals that the dependent variable for fraud detection consists of four questions with a mean of 4.35 and a standard deviation of 0.03. The mean value for the independent variable, effectiveness of internal audit with four questions, is 4.43, with a standard deviation of 0.11. The mean value obtained for the independent variable, effectiveness of internal control with 13 questions, is 4.18, with a standard deviation of 0.27. With six ques-

tions on the independent variable of continuing professional commitment, the mean resulted in 4.08, with a standard deviation of 0.33. With 14 questions, the moderating variable of internal auditor quality yielded a mean of 4.02 and a standard deviation of 0.19. Each variable's standard deviation value in Table 2 is smaller than the mean, indicating that the homogeneity of the processed data is fairly strong.

Table 3. Convergent validity and reliability

Variable	AVE	Composite Reliability	Cronbach's Alpha
EIA	0.741	0.920	0.890
EIC	0.671	0.960	0.972
CPC	0.594	0.941	0.943
QIA	0.905	0.927	0.858
FD	0.820	0.958	0.963

Note: EIA = Internal Audit Effectiveness; EIC = Internal Control Effectiveness; CPC = Continuing Professional Commitment; QIA = Internal Auditor Quality; FD = Fraud Detection.

According to Table 3, each variable has a high reliability value for each construct as the composite reliability value and Cronbach's alpha for all constructs are above 0.70. Additionally, the AVE value for each variable is higher than 0.50, supporting the assertion that each variable is legitimate.

Table 2. Descriptive statistics

Variable	Number of Questions	Mean	Standard deviation
Fraud Detection (FD)	4	4.35	0.03
Internal Audit Effectiveness (EIA)	4	4.43	0.11
Internal Control Effectiveness (EIC)	13	4.18	0.27
Continuing Professional Commitment (CPC)	6	4.08	0.33
Internal Auditor Quality (QIA)	14	4.02	0.19

**Table 4.** PLS Path algorithm and bootstrapping

Variable	Path coefficient	T Statistics	P Values
EIA>FD	1.149	5.674	0.000
EIC> FD	-0.932	2.238	0.001
CPC> FD	0.069	0.568	0.477
QIA*EIA> FD	-0.190	0.574	0.623
QIA*EIC> FD	0.114	0.240	0.645
QIA*CPC> FD	0.018	0.324	0.450

Note: EIA = Internal Audit Effectiveness; EIC = Internal Control Effectiveness; CPC = Continuing Professional Commitment; QIA = Internal Auditor Quality; FD = Fraud Detection.

The test results reveal that the study's *t*-table, which is 2.024, was calculated using the formulas df = n - k or df = 78 - 5 = 73. This value is then connected with a 5% confidence level, which is equal to 0.05. Testing internal audit effectiveness at spotting fraud yields 5.674 > 2.024 and a significance level of 0.000 < 0.050. These findings suggest that internal audit effectiveness has a large impact on fraud detection, and H1 is accepted. The findings are consistent with those of Barzinji et al. (2022), who used a sample of 110 companies listed on the Iraqi Stock Exchange to determine how well internal control works in detecting fraud and preventing it. Flowerastia et al. (2021) showed that internal control has a beneficial impact on fraud detection using a sample of 15 startup enterprises in Jakarta. High internal control has an impact on Sulselbar bank fraud detection (Sudirman et al., 2021). This supports the fraud diamond theory, which explains what influences a person's decision to commit fraud, one of which is a circumstance that presents an opportunity for fraud or an opportunity that is made for fraud perpetrators. Whereas fraud detection will be easier to do if strong internal control is adopted, this will restrict possibilities for fraud perpetrators.

