
IMPLEMENTATION OF COMPUTER-BASED AUDIT TECHNIQUES AS AUDITOR SUPPORT IN DETECTING FINANCIAL REPORT FRAUD

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Abstract

This study aims to analyze the influence of audit experience and professional skepticism on auditors' ability to detect financial statement fraud, with the application of Computer-Assisted Audit Techniques (CAATs) as a moderating variable. A quantitative approach was employed, with data collected through questionnaires distributed to 65 external auditors working at Public Accounting Firms in the Jakarta area. The analytical method used was Moderated Regression Analysis (MRA). The results show that audit experience does not have a significant effect on auditors' ability to detect fraud, while professional skepticism has a positive influence. The direct application of CAATs also does not significantly affect the detection ability; however, CAATs are able to moderate the relationship between professional skepticism and auditors' ability to detect fraud. Conversely, CAATs do not moderate the relationship between audit experience and fraud detection ability. These findings highlight the importance of professional skepticism and technological utilization in enhancing auditors' effectiveness in fraud detection.

Keywords: Audit Experience, Professional Skepticism, Fraud Detection, Computer-Assisted Audit Techniques (CAATs), Auditor

INTRODUCTION

Financial statements are one of the main tools used by stakeholders to assess the performance and financial condition of an entity. Therefore, reliability and honesty in presenting financial statements are very important. However, in practice, there is often manipulation of information in financial statements or what is known as financial statement fraud, which can harm many parties. A notable example of this is the financial scandal that occurred at PT Indofarma Tbk, a subsidiary of the BUMN Pharmaceutical Holding, where an investigative audit revealed fraudulent

practices resulting in state losses amounting to IDR 371.8 billion (Sandi, 2024). Such cases highlight the severe consequences of financial statement fraud and the importance of effective auditing. Fraud in financial statements is a serious threat to the integrity and public trust in an entity, especially in public companies and State-Owned Enterprises (BUMN). The case involving PT Indofarma Tbk, a subsidiary of the BUMN Pharmaceutical Holding, emerged as a significant financial scandal. An investigative audit conducted by a Public Accounting Firm (KAP) in 2024 uncovered fraudulent practices that



resulted in state losses amounting to IDR 371.8 billion (CNBC Indonesia, 2024). This scandal exemplifies weaknesses in the internal control systems and highlights the failure of auditors to detect fraud early, ultimately underscoring the importance of robust audit practices in preventing such incidents. The results of an investigative audit conducted by the Public Accounting Firm (KAP) in 2024 revealed fraudulent practices that resulted in state losses of IDR 371.8 billion (CNBC Indonesia, 2024). This case is clear evidence of the weakness of the internal control system and the role of auditors in detecting indications of fraud early.

Competence reflects the auditor's knowledge and skills in carrying out his/her duties, while audit experience provides the auditor with practical insight in dealing with various types of audit risks, including fraud. On the other hand, time pressure can reduce the accuracy and quality of the audit performed, while a high level of skepticism is required by the auditor so that he/she does not easily believe the information provided by management. (Arens, Elder, & Beasley, 2015)

According to Cressey (1950) in Natalia et al (2022), fraud can occur if there are three conditions, namely pressure, opportunity and rationalization. Febriandani and Utomo (2022) found that there are other factors that trigger fraud, including individual factors both internal and external to the company due to greed and need (low salaries, opportunistic attitudes, inadequate knowledge and technology, exploitation of loopholes due to lack of regulation. To minimize the occurrence of fraud, preventive measures need to

be taken both from within the company and external to the company (from the external auditor side).

Several previous studies such as Hafizah and Abdurahim (2017) have proven that competence, time pressure, professional skepticism, and work experience affect the auditor's ability to detect fraud. Natalia (2022) stated that there are 14 factors that affect the auditor's ability to detect fraud. There are 7 internal factors, namely auditor independence/independence, professional skepticism, auditor competence, audit experience, ethical commitment or profession/moral reasoning, emotional intelligence, and locus of control. Then there are 7 external factors, namely time pressure, audit training/education, red flag/fraud triangle, workload/complexity of tasks, whistleblowing system, digital forensics, quality control system. Gunawan (2023) found that auditor work experience and auditor professional skepticism have a positive effect on the auditor's ability to detect fraud. The established audit process coupled with audit experience and auditor skepticism will be better able to detect fraud in financial statements. Meanwhile, the auditor's workload has no effect on the auditor's ability to detect fraud.

