

The Effect of Forensic Auditor Skills, Forensic Auditor Techniques, Forensic Auditor Experience, and Technological Readiness on Fraud Detection

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Abstract

The purpose of this study is to analyze the effect of auditor skills, auditor techniques, auditor experience, technology readiness, and auditor independence. Forensic auditors are increasingly being challenged to be able to detect fraud that is increasingly sophisticated and involves aspects of the latest technology. This research approach is quantitative. The sampling technique is incidental sampling. The population is forensic auditors scattered throughout Indonesia. The primary data collection technique is the survey method. The data analysis technique used SEM-PLS. The results showed that auditor skills, forensic auditor techniques, and experience of forensic auditors partially had a positive and significant effect on fraud detection. Meanwhile, auditor technology readiness, and auditor independence, partially have a negative and significant impact on fraud detection.

Keywords

Forensic auditor skills; forensic audit techniques; forensic auditor experience; forensic auditor technology readiness; auditor independence; fraud detection.



I. Introduction

Cases of fraud in financial statements (financial reporting fraud) have become a phenomenon, which can be seen among others from material misstatements. As stated in Statement of Auditing Standards (PSA) No. 70, problems in financial statements such as material misstatements are caused by errors or fraud. Fraud or fraud itself is a general term and includes human ingenuity to gain an advantage over others by false representations (Akers & Gissel, 2006) that are not legitimate (Joudaki, et al., 2016) such as using books and accounting reports to conceal fraudulent behaviour or give a false impression of the financial and economic reality of an entity (Tommasetti, de Oliveira Leite, Maia, & da Silva Macedo, 2021) which is an important issue today (Mohamed, Said, & Bakri, 2017). There is a term called 'triangle fraud' which consists of incentives or pressure to commit fraud or fraud, opportunities for fraud, and rationalization by perpetrators (Hollow, 2015). In addition, three other elements are added, namely the act of deception, its concealment, and the resulting conversion (benefit for the fraudsters) (Trompeter, Carpenter, Desai, Jones, & Riley Jr., 2013). Meanwhile, there are four domains of fraudulent behaviour, namely individuals, companies, organizational fields, and society in general (Cooper, Dacin, & Palmer, 2013). Coupled with changes and technological advances, the opportunities for fraud or fraud increase by increasing uncertainty and information asymmetry, with asymmetry making it more difficult for investors and regulators to monitor fraud (Toms, 2017). Especially in today's era of understanding dubious practices by constructing a narrative, perhaps framing it as a scandal, which tends to lead to regulatory change efforts (van Driel, 2019). Meanwhile, material misstatement is used as a guide to determine the extent, nature, and timing of planned audit tests (Popova, 2012).

During the audit, the risk of possible misstatements in the financial statements is assessed by analytical procedures, the input information of which is the value of the audited company's financial indicators selected by the auditor (Kochinev, Antysheva, & Putintseva, 2021).

Various audit cases occur from time to time which has a significant impact on public confidence, both national and international cases. In particular, sometimes there is a premature signing of audit documents which is one of the external auditors' behaviour in the progress of the audit which will reduce the quality of an audit program (Jasi, Nawawi, & Puteh Salin, 2016). Meanwhile, audits should be able to add credibility to financial statements and make a very large contribution to efficiently running business organizations, capital markets, and the economy as a whole (Razae, 2004) so that the public considers company failures to be identified with audit failures (Olojede, Erin, Asiriwa, & Usman, 2020). Meanwhile, public trust is the heartbeat of every profession so when trust is lost there is a credibility problem (Best, Buckby, & Tan, 2001). The occurrence of this corporate fraud can lead to a series of damaging economic consequences for the company, including damage to the company's reputation, decreased investor confidence, increased financing costs, and decreased firm value (Zhao, Yang, Li, & Song, 2021). Financial statements are basically a source of information for investors as one of the basic considerations in making capital market investment decisions and also as a means of management responsibility for the resources entrusted to them (Prayoga and Afrizal 2021). Financial performance is a measuring instrument to know the process of implementing the company's financial resources. It sees how much management of the company succeeds, and provides benefits to the community. Sharia banking is contained in the Law of the Republic of Indonesia No.21 of 2008 article 5, in which the Financial Services Authority is assigned to supervise and supervise banks. (Ichsan, R. et al. 2021)

The case of Bernard Madoff, New York Financial Manager, which broke in December 2008 was the largest private fraud case, with a value of US\$65 billion, which led to Madoff's prison sentence of 150 years (Deil, 2013). Still, at the end of 2008, Lehman Brothers with its Investment Bank declared bankruptcy. This bankruptcy became one of the worst bankruptcies to spread to the world's finances. The bankruptcy report also revealed the claims of scandalous Lehman officials and their auditors Ernst & Young who had committed fraud in the assessment of Lehman Brothers' financial statements (Deil, 2013). Another case, in 2009, was the case of Satyam, India's fourth largest information and technology outsourcing company, involving public accounting firm Price Waterhouse.