Testing internal control effectiveness in preventing fraud yields t-value > t-table (2.238 > 2.024) and a significance value of 0.001 < 0.050. These findings suggest that the effectiveness of internal control has a considerable impact on the detection of fraud, and H2 is therefore accepted. The findings of this investigation are consistent with studies by Sudirman et al. (2021), Flowerastia et al. (2021), and Barzinji et al. (2022). They discovered that fraud detection was impacted by high internal control levels. This lends credence

to the fraud diamond theory, which explains the elements that influence a person's decision to commit fraud. One such element is the creation of an opportunity for the perpetrator to engage in fraudulent activities. When efficient internal controls are put in place, fraud detection will be made simpler, which will limit the options available to fraudsters in an effort to reduce fraud.

A significant value of 0.477 > 0.050 is shown when testing the relationship between continuing professional commitment and fraud detection, with t-value < t-table (0.568 < 2.024). As a result, H3 is rejected, demonstrating that continuing professional commitment has no discernible impact on fraud detection. This study supports Anfusina and Mappanyukki (2020), who showed that professional commitment has little bearing on fraud. This continual dedication to one's career is related to the external forces that affect a person's conduct, such as the need for a job and other necessities. This finding is corroborated by descriptive data on continuing professional commitment, wherein the fifth indicator received responses from up to four out of 78 respondents, or roughly 5%, who strongly disagreed with the statement that changing careers from an auditor to another profession is difficult. Up to four out of 78 respondents, or about 5%, indicated that they did not concur that changing careers other than those of an auditor was tough. Heider's (1958) attribution theory focuses on how people explain what might have led to a person's or individual's behavior. The findings of this study are not supported by the attribution theory because a person's ongoing professional commitment has no bearing on their ability to detect fraud. Even though the external factors they must contend with are constantly changing, this has no bearing on the auditor's ability to carry out his duties to do so.

A significant value of 0.623 > 0.050 is found while evaluating the mediating effect of quality of internal auditors on the relationship between the effectiveness of internal audits and fraud detection. These findings show that the relationship between the effectiveness of internal audits in detecting fraud is not moderated by the quality of internal auditors; H4 is rejected. These

findings are consistent with Hatuwe et al. (2022), who found that for a sample of all 88 auditors at BPKP Maluku and Papua, competence and independence had no effect on the capacity of auditors to detect fraud. Additionally, Prasetyo et al. (2015) found that an internal auditor receives compensation directly from the organization being audited. Hence, independence has no discernible impact on the auditor's capacity to identify fraud. Atmaja (2016) discovered that proficiency had no discernible impact on fraud detection, which was brought on by the fact that fraud schemes became more complicated as technology became more advanced. The descriptive data on the fourth indicator reveal another factor that contributes to the lack of effectiveness. Up to 11 out of 78 respondents, or 14%, gave neutral responses, indicating that they have doubts about their ability to stay current on industry developments and changes to applicable regulations and standards.

For the seventh indicator, 14 out of 78 respondents, or 19%, chose "neutral," indicating that they were unsure about their ability to compile and deliver audit reports. In addition, for the 12th indication, 14 out of 78 respondents, or 19%, gave neutral responses, indicating that they had doubts about their ability to freely access the information sources necessary to perform audits. Additionally, 11 out of the 78 respondents (14% of the total) gave a neutral response to the 14th indicator, indicating that they were unsure about their freedom from feeling compelled to change the facts to be reported. The study's findings contradict the attribution theory, which contends that an individual's internal and external circumstances will influence how successfully an auditor can spot fraud. Internal auditors are thought to be less capable of upholding their independence when performing audits; if internal auditors cannot uphold their independence, their duty to uncover fraud is diminished, and these may result in serious misstatements that lead to inaccuracies in financial statements. Furthermore, it demonstrates that a person's high competence does not necessarily ensure that the auditor is able to detect fraud; increasingly complicated technology is being employed as a means of concealing the fraudulent actions undertaken, necessitating the need for specialized skills. This outcome conflicts with the findings of Nwaobia et al. (2021), who showed that auditor attributes like competence and independence can reduce the impact of internal audit on fraud detection in a sample of 10 carefully chosen Nigerian banks.