In the context of increasingly complex financial activities and very large data volumes, the presence of Computer-Based Audit Techniques (CAA) is very important. This technology allows auditors to conduct data analysis more broadly, deeply, and quickly. However, the adoption of this technology is still limited, both in terms of understanding and practical use by auditors in Indonesia. Thus, the

application of CAA can act as a moderating variable, which strengthens or weakens the influence of individual factors on the auditor's ability to detect fraud. The application of CAA will increase the efficiency and effectiveness of audits by utilizing computer capabilities. (Surya & Widhiyani, 2016). In addition, the implementation of TABK makes it easier to access various types of electronic files and perform operations comprehensively so that fraud can be prevented early. In addition, Atmaja (2016) found that competence, professionalism, and audit experience have a positive effect on the auditor's ability to detect fraud, and the implementation of TABK can moderate this relationship.

This study aims to determine whether there is an influence of competence, audit experience, time pressure and professional skepticism on the auditor's ability to detect financial report fraud by implementing computer-based audit techniques as a

moderating variable at the DKI Jakarta Public Accounting Office.

The proposed hypothesis is formulated as follows:

Hypothesis 1: Audit experience has an impact on auditor's ability to detect fraud in financial reports

Hypothesis 2: Professional skepticism has an impact on auditor's ability to detect fraud in financial reports

Hypothesis 3: TABK has an effect on auditor's ability to detect fraud in financial reports

Hypothesis 4: The application of TABK moderates the effect of experience on the auditor's ability to detect fraud in financial reports.

Hypothesis 5: The application of TABK moderates the influence of professional skepticism on the auditor's ability to detect fraud in financial reports.

Conceptual Framework

The following is a conceptual framework for developing research hypotheses.



METHOD

The research method used in this study is a quantitative method. This study uses a population of external auditors working at Public Accounting Firms (KAP) in Jakarta registered in the Directory of the Indonesian Institute of Accountants (IAI) for the period 2016-

2024. The sample in this study was 70 External Auditors in Jakarta. The sampling technique used in this study was the convenience sampling method. The analysis method used in this study is Moderated Regression Analysis (MRA). MRA is a special application of multiple linear regression which

contains elements of regression equation interaction (multiplication of two or more independent variables)

RESULTS AND DISCUSSION

Results of Validity, Reliability and Classical Assumption Tests

Testing of the research instrument in terms of both its validity and reliability on 70 respondents showed that the results of the research instrument used were valid at a significance level of 5% and its reliability coefficient (Cronbach Alpha) was greater than 0.6 (Nunally, 1967) in (Ghozali, 2016). All questionnaire question items for the variables of audit experience, audit risk, auditor perception of the public accountant code of ethics and audit judgment are valid and reliable.

The results of the normality test using the test Kolmogorov-Smirnov is 0.200 which means the probability value is > 0.05 , so it can be concluded that the regression error (residual) data is normally distributed. Heteroscedasticity test by using scatterplot which shows that there is no clear pattern and the data distribution is spread above and below or around the number 0, then it is concluded that the data does not experience heteroscedasticity. The multicollinearity test shows that the independent variable has a tolerance value of more than (>0.1) and VIF less than (<10), so it can be concluded that there is no multicollinearity.

Hypothesis Test Results

a. Coefficient of Determination Test

Table 1. Results of Determination Coefficient Test (R^2)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.334a	.111	.042	4,581

a. Predictors: (Constant), PA, SP, TABK, Experience*TABK, Skepticism*TABK

b. Dependent Variable: Fraud

Source: processed data

Table 1 shows the R Square value of 0.111 or 11.1%, this shows that the variable auditor's ability to detect fraud in financial reports which can be explained by the variables of audit experience, professional skepticism, TABK, the interaction of audit

experience with TABK, and the interaction of professional skepticism with TABK is 11.1%, while the remaining 88.9% is explained by other factors not included in this research model.

b. Statistical Test Results t

The results of the t-statistic test can be seen in table 2 below.