In 2019, following Enron Corp and World Com was the case of General Electric (GE). The US multinational MNCs in technology and services, GE, was hit by the issue of manipulating its financial statements. US accounting and finance investigator Harry Markopolos said GE's financial statements were inaccurate and full of fraud. Markopolos details up to 170 pages in detail where the fraud aspect is carried out. One of them is the bubble in GE's insurance unit, due to the need for funds of up to the US \$ 18.5 billion. After a seven-month investigation, the Markopolos team found that GE had a total of US\$38 billion in financial manipulation (Oktarianisa, 2019). Financial reporting fraud also occurs in Indonesia from time to time. In 2005, the financial statements of PT Kereta Api Indonesia (KAI) stated that it earned a profit of Rp. 6.90 billion, while the company incurred a loss of Rp. 63 billion.

On April 2 2018, the Chairman of the Supreme Audit Agency (BPK) received a potential state loss of Rp. 9.72 trillion from 12,947 cases. Potential state losses due to non-compliance to inefficiency at the central government, regional governments, BUMN, BUMD, oil and gas contract contractor companies (KKKS), Public Service Agencies

(BLU), and so on. The types of violations found were 3,900 cases of disobedience that endangered the state worth Rp 5.83 trillion. A total of 4,815 cases belonged to the category of weaknesses in the Internal Control System (SPI). A total of 1,901 cases were administrative irregularities, and 2,241 other cases cost the state Rp. 3.88 trillion (MetroTvNews, 2018). In 2019, the Ministry of Finance's Financial Professional Development Center (PPPK Kemenkeu) found violations committed by the Public Accounting Firm (AKP) which audited the 2018 financial statements of PT Garuda Indonesia (Persero) Tbk and its Subsidiaries, thereby providing an opinion on the independent auditor's report. on the financial statements. In addition, KAP is considered not to have implemented an optimal quality control system in connection with consultations with external parties. PT Garuda Indonesia (Tbk) was declared to have violated OJK Regulation No. 129/POJK.04/2016 concerning the Annual Report of Issuers or Public Companies. All members of the Board of Directors of PT. Garuda Indonesia was also subject to administrative sanctions for violating Bapepam Regulation Number VIII.G.11 concerning the Responsibilities of the Board of Directors for Financial Statements. Administrative sanctions are also imposed on the range of members of the Board of Directors and Board of Commissioners of PT. Garuda Indonesia (Persero) Tbk for violating OJK Regulation Number 29/POJK.004/2016 concerning the Annual Report of Issuers or Public Companies (Kemenkeu.,go.id, 2019).

Meanwhile, another issue that has attracted attention in 2019-2021 concerns three national insurance companies, namely two state-owned insurance companies [PT. Asuransi Jiwasraya (Persero), and PT. Asabari (Persero)], and a private insurance company in the form of a mutual (policyholder becomes a shareholder), namely Asuransi Jiwa Bersama (AJB) Bumiputera 1912. The three insurance companies faced similar problems in terms of investment, but with different solutions, which is part of Jiwasraya's new law (CBBC Indonesia, 2020). Jiwasraya failed to pay for its bancassurance JS Saving Plan product which is due October-December 2019 of IDR 12.4 trillion. In 2020, Jiwasraya's default has the potential to increase by IDR 3.7 trillion, bringing the total default to IDR 16 trillion. Jiwasraya is experiencing liquidity problems because the premium income is not in line with the obligations that must be carried out. The swelling of the obligation is because Jiwasraya made a mistake in setting the price of the product, aka mispricing. the product savings plan has a guaranteed return of 19-13% per year during 2013-2018 with an annual opening period. In addition to the issue of investment losses, Jiwasraya is also being investigated by the Attorney General's Office regarding allegations of corruption that cost the state Rp. 13.7 trillion. The AGO has named five suspects and blocked the assets of the suspects. Meanwhile, more than 131 investment manager companies were also investigated for this corruption crime (CNBC Indonesia, 2020).

II. Review of Literature

In connection with the issue of fraud in financial reports (financial reporting fraud), it can be studied from various perspectives. This study will examine the issue of fraud from the aspect of the auditor's ability to detect fraud, which means the problem of fraud detection. This is because information asymmetry and conflicts of interest must be reduced by ensuring high audit quality (Habib, Wu, Bhuiyan, & Sun, 2019) while audit quality is defined heterogeneously in both practice and research (Velte, 2022). Meanwhile, auditing itself is a collective process carried out by a professional accounting team with various skills, experience, and emotions (Amyar, Hidayah, Lowe, & Woods, 2019) where the goal

is to identify and assess the risk of material misstatement, whether caused by fraud or fraud. or errors at the financial statement and assertion level (Porcuna-Enguix, Bustos-Contell, Serrano-Madrid, & Labatut-Serer, 2021). Audit effort significantly increases the likelihood of audit adjustments, which hinders positive earnings management and improves the quality of audited financial statements (Xiao, Geng, & Yuan, 2020). Regarding the ability of auditors, auditors often charge higher fees to companies when the company has a larger scope of analysts (Lim & Monroe, 2020). The author's motivation for conducting this research is to find out the extent of the capacity of forensic auditors in Indonesia in detecting fraud, and whether the capacity of forensic auditors in Indonesia is adequate or not in detecting fraud, considering that nowadays the modus and technological aspects of fraud are increasingly complicated so that it is increasingly difficult to detect means demanding more capacity of forensic auditors. Financial reporting fraud is a criminal act of manipulating material facts that will affect the decisions of users of financial statements. Auditor fraud detection means how the auditor looks for violations carried out intentionally that result in fraudulent financial reporting (Suryandari & Yuesti, 2017; Siew, Zen, Afiq, Hui, Ying & Mary, 2018).