A significant value of 0.645 > 0.050 and *t*-value > t-table (0.240 < 2.024) are obtained when the relationship between the effectiveness of internal controls and fraud detection is tested. These findings show that the relationship between internal control effectiveness and fraud detection is not moderated by the quality of internal auditors; hence, H5 is rejected. These findings are consistent with Agustina et al. (2021), who found that for a sample of auditors from the Inspectorate General of the Ministry of Education and Culture, competence or independence had no effect on fraud detection. The findings contradict the attribution hypothesis, which contends that an auditor's capacity for fraud detection is influenced by competence and independence. Descriptive data reveal the reason for this outcome: internal auditors continue to mistrust their independence because they work for the organization. Additionally, information and evidence of the sufficiency of the evidence are required for an examination. Despite the auditor's high level of proficiency, this proficiency is unaffected by the auditor's inability to identify fraud because of the auditor's inability to obtain the necessary information. High-quality evidence must also be sufficient and convincing in addition to being relevant and reliable.

The value of *t*-value > *t*-table (0.234 < 2.024) with a significance value of 0.450 > 0.050 is shown when testing the moderating effect of internal auditor quality on continuing professional commitment and fraud detection. These findings show that the level of internal auditor competency has no bearing on the association between continued professional commitment and fraud detection; H6 is rejected. According to Agustina et al. (2021), there is no relationship between the competence and independence of auditors and fraud detection. This conclusion is supported by the study's findings. The cause of the internal auditor quality variable's inefficiency can be seen in the descriptive data; it seems that some auditors

still have doubts about their ability to continuously update and improve their knowledge in light of changes to applicable standards and laws, despite the fact that by professional standards an auditor must constantly advance his abilities and knowledge. Additionally, an internal auditor must always be impartial and independent when performing audits, yet according to the

descriptive data, some respondents continue to question their independence. Internal auditors are thought to be less capable of upholding their independence when performing audits; if an internal auditor cannot uphold independence, his duty to uncover fraud is diminished, and this may result in serious misstatements that lead to inaccuracies in financial statements.

### CONCLUSION

The purpose of this study is to investigate the elements that influence fraud detection while control-ling for internal auditor effectiveness. The findings of this study show that fraud detection is significantly influenced by the effectiveness of internal audit; this suggests that the ability to detect fraud increases with the internal audit effectiveness. Fraud detection is significantly influenced by the effectiveness of internal controls; this suggests that the ability to detect fraud increases with the internal control effectiveness. The detection of fraud is not much impacted by continuing professional commitment; this suggests that an auditor's commitment to his profession has no impact on his capacity to spot fraud. The relationship between internal audits, effectiveness of internal controls, professional commitment, and fraud detection cannot be moderated by the quality of internal auditors.

This study has several constraints. Riau City Inspectorate was the sole inspectorate institution used as the study's subject; thus, the results cannot be generalized. The distribution of questionnaires as a method of data collection made it possible for respondents to not fill in the questionnaires seriously because they were not accompanied while completing the questionnaires. It is anticipated that the recommendations made to the APIP Inspectorate of Riau City will help internal auditors behave more independently and in accordance with the appropriate APIP standards. For internal auditors to be able to spot very complicated hidden fraud, they must also have a number of specific skills. To enable the generalization of research findings, future research can include additional variables such as experience, professional skepticism, audit quality, forensic accounting competence, affective and normative professional commitment, length of the audit period, and increase the subject of study and respondents.