Table 2. Statistical Test Results

Coefficients^a

Model			Unstandardized	Beta	Standardized
		B	Coefficients		
1 (Constant)	4.379	16,930		.259	.797
PA	-1.622	1.126	-1.048	-1.441	.155
SP	1.256	.711	1.116	1,767	.082
TABK	1,725	1.117	1.186	1,544	.127

Experience*TABK	.082	.070	1,680	1,170	.246
Skepticism*TABK	-.089	.044	-2.865	-2.007	.049

a Dependent Variable: Fraud

Source: Processed by SPSS

The results of the equation using coefficients are as follows:

$$\text{Fraud} = 4.379 - 1.622 \text{ PA} + 1.256 \text{ SP} + 1.725 \text{ TABK} + 0.082 \text{ PA} * \text{TABK} - 0.089 \text{ SP} * \text{TABK} + \epsilon$$

The Influence of Audit Experience on Auditor's Ability to Detect Fraud in Financial Reports

From the results of the t-test, it is known that the t-count value is -1.441 with a significance level of 0.155 (≥ 0.1). So it can be concluded that hypothesis 1 (H1) is rejected, which means that audit experience does not affect auditor's ability to detect fraud in financial reports. In other words, increasing auditor experience does not necessarily increase their ability to identify fraud. This finding is in line with studies conducted by Supriyanto (2015) and Swastika (2016), which also found that auditor experience does not significantly affect the ability to detect fraud. Rahayu and Gudono (2016) stated that statistically, auditor experience has no impact on the ability to uncover fraud. Aminudin and Suryandari (2016) also stated that experience partially does not affect the auditor's ability to detect fraud.

The lack of a thorough approach in observing and understanding the behavior of fraud perpetrators, including how often they manipulate, can be the reason why auditor experience alone is not enough to detect fraud – especially if the perpetrators are senior. Fraud can be committed by various parties, including those in higher positions, and experienced perpetrators usually have more complex ways to hide their actions. Therefore, it is important for auditors to have a good understanding in

recognizing signs of fraud, even if the indications point to superiors or more senior parties. Supriyanto (2015) also said that fraud detection also depends on the sophistication of the fraud perpetrators, the frequency of manipulation, the level of collusion and the size of the seniority involved.

The Influence of Professional Skepticism on Auditor's Ability to Detect Fraud in Financial Reports

From the results of the t-test, it is known that the t-count value is 1.767 with a significance level of 0.082 (≤ 0.1). So it can be concluded that hypothesis 2 (H2) is accepted, which means that Professional Skepticism has an effect on the auditor's ability to detect fraud in financial reports. The skepticism that auditors need to have includes caution in dealing with conditions that appear unusual or deviate from the normal activities of the organization being audited, caution in drawing general conclusions from the results of certain audit observations, and caution in accepting audit evidence provided by management as a substitute for primary evidence that should be collected directly by the auditor. Professional skepticism reflects the auditor's critical attitude in assessing the reliability and accuracy of the audit evidence obtained. This attitude allows the auditor to have strong confidence in evidence or statements, and encourages the auditor to consider whether the evidence is sufficient and appropriate. Therefore, in assessing audit evidence, auditors are

required to always apply professional skepticism.

The findings in this study empirically show that professional skepticism has a positive influence on the auditor's ability to detect fraud in financial statements. This means that the higher the level of professional skepticism possessed by the auditor, the greater his/her ability to identify fraud. In the context of this study, professional skepticism is more focused on an attitude that reflects thinking that always questions and critically assesses every audit evidence obtained.

This empirical finding is in line with the results of previous research conducted by (Anggriawan, 2014), (Prasetyo, 2015), (Hafizhah & Abdurahim, 2017), (Purwanti & Astika, 2017), (Larasati & Puspitasari, 2019), (Muntasir & Maryasih, 2021), as well as (Suciawati, Astari, & Bagianda, 2022), which states that professional skepticism has a positive effect on the auditor's ability to identify fraud.