One of the causes of audit failure is the auditor's lack of sensitivity to indicators of fraud (Idawati & Gunawan, 2015). Meanwhile, it is proven that the intimacy between the client and the auditor built by the long tenure of the audit firm creates client trust (Wilson, McNellis, & Latham, 2018). Ten years of audit assignments can result in high audit quality (Carcia-Blandon, Argiles-bosch, & Ravenda, 2019). This shows that it is true that self-efficacy and sensitivity to professional ethics have a positive and significant effect on auditor performance (Afifah, Sari, Anugerah, & Sanusi, 2015) while commitment and organizational culture affect auditor performance (Indrayanti, Chandrarin, & Supanto, 2021). On the other hand, indicators of fraud can be explained into three categories. First, indicators related to the corporate environment such as corporate ethics. Second, the symptoms associated with fraud perpetrators, for example, financial pressure and opportunities to commit fraud. Third, indicators related to finance and accounting practices (Fullerton & Durtschi, 2004). Meanwhile, financial ratio analysis is one of the simple methods to identify fraud or fraud (Kanapickiene & Grundiene, 2015). The 2016 Global Economic Crime Survey (Global Economic Crime Survey 2016) revealed that among fraud cases, there was a 30% increase in reported misappropriation incidences which are considered the easiest frauds to detect by auditors (PricewaterhouseCoopers, 2016). Furthermore, the 2013 Report on KPMG's Fraud Survey Report (KPMG's Fraud Survey Report 2013) revealed that financial reporting fraud represented 12% of the total fraud committed in organizations, but auditors only found 14% of these cases (KPMG, 2013). Therefore, these facts create a question of whether the lack of professional scepticism of auditors contributes to lower fraud detection given that researchers have identified a relationship between professional scepticism and auditor fraud detection (Hurt, 2010). Professional scepticism is essential for the identification of relevant fraud risk factors and the choice of relevant audit procedures (Carpenter & Reimers, 2013). Generally, the public has put their trust and confidence in auditors who are sceptical about tracing any financial statement fraud (Hussin & Iskandar, 2015). This means that the effectiveness of fraud detection is related to factors that have a relationship with the auditor himself.

Research on the factors that affect the ability of forensic auditors to detect fraud is important nowadays, amid so many fraudulent practices in various industrial sectors in the country. The ability of forensic auditors is one of the requirements in preventing and detecting fraud, so it is expected that the performance of forensic auditors will be maximized. Several studies examine the qualifications of auditors in detecting fraud. Ira &

Noryanti's research (2016) examines the impact of professionalism and auditor experience on the auditor's ability to detect fraud. The research, which was conducted in September-October 2015, was conducted with public accountants in all Public Accounting Firms (KAP) domiciled in Tangerang and South Jakarta. The population is 99 KAPs, including 15 KAPs in the Tangerang area, and 84 KAPs in South Jakarta. The research sample was selected purposively, namely 3 KAPs in the Tangerang area, and 2 KAPs in South Jakarta. This research using the multiple linear regression data analysis methods concludes that the professionalism and experience of auditors have a positive and significant effect on the editor's ability to detect fraud.

Indrawati, Cahyono, & Maharani's research (2019) examines the effect of auditor training, professional scepticism, and independence of fraud auditors on the auditor's ability to detect fraud. The research population is Public Accounting Firm (AKP) Malang, East Java. The sampling technique is purposive sampling. The technique of collecting data is through a survey with a questionnaire instrument. The data analysis technique used multiple linear regression with the help of SPSS software. The results showed that partially or simultaneously, the three independent variables (auditor training, professional scepticism, and auditor independence) affected the auditor's ability to detect fraud. Fahri, Antong, and Kasran's research (2019) aims to find out whether competence, independence, professional scepticism, and auditory experience influence fraud. The population and sample are auditors who work in Inspectorate Offices throughout Luwu Raya, South Sulawesi. The sampling technique used was the purposive sampling technique. Technical data collection through a survey with a questionnaire as a research instrument. The data analysis technique used multiple linear regression using SPSS. The results of this study prove that competence, independence, professional scepticism, and auditory experience have a positive and significant impact on fraud in Inspectorate Offices throughout Luwu Raya. Another study that links auditor qualifications to detect fraud is the research of Oyerogba (2021) which raises one of the problems related to fraud, namely regarding fraud detection or fraud detection. Related to the problem of fraud detection, this study focuses on an empirical survey of the perceptions of professionals in the auditing field and those related to forensic auditing (forensic auditing), namely the knowledge and skills of forensic auditors, experiences and techniques that forensic auditors must possess to provide quality services. high in detecting fraud.