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### REFERENCES

- ACFE Indonesia. (2020). Riset Fraud Indonesia 2019 [The Indonesia fraud survey (IFS) 2019]. (In Indonesian). Retrieved from https://acfe-indonesia.or.id/survei-fraud-indonesia/
- Agustina, F., Nurkholis, & Rusydi, M. K. (2021). Auditors' professional skepticism and fraud detection. International Journal of Research in Business and Social Science, 10(4), 275-287. https://doi.org/10.20525/ ijrbs.v10i4.1214
- 3. Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1-18. https://doi.org/10.1111/j.2044-8325.1990. tb00506.x
- Anfusina, M. S., & Mappanyukki, R. (2020). The effect of morality, compensation, and professional commitment to fraudulent financial statements with rationalization as an intervening variable empirical study on SKPD South Tangerang City. International Journal of Asian Social Science, 10(9), 521-534. https://doi.org/10.18488/journal.1.2020.109.521.534
- Arens, A. A., & Elder, R. J. (2011). Auditing and assurance service an integrated approach – An Indonesian adaptation (1<sup>st</sup> ed.). Salemba Empat.
- Aswar, K., Akbar, F. G., Wiguna, M., & Hariyani, E. (2021). Determinants of audit quality: Role of time budget pressure. *Problems and Perspectives in Management*, 19(2), 308-319. https://doi.org/10.21511/ ppm.19(2).2021.25
- Aswar, K., Ermawati, E., Wiguna, M., & Hariyani, E. (2020). A conceptual framework on the audit quality in the government internal audit in Indonesia. *Information Management* and Business Review, 12(1(I)), 22-26. https://doi.org/10.22610/imbr. v12i1(I).3012
- Atmaja, D. (2016). Pengaruh kompetensi, profesionalisme, dan pengalaman audit terhadap kemampuan auditor badan pemeriksa keuangan (BPK) dalam mendeteksi fraud dengan teknik audit berban-

- tuan komputer (TABK) sebagai variabel moderasi [The influence of competency, professionalism and audit experience on the ability of financial audit agency auditors to detect fraud using computer-assisted audit techniques as a moderating variable]. *Media Riset Akuntansi*, *Auditing & Informasi*, 16(1), 53-68. (In Indonesian). https://doi.org/10.25105/mraai.v16i1.2078
- 2. Barzinji, Z. A. Q., Yusoff, D. W. S., Rosbi, M. S. B. M., Salleh, M. F. M., & Abdullah, A. H. (2022). The effect of forensic accounting on fraud prevention, the moderating role internal control effectiveness. *International Journal of Economic, Commerce and Management, X*(1), 213-230. Retrieved from http://ijecm.co.uk/wp-content/up-loads/2022/01/10113.pdf
- Bubilek, O. (2017). Importance of internal audit and internal control in an organization – Case study (Thesis). ARCADA. Retrieved from https://core.ac.uk/download/ pdf/84797907.pdf
- COSO. (2019). COSO internal control – integrated framework: Implementation guide for the healthcare provider industry. Retrieved from https://www.coso. org/\_files/ugd/3059fc\_b5232f-85f48848a295cc6c168de82006.pdf
- Cressey, D. R. (1973). Other people's money. Montclair: Patterson Smith.
- Drogalas, G., Pazarskis, M., Anagnostopoulou, E., & Papachristou, A. (2017). The effect of internal audit effectiveness, auditor responsibility and training in fraud detection. *Journal of Accounting and Management Information Systems*, 16(4), 434-454. https://doi.org/10.24818/jamis.2017.04001
- 14. Flowerastia, R. D., Trisnawati, E., & Budiono, H. (2021). Fraud awareness, internal control, and corporate governance on fraud prevention and detection. Proceedings of the International Conference on Economics, Business, Social, and Humanities (ICEBSH 2021) (pp. 235-242). https://doi.org/10.2991/ assehr.k.210805.038