The effect of TABK on Auditor's Ability to Detect Fraud in Financial Reports

From the results of the t-test, it is known that the t-count value is 1.544 with a significance level of 0.127 (≥ 0.1). So it can be concluded that hypothesis 3 (H3) is rejected, which means that TABK has no effect on auditor's ability to detect fraud in financial reports. It can be concluded that the effectiveness and efficiency in the application of computer-assisted audit techniques (CAA) have not been utilized properly by auditors. This is because some auditors do not have an educational background other than information technology, so auditors find it difficult to use computer-assisted audit techniques (CAA). In fact, the variable

computer-assisted audit techniques (CAA) is very important to apply to improve the skills or competencies of auditors. However, this study shows that the variable computer-assisted audit techniques (CAA) does not affect the auditor's ability to detect fraud. The results of this study differ from the research conducted by Najmuddin & Pamungkas (2021) and Fauzi et al. (2020) which states that the application of computer-assisted audit techniques has an effect on auditor's ability to detect fraud in financial reports

Implementation of TABK Moderates the Effect of Experience on Auditor's Ability to Detect Fraud in Financial Reports

From the results of the t-test, it is known that the t-value is 1.170 with a significance level of 0.246 (≥ 0.1). So it can be concluded that hypothesis 4 (H4) is rejected, which means that TABK is not a moderating variable of audit experience on auditor's ability to detect fraud in financial reports. Computer-Assisted Audit Techniques (CATT) do not strengthen the relationship between auditor experience and their ability to detect fraud. This means that even though auditors have experience and use CATT during the audit process, it does not necessarily increase their ability to uncover fraud. Rahmawati (2014) stated that experience is the result of knowledge and skills that someone acquires after being directly involved in a job. The more experience an auditor has, the better the quality of the audit produced, which should be able to support fraud detection. Meanwhile, CATT plays a greater role as a tool or audit implementation technique whose use needs to be adjusted to the conditions and situations of the information technology system being

audited. Therefore, the application of CATT in detecting fraud tends to be more limited and specific. This finding contradicts the literature referenced by Mahzan and Lymer (2014), which states that CATT is used by auditors as a way to help detect fraud.

Implementation of TABK Moderates the Effect of Professional Skepticism on Auditor's Ability to Detect Fraud in Financial Reports

From the results of the t-test, it is known that the t-count value is -2.007 with a significance level of 0.049 (≤ 0.1). So it can be concluded that hypothesis 5 (H5) is accepted, which means that TABK can moderate the influence of professional skepticism on the auditor's ability to detect fraud in financial reports.

Computer-Based Audit Techniques (CAA) in this study strengthen the influence of professional skepticism on the auditor's ability to detect fraud in financial statements. This can be interpreted that the increasing professional skepticism of auditors accompanied by the use of CAA in their audit assignments can improve the auditor's ability to detect fraud in financial statements. The auditor's principle of prudence is able to provide signals of fraud. The existence of CAA will give the auditor more time to detect fraud so that the resulting audit report is of higher quality.

This is in line with research conducted by Januraga and Budiarta (2015) which concluded that TABK has a negative influence on the quality of audits conducted by auditors.

CONCLUSION

Based on the research results and discussions outlined in the previous chapter, the following conclusions can be drawn: Audit experience has no

effect on the auditor's ability to detect fraud in financial reports. Thus, hypothesis one is rejected, showing that audit experience does not influence the auditor's ability to detect fraud in financial reports. Professional skepticism has an impact on the auditor's ability to detect fraud in financial reports. Thus, hypothesis two is accepted, indicating that professional skepticism influences the auditor's ability to detect fraud. TABK has no effect on the auditor's ability to detect fraud in financial reports. Thus, hypothesis three is rejected, which means that TABK does not influence the auditor's ability to detect fraud. The application of TABK cannot moderate the effect of experience on the auditor's ability to detect fraud in financial reports. Thus, hypothesis four is rejected, meaning that TABK is not a moderating variable. However, the implementation of TABK can moderate the influence of professional skepticism on the auditor's ability to detect fraud in financial reports. Thus, hypothesis five is accepted, indicating that TABK is a moderating variable.

Regarding suggestions, auditors need to be given further training on the use of Computer-Based Audit Techniques (CBA), so that they can be used optimally in detecting fraud. Auditors also need to continue developing an attitude of professional skepticism to be more careful and critical when assessing audit evidence. Further research is suggested to incorporate other variables such as technological competence, time pressure, or internal control for more comprehensive results. Additionally, further research should involve auditors from other regions in Indonesia to ensure that the results are

more representative of general conditions. Future research could benefit from using interviews or case

studies to better understand the constraints that auditors face in detecting fraud

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