III. Research Method

Based on data analysis techniques, this research is research with quantitative methods. The research method used in this study is a survey method. The population in this study were forensic auditors, accountants, judges, and accounting academics/lecturers). The number of samples in this study is based on the Tabachnick & Fidell formula (2013: 126), namely:

$$n \geq 50 + 8 (m)$$

Where:

n = research sample

m = number of independent variables

IV. Result and Discussion

4.1 Statistical Test Results

The results of this study include a description of the demographics of the respondents, a description of the research variables, and the interpretation of the results of data processing.

a. Description of Respondent Demographics

Table 1. Demographic Description of Respondents

Respondent's Profile					
		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	57	57,0	57,0	57,0
	Female	43	43,0	43,0	100,0
	Total	100	100,0	100,0	
Age	31-35 y.o.	17	17,0	17,0	17,0
	36-40 y.o.	19	19,0	19,0	36,0
	41-45 y.o.	24	24,0	24,0	60,0
	46-50 y.o.	18	18,0	18,0	78,0
	≥ 51 y.o.	22	22,0	22,0	100,0
	Total	100	100,0	100,0	
Formal education	Diploma (D1 s.d D4)	30	30,0	30,0	30,0
	Bachelor (S-1)	31	31,0	31,0	61,0
	Magister (S-2)	17	17,0	17,0	78,0
	Postgraduate (S-3)	22	22,0	22,0	100,0
	Total	100	100,0	100,0	
Length of service as an Auditor	≤ 2 years	26	26,0	26,0	26,0
	3-4 years	22	22,0	22,0	48,0
	5-6 years	29	29,0	29,0	77,0
	≥ 7 years	23	23,0	23,0	100,0
	Total	100	100,0	100,0	
Have received education/training to detect fraud	Never	20	20,0	20,0	20,0
	Seldom	29	29,0	29,0	49,0
	Often	18	18,0	18,0	67,0
	Very often	33	33,0	33,0	100,0
	Total	100	100,0	100,0	

b. Research Variable Description

Table 2. Class Interval in Likert 1-6

Class Interval in Likert 1-6	Meaning (1)
1 - 1,83	<i>Strongly disagree</i>
1,83 < X ≤ 2,66	<i>Disagree</i>

$2,66 < X \leq 3,49$	<i>Somewhat disagree</i>
$3,49 < X \leq 4,32$	<i>Somewhat agree</i>
$4,32 < X \leq 5,15$	<i>Agree</i>
$5,15 < X \leq 6$	<i>Strongly agree</i>

Tabel 3. Variable Demography

	Mean	Average Mean	30% Mean	Std. Deviation	Std Deviation Variables	Deviation
KAF1	5,4200	5,4450	1,6335	0,58913	0,5914	Low
KAF2	5,2400			0,78005		
KAF3	5,5000			0,54123		
KAF4	5,5500			0,57516		
KAF5	5,4500			0,53889		
KAF6	5,4700			0,52136		
KAF7	5,4700			0,62692		
KAF8	5,5000			0,52223		
KAF9	5,3300			0,69711		
KAF10	5,5200			0,52185		
TAF1	5,5700	5,4867	1,6460	0,51747	0,5427	Low
TAF2	5,5300			0,52136		
TAF3	5,5000			0,54123		
TAF4	5,3800			0,61595		
TAF5	5,4400			0,51874		
TAF6	5,5000			0,54123		
PAF1	5,4800	5,3667	1,6100	0,50212	0,7030	Low
PAF2	5,5100			0,52214		
PAF3	5,6100			0,51040		
PAF4	5,4800			0,55922		
PAF5	5,3900			0,63397		
PAF6	5,1700			0,91071		
PAF7	5,0600			1,11754		
PAF8	5,1300			0,96038		
PAF9	5,4700			0,61060		
KT1	5,4700	5,4000	1,6200	0,57656	0,6306	Low
KT2	5,4700			0,57656		
KT3	5,4200			0,58913		
KT4	5,2400			0,78005		
IA1	5,5000	5,4900	1,6470	0,54123	0,5543	Low
IA2	5,5500			0,57516		
IA3	5,4500			0,53889		
IA4	5,4700			0,52136		
IA5	5,4700			0,62692		
IA6	5,5000			0,52223		

DF1	5,3300	5,4313	1,6294	0,69711	0,6154	Low
DF2	5,5200			0,52185		
DF3	5,5700			0,51747		
DF4	5,5300			0,52136		
DF5	5,5000			0,54123		
DF6	5,3800			0,61595		
DF7	5,4400			0,51874		
DF8	5,5000			0,54123		
DF9	5,4800			0,50212		
DF10	5,5100			0,52214		
DF11	5,6100			0,51040		
DF12	5,4800			0,55922		
DF13	5,3900			0,63397		
DF14	5,1700			0,91071		
DF15	5,0600			1,11754		

c. Assumption test result

1. Outer Model test

Table 4. Result of Outer Loading Processing 1 to Final

Indicator	Outer Loadings Run 1	Outer Loadings Run 2	Outer Loadings Final Run	Description
DF1	0,664			Not Valid
DF10	0,757	0,783	0,784	Valid
DF11	0,818	0,820	0,820	Valid
DF12	0,846	0,836	0,836	Valid
DF13	0,783	0,763	0,763	Valid
DF14	0,581			Not Valid
DF15	0,589			Not Valid
DF2	0,732	0,764	0,764	Valid
DF3	0,834	0,855	0,854	Valid
DF4	0,786	0,798	0,798	Valid
DF5	0,838	0,839	0,839	Valid
DF6	0,823	0,811	0,810	Valid
DF7	0,770	0,781	0,780	Valid
DF8	0,784	0,792	0,791	Valid
DF9	0,800	0,809	0,810	Valid
IA1	0,846	0,847	0,847	Valid
IA2	0,788	0,789	0,789	Valid
IA3	0,830	0,830	0,831	Valid
IA4	0,843	0,842	0,842	Valid
IA5	0,809	0,808	0,808	Valid
IA6	0,881	0,880	0,880	Valid
KAF1	0,759	0,754	0,754	Valid