- González, T. F., & Guillén, M. (2008). Organizational commitment: A proposal for a wider ethical conceptualization of 'normative commitment'. *Journal of Business Ethics*, 78(3), 401-414. https://doi. org/10.1007/s10551-006-9333-9
- 16. Haladu, D. A. (2018). Fraud detection and internal control measures in deposit money banks listed on the NSE. *International Journal of Science and Management Studies (IJSMS)*, *1*(4), 43-54. https://doi.org/10.51386/25815946/ijsms-v1i4p106
- 17. Hamilah, H., Denny, D., & Handayani, E. (2019). The effect of professional education, experience and independence on the ability of internal auditors in detecting fraud in the pharmaceutical industry company in Central Jakarta. *International Journal of Economics and Financial Issues*, 9(5), 55-62. https://doi.org/10.32479/ijefi.8602
- Hatuwe, R. S. M., Musa, M. N. D., Saling, & Marihi, L. O. (2022). Determinant of fraud detection on financial statement. *Public Policy* (*Jurnal Aplikasi Kebijakan Publik* & Bisnis), 3(1), 16-26. https://doi. org/10.51135/publicpolicy.v3.i1. p16-26
- Heider, F. (1958). The psychology of interpersonal relations. New York: John Wiley & Sons. http://dx.doi. org/10.1037/10628-000
- Hikmayah, N., & Aswar, K. (2020).
   The impact of factors on the audit quality in Indonesia: The moderating effect of professional commitments. International Journal of Academic Research in Accounting, Finance and Management Sciences, 9(4), 285-293. http://dx.doi.org/10.6007/IJARAFMS/v9-i4/6916
- 21. Indonesia Corruption Watch (ICW). (2021a). *Indonesia Corruption Watch (Anti Korupsi)*. Retrieved from https://www.loc.gov/item/lcwaN0003129/
- 22. Indonesia Corruption Watch (ICW). (2021b, September 12). *Tren penindakan kasus korupsi semester 1 tahun 2021*. (In Indonesian). Retrieved from https://antikorupsi.org/

- id/article/tren-penindakan-kasus-korupsi-semester-1-tahun-2021
- Kertarajasa, A. Y., Marwa, T., & Wahyudi, T. (2019). The effect of competence, experience, independence, due professional care, and auditor integrity on audit qualitiy with auditor ethics as moderating variable. *Journal of Accounting Finance and Auditing Studies (JAFAS)*, 5(1), 80-99. https://doi.org/10.32602/jafas.2019.4
- Kontogeorgis, G. (2018). The role of internal audit function on corporate governance and management. *International Journal of Accounting and Financial Reporting*, 8(4), 100-114. https://doi.org/10.5296/ijafr. v8i4.13626
- La Ode, A., Wahyuniati, H., Angela, F., & Oktri, S. (2020). Auditor's ability to detect fraud: Independence, audit experience, professional skepticism, and work load. *Russian Journal of Agricultural and Socio-Economic Sciences*, 107(11), 192-205. https://doi.org/10.18551/rjoas.2020-11.23
- Mansor, T. M. T., Mohamad Ariff, A., & Hashim, H. A. (2020). Whistleblowing by auditors: The role of professional commitment and independence commitment. *Managerial Auditing Journal*, 35(8), 1033-1055. https://doi.org/10.1108/ MAJ-11-2019-2484
- Narayana, A. A. S., & Ariyanto, D. (2020). Auditors experience as moderating effect investigative abilities and understanding of red flags on fraud detection. *International Research Journal of Management,* IT & Social Sciences, 7(1), 205-216. https://doi.org/10.21744/irjmis. v7n1.837
- Nwaobia, A. N., Omotayo, I. I., & Ajibade, A. (2021). Internal audit and fraud detection in selected banks listed in Nigeria. *Journal* of *Economics and Finance (IOSR-JEF)*, 12(4), 51-65. Retrieved from https://www.iosrjournals.org/ iosr-jef/papers/Vol12-Issue4/Ser-4/ H1204045165.pdf
- 29. Octavia, E., Saudi, M. H., & Sinaga, O. (2021). Independence, professionalism and auditor's ability in detecting fraud (PT. Telkom Bandung). *Palarch's Journal of Archaeology of*

- Egypt/Egyptology, 17(10), 1178-1190. Retrieved from https://archives. palarch.nl/index.php/jae/article/view/4808
- Prasetyo, S., Kamaliah, K., & Hanif, R. (2015). Pengaruh red flags, skeptisme profesional auditor, kompetensi, independensi, dan profesionalisme terhadap kemampuan auditor dalam mendeteksi kecurangan [The influence of red flags, auditor professional skepticism, competence, independence and professionalism on the auditor's ability to detect fraud]. Jurnal Online Mahasiswa Fakultas Ekonomi Universitas Riau, 2(1), 33851. (In Indonesian). Retrieved from https:// www.neliti.com/publications/33851/ pengaruh-red-flags-skeptismeprofesional-auditor-kompetensiindependensi-dan-pro
- il. Pura, R. (2021). Pengaruh kompetensi auditor, komitmen profesional dan etika profesi terhadap perilaku disfungsional auditor [The influence of auditor competence, professional commitment and professional ethics on auditor dysfunctional behavior]. *JABI (Jurnal Akuntansi Berkelanjutan Indonesia)*, 4(2), 204-217. (In Indonesian). Retrieved from https://openjournal.unpam. ac.id/index.php/JABI/article/view/8906
- 32. Ramos, M., & West, L. (2003). Fraud detection in a GAAS audit: SAS no.99 implementation guide. AICPA – American Institute of Certified Public Accountants. Retrieved from https://core.ac.uk/download/ pdf/288061006.pdf
- Risanti, T. P., Aswar, K., Jumansyah, J., & Wirman, W. (2021).
   Determinants influencing the audit quality: Empirical evidence from Indonesia. *Universal Journal of Accounting and Finance*, 9(6), 1265-1272. http://dx.doi.org/10.13189/ujaf.2021.090606
- Shonhadji, N., & Maulidi, A. (2022).
   Is it suitable for your local governments? A contingency theory-based analysis on the use of internal control in thwarting white-collar crime.
   Journal of Financial Crime, 29(2), 770-786. https://doi.org/10.1108/JFC-10-2019-0128
- Solichin, M. (2020). Increasing capability of local government internal auditors in detecting fraud

- through strengthening professional commitments and organizational commitments. *Proceedings of The First International Conference on Financial Forensics and Fraud.* Bali, Indonesia. https://doi.org/10.4108/eai.13-8-2019.2294255
- 36. Standar Kompetensi Auditor. (2010).

  Peraturan Kepala BPKP NomorPER211/K/JF/2010 [Regulation of the
  Head of BPKP Number PER-211/K/
  JF/2010]. (In Indonesian). Retrieved
  from https://jdih.bpkp.go.id/
  produkhukum/194/detail
- Sudirman, S., Sasmita, H., Djabir D, M., Krisnanto, B., & Muchsidin, F. F. (2021). Effectiveness of internal audit in supporting internal control and prevention of fraud. *Bongaya Journal for Research in Account*ing (BJRA), 4(1), 8-15. https://doi. org/10.37888/bjra.v4i1.271
- 38. The Institute of Internal Auditors (IIA). (2004). *Institute of internal auditors*. Retrieved from https://www.theiia.org/en/standards/what-are-the-standards/mandatory-guidance/
- Transparency International. (2021). Corruption perceptions index. Retrieved from https://www.transparency.org/en/cpi/2021/index/idn
- 40. Tuanakotta, T. M. (2019). Audit internal berbasis risiko [Risk-based internal audit]. Salemba Empat. (In Indonesian).
- 41. Umar, H., Erlina, Fauziah, A., & Purba, R. B. (2019). Audit quality determinants and the relation of fraud detection. *International Journal of Civil Engineering and Technology (IJCIET)*, 10(3), 1447-1460. Retrieved from https://ssrn.com/abstract=3457115
- 42. Wolfe, D. T., & Hermanson, D. R. (2004). The fraud diamond: Considering the four elements of fraud. *The CPA Journal*, 74(12), 38-42. Retrieved from https://digitalcommons.kennesaw.edu/facpubs/1537/
- Zainudin, A. D. P. A., Aswar, K., Lastiningsih, N., Sumardjo, M., & Taufik, T. (2021). Analysis of potential factors influencing audit quality: The moderating effect of time budget pressure. *Problems and Perspective in Management Journal*, 19(4), 519-529. http://dx.doi.org/10.21511/ppm.19(4).2021.42