KAF10	0,847	0,858	0,858	Valid
KAF2	0,686			Not Valid
KAF3	0,836	0,852	0,852	Valid
KAF4	0,785	0,799	0,799	Valid
KAF5	0,815	0,830	0,830	Valid
KAF6	0,822	0,816	0,816	Valid
KAF7	0,770	0,780	0,780	Valid
KAF8	0,863	0,864	0,864	Valid
KAF9	0,658			Not Valid
KT1	0,820	0,869	0,869	Valid
KT2	0,856	0,886	0,886	Valid
KT3	0,791	0,759	0,759	Valid
KT4	0,694			Not Valid
PAF1	0,765	0,787	0,810	Valid
PAF2	0,736	0,764	0,803	Valid
PAF3	0,837	0,861	0,873	Valid
PAF4	0,836	0,857	0,869	Valid
PAF5	0,835	0,833	0,822	Valid
PAF6	0,701	0,646		Not Valid
PAF7	0,721	0,661		Not Valid
PAF8	0,683			Not Valid
PAF9	0,830	0,841	0,837	Valid
TAF1	0,857	0,859	0,859	Valid
TAF2	0,810	0,811	0,811	Valid
TAF3	0,873	0,872	0,872	Valid
TAF4	0,834	0,832	0,832	Valid
TAF5	0,796	0,796	0,796	Valid
TAF6	0,809	0,809	0,809	Valid

Table 5. Result of Discriminant Validity with Cross Loading

	DF	IA	KT	KAF	PAF	TAF
DF10	0,784	0,629	0,690	0,631	0,803	0,732
DF11	0,820	0,664	0,655	0,653	0,873	0,749
DF12	0,836	0,673	0,664	0,677	0,869	0,767
DF13	0,763	0,609	0,662	0,594	0,822	0,685
DF2	0,764	0,795	0,729	0,858	0,615	0,765
DF3	0,854	0,819	0,674	0,825	0,758	0,859
DF4	0,798	0,767	0,658	0,767	0,723	0,811
DF5	0,839	0,772	0,656	0,751	0,745	0,872
DF6	0,810	0,661	0,709	0,652	0,758	0,832
DF7	0,780	0,740	0,636	0,750	0,694	0,796
DF8	0,791	0,611	0,624	0,646	0,704	0,809
DF9	0,810	0,706	0,655	0,703	0,810	0,766
IA1	0,705	0,847	0,643	0,852	0,600	0,709

IA2	0,665	0,789	0,610	0,799	0,575	0,662
IA3	0,689	0,831	0,634	0,830	0,617	0,668
IA4	0,689	0,842	0,700	0,816	0,626	0,709
IA5	0,771	0,808	0,612	0,780	0,703	0,770
IA6	0,834	0,880	0,685	0,864	0,746	0,849
KAF1	0,628	0,674	0,759	0,754	0,571	0,620
KAF10	0,764	0,795	0,729	0,858	0,615	0,765
KAF3	0,705	0,847	0,643	0,852	0,600	0,709
KAF4	0,665	0,789	0,610	0,799	0,575	0,662
KAF5	0,689	0,831	0,634	0,830	0,617	0,668
KAF6	0,689	0,842	0,700	0,816	0,626	0,709
KAF7	0,771	0,808	0,612	0,780	0,703	0,770
KAF8	0,834	0,880	0,685	0,864	0,746	0,849
KT1	0,739	0,639	0,869	0,654	0,744	0,707
KT2	0,715	0,651	0,886	0,665	0,741	0,671
KT3	0,628	0,674	0,759	0,754	0,571	0,620
PAF1	0,810	0,706	0,655	0,703	0,810	0,766
PAF2	0,784	0,629	0,690	0,631	0,803	0,732
PAF3	0,820	0,664	0,655	0,653	0,873	0,749
PAF4	0,836	0,673	0,664	0,677	0,869	0,767
PAF5	0,763	0,609	0,662	0,594	0,822	0,685
PAF9	0,752	0,617	0,801	0,623	0,837	0,712
TAF1	0,854	0,819	0,674	0,825	0,758	0,859
TAF2	0,798	0,767	0,658	0,767	0,723	0,811
TAF3	0,839	0,772	0,656	0,751	0,745	0,872
TAF4	0,810	0,661	0,709	0,652	0,758	0,832
TAF5	0,780	0,740	0,636	0,750	0,694	0,796
TAF6	0,791	0,611	0,624	0,646	0,704	0,809

Table 6. Result of Discriminant Validity with Fornier Larcker

	Fraud Detection (Y)	Auditor Independence	Technological Readiness (X4)	Forensic Auditor Skills (X1)	Forensic Auditor Experiences (X3)	Forensic Auditor Techniques (X2)
Fraud Detection (Y)	0,805					
Auditor Independence	0,875	0,833				
Technological Readiness (X4)	0,829	0,777	0,840			
Forensic Auditor Skills (X1)	0,881	0,988	0,817	0,820		

Forensic Auditor Experiences (X3)	0,951	0,778	0,821	0,775	0,836	
Forensic Auditor Techniques (X2)	0,979	0,879	0,795	0,883	0,880	0,830

Table 7. Result of Internal Consistency Test with Composite Reliability

	Composite Reliability	Advisability
Fraud Detection (Y)	0,957	≥0,60 □ advisable
Auditor Independence	0,932	≥0,60 □ advisable
Technological Readiness (X4)	0,877	≥0,60 □ advisable
Forensic Auditor Skills (X1)	0,942	≥0,60 □ advisable
Forensic Auditor Experiences (X3)	0,933	≥0,60 □ advisable
Forensic Auditor Techniques (X2)	0,930	≥0,60 □ advisable

Table 8. Result of Internal Consistency Test with Cronbach's Alpha

	Cronbach's Alpha	Advisability
Fraud Detection (Y)	0,950	≥0,60 □ advisable
Auditor Independence	0,912	≥0,60 □ advisable
Technological Readiness (X4)	0,789	≥0,60 □ advisable
Forensic Auditor Skills (X1)	0,930	≥0,60 □ advisable
Forensic Auditor Experiences (X3)	0,914	≥0,60 □ advisable
Forensic Auditor Techniques (X2)	0,910	≥0,60 □ advisable

Table 9. Convergent Validity Test Results with Average Variance Extracted (AVE)

	Average Variance Extracted (AVE)	Advisability
Fraud Detection (Y)	0,647	≥0,5 □ advisable
Auditor Independence	0,694	≥0,5 □ advisable
Technological Readiness (X4)	0,705	≥0,5 □ advisable
Forensic Auditor Skills (X1)	0,672	≥0,5 □ advisable
Forensic Auditor Experiences (X3)	0,699	≥0,5 □ advisable
Forensic Auditor Techniques (X2)	0,689	≥0,5 □ advisable

2. Inner Model Test

Table 10. Value of Variance Inflation Factor (VIF)

	Fraud Detection (Y)	Auditor Independence	Technological Readiness (X4)	Forensic Auditor Skills (X1)	Forensic Auditor Experiences (X3)	Forensic Auditor Techniques (X2)
Fraud Detection (Y)						
Auditor Independence	5,738					
Technological Readiness (X4)	5,475					
Forensic Auditor Skills (X1)	6,827					
Forensic Auditor Experiences (X3)	6,422					
Forensic Auditor Techniques (X2)	8,170					

Table 11. Value of F-Square

	Fraud Detection (Y)
Fraud Detection (Y)	
Auditor Independence	0,422
Technological Readiness (X4)	0,268
Forensic Auditor Skills (X1)	0,673
Forensic Auditor Experiences (X3)	9,086
Forensic Auditor Techniques (X2)	10,766

Table 12. Value of Determination Coefficient (R²)

	R Square	R Square Adjusted
Fraud Detection (Y)	0,997	0,996

Table 13. Value of Determination Coefficient (R²)

	R Square	R Square Adjusted
Deteksi Fraud (Y)	0,997	0,996

Table 14. Coefficient Interval

Coefficient Interval	Relationship Level
0,00 – 0,199	Very Low
0,20 – 0,399	Low
0,40 – 0,599	Medium
0,60 – 0,799	Strong
0.80 – 1,000	Very Strong

3. Hypothesis Test

Table 15. Path Coefficient

	Original Sample (O)	T Statistics (O/STDEV)	P Values
Auditor Independence -> Fraud Detection (Y)	-0,287	4,494	0,000
Technological Readiness (X4) -> Fraud Detection (Y)	-0,071	3,171	0,002
Forensic Auditor Skills (X1) -> Fraud Detection (Y)	0,395	5,740	0,000
Foreign Forensic Auditor Experience (X3) -> Deteksi Fraud (Y)	0,445	17,331	0,000
Forensic Auditor Technique (X2) -> Fraud Detective (Y)	0,546	22,031	0,000

Table 16. Hypothesis Proving

Model	Path Coefficient	t-value	p-values	Description	Hypothesis Proving
H-1: Forensic auditor skills have a positive effect on fraud detection	0.395	5,74	0,000	Positive and significant effect	H1 accepted
H-2: Forensic auditor techniques have a positive effect on fraud detection	0,546	22,031	0,000	Positive and significant effect	H2 accepted
H-3: The experience of forensic auditors has a positive effect on fraud detection	0,445	17,331	0,000	Positive and significant effect	H3 accepted
H-4: Technology readiness has a positive effect on fraud detection	-0,071	3,171	0,000	Negative and significant effect	H4 denied
H-5: Auditor independence has a positive effect on fraud detection.	-0,287	4,494	0,000	Negative and significant effect	H5 denied

4.2 Discussion

a. Effect of Forensic Auditor Skills on Fraud Detection

The results of the study prove that Forensic Auditor Skills has a positive and significant effect on Fraud Detection, with a coefficient value of 0.395 (39.5%), value of $t=5.74 (> 1.96)$, and $p\text{-value} = 0.000$. Statistically means, that when Forensic Auditor Skills increase by one unit, Fraud Detection increases by 39.5% of the unit value. It means that hypothesis 1 is accepted. Hypothesis 1 reads "Forensic Auditor Skills have a positive effect on Fraud Detection". The results of this study support the results of research by Oyerogba (2021) and Harris & Williams (2020) which found that Forensic Auditor Skills had a positive and significant effect.

b. The Effect of Forensic Auditor Techniques on Fraud Detection

The results of the study prove that the Forensic Auditor Technique has a positive and significant effect on Fraud Detection, with a coefficient value of 0.445 (44.5%), t value = 17.731 (> 1.96), and $p\text{-value} = 0.00$. Statistically means, that when the Forensic Auditor Technique increases by one unit, the Fraud Detection increases by 44.5% of the unit value. It means that hypothesis 2 is accepted. Hypothesis 2 reads "Forensic Auditor Techniques have a positive effect on Fraud Detection". The results of this study support the results of Oyerogba (2021), Mason & Williams (2020), and Kizil et al (2021) which prove the positive influence of forensic auditor techniques on the ability to detect fraud.

c. Effect of Forensic Auditor Experience on Fraud Detection

The results of the study prove that the Forensic Auditor Experience has a positive and significant effect on Fraud Detection, with a coefficient value of 0.395 (39.5%), t value = 5.740 (> 1.96), and $p\text{-value} = 0.000$. Statistically means, that when the Forensic Auditor Experience increases by one unit, the Fraud Detection increases by 39.5% of the unit value. It means that hypothesis 3 is accepted. Hypothesis 3 reads "Forensic Auditor Experience has a positive effect on Fraud Detection". The results of this study support the results of research by Oyerogba (2021), Noviyani (2002), Tirta & Sholihin (2004) and Nasution (2012) who found that the auditor's experience factor affects his ability to detect fraud.

d. The Effect of Technology Readiness on Fraud Detection

The results of the study prove that Technology Readiness has a positive and significant effect on Fraud Detection, with a coefficient value of -0.071 (-7.1%), t value = 3.171 (> 1.96), and $p\text{-value} = 0.002$. Statistically means, that when Technology Readiness increases by one unit, Fraud Detection decreases by -7.1% of the unit value. It means that hypothesis 4 is rejected. Hypothesis 4 reads "Technology readiness has a positive effect on fraud detection".

The results of this study contradict the research results of Pearson & Singleton (2008), Grubor, et al. (2013), Alrawashdeh et al (2021), Simeon (2018), Chukwu et al (2019) collectively found that the auditor's technology readiness factor affected his ability to detect fraud.

The explanation of why Auditor Technology Readiness has a negative and significant effect can be seen from the average value of the Auditor Technology Readiness variable which is also high (5,4400, which means that it is classified as strongly agree), perhaps the technology readiness that auditors have according to their perception is not felt to be disable to help them in detecting fraud today. The readiness of Forensic Technology has been not felt to be very helpful for them in detecting fraud practices that are more diverse, sophisticated and make maximum use of technology.

e. Effect of Auditor Independence on Fraud Detection

The results of the study prove that the Forensic Auditor Independence has a negative and significant effect on Fraud Detection, with a coefficient value of -0.287 (-28.7%), t value = 4.494 (> 1.96), and p -value = 0.000. Statistically means, that when the Forensic Auditor Independence increases by one unit, the Fraud Detection decreases by -28.7% of the unit value. It means that hypothesis 5 is rejected. Hypothesis 5 reads "Auditor independence has a positive effect on fraud detection".

The explanation of why Auditor Independence has a negative and significant effect, by looking at the average value of the Auditor Independence variable is also high (5,4900 means that it is classified as strongly agree), it may be that the independence that auditors have according to their perceptions can not be felt to help them in detecting fraud today. The independence of the Forensic Auditor has been not felt to have something to do with improving the forensic auditor's ability to detect fraud that is more diverse, sophisticated and utilizes technology to its full potential.

V. Conclusion

Based on the research that has been done, it can be concluded that the skills of forensic auditors, Forensic auditor techniques, The experience of forensic auditors have a positive and significant effect on fraud detection. It means that research hypothesis 1, 2, and 3 is accepted. Technology readiness, Auditor independence have a negative and significant effect on fraud detection. It means that research hypothesis 4 and 5 is rejected.

References

- Atifah, U., Sari, R. N., Anugerah, R., & Sanusi, Z. M. (2015). The Effect of Role Conflict, Self-efficacy, Professional Ethical Sensitivity on Auditor Performance with Emotional Quotient as Moderating Variable. *Procedia Economics and Finance*, Vol. 31, 206-212. DOI: [https://doi.org/10.1016/S2212-5671\(15\)01222-8](https://doi.org/10.1016/S2212-5671(15)01222-8).
- Akers, M. D., & Gissel, J. L. (2006). What is Fraud and Who is Responsible? *Journal of Forensic Accounting*, Vol. 7 (1) , 247-256.
- Amyar, F., Hidayah, N., Lowe, A., & Woods, M. (2019). Investigating the backstage of audit engagements: The paradox of team diversity. *Account. Audit. Account. J.*, Vol. 32, 378-400.
- Best, P., Buckby, S., & Tan, C. (2001). Evidence of the audit expectation gap in Singapore. *Manag Audit J*, Vol. 16 (3), 134-114. ISSN: 0268-6902.
- Carcia-Blandon, J., Argiles-bosch, J., & Ravenda, D. (2019). Audit firm tenure and audit quality: A cross-European study. *Journal of International Financial Management & Accounting*, Vol. 31(1), 35-64. DOI: <https://doi.org/10.1111/jifm.12098>.
- Carpenter, T. D., & Reimers, J. L. (2013). Professional Skepticism: The Effects of a Partner's Influence and the Level of Fraud Indicators on Auditors' Fraud Judgments and Actions. *Behavioral Research in Accounting*, Vol. 25 (2), 45-69. DOI: <https://doi.org/10.2308/bria-50468>.
- Cooper, D., Dacin, T., & Palmer, D. (2013). Fraud in accounting, organizations and society: Extending the boundaries of research. *Accounting, Organizations and Society*, 38, 440-457. SSRN: <https://ssrn.com/abstract=2420064>.
- Desai, N. (2020). Understanding the Theoretical Underpinnings of Corporate Fraud . *Vilkapa: The Journal for Decision Makers*, Vol. 45 (1), 25-31. DOI: <https://doi.org/10.1177/0256090920917789>.

- Habib, A., Wu, J., Bhuiyan, M., & Sun, X. (2019). Determinants of auditor choice. Review of the empirical literature. *Int J Audit*, Vol. 23 (2), 308-335. DOI: <https://doi.org/10.1111/ijau.12163>.
- Hollow, M. (2015). *Rouge banking. A history of financial fraud in interwar Britain*. Basingstoke: Palgrave Macmillan.
- Hussin, S. A., & Iskandar, T. M. (2015). Re-Validation of Professional Skepticism Traits. *Procedia Economics and Finance*, Vol. 28 , 68-75. DOI: [https://doi.org/10.1016/S2212-5671\(15\)01083-7](https://doi.org/10.1016/S2212-5671(15)01083-7).
- Indrayanti, Chandrarin, G., & Supanto, F. (2021). The Influence of Audit Quality on Auditor Performance with Mediating Organizational Commitment and Organization Culture. *Journal of Southwest Jiaotong University*, Vol. 56 (2), 350-364. DOI: 10.35741/issn.0258-2724.56.2.28.
- Ichsan, R. et al. (2021). Determinant of Sharia Bank's Financial Performance during the Covid-19 Pandemic. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*. P. 298-309.
- Jasi, K. M., Nawawi, A., & Puteh Salin, A. S. (2016). Reduction of Audit Quality by Auditors of Small and Medium Size Audit Firms in Malaysia: A Case of Premature Sign-Off of Audit Documents. *Journal of Accounting, Business and Management (JABM)*, [S.I.], v. 23, n. 2, 1-12. ISSN: 2622-2167.
- Joudaki, H., Rashidian, A., Minaei-Bidgoli, B., Mahmoodi, M., Geraili, B., Nasiri, M., et al. (2016). Improving Fraud and Abuse Detection in General Physician Claims: A Data Mining Study. *Int J Health Policy Manag*, Vol. 5 (3), 165-172. DOI: <https://doi.org/10.15171%2Fijhpm.2015.196>.
- Kanapickiene, R., & Grundiene, Z. (2015). The Model of Fraud Detection in Financial Statements by Means of Financial Ratio. *Procedia - Social and Behavioral Sciences*, Vol. 213 , 321-327. DOI: <https://doi.org/10.1016/j.sbspro.2015.11.545>.
- Kochinev, Y., Antysheva, E., & Putintseva, N. (2021). Formalization of Analytical Procedures for Assessing the Risks of Material Misstatement in Financial Statements due to Fraud. *SPBPU IDE '20: Proceedings of the 2nd International Scientific Conference on Innovations in Digital Economy: SPBPU IDE-2020* (pp. 1-5. DOI: <https://doi.org/10.1145/3444465.3444532>). Association for Computing Machinery.
- Lim, Y., & Monroe, G. S. (2020). Analyst Coverage and Audit Fees: International Evidence. *Journal of Accounting, Auditing, & Finance*, Vol. 37 (2), 466-492. DOI: <https://doi.org/10.1177/0148558X20928243>.
- Mohamed, N., Said, J., & Bakri, H. H. (2017). Mitigating asset misappropriation through integrity and fraud risk elements: evidence from emerging economies. *Journal of Financial Crime*, Vol. 24 (2), 1-16. DOI: 10.1108/JFC-04-2016-0024.
- Olojede, P., Erin, O., Asiriwa, O., & Usman, M. (2020). Audit expectation gap: an empirical analysis. *Future Business Journal*, Vol. 6 (10), DOI: <https://doi.org/10.1186/s43093-020-00016-x>.
- Popova, V. (2012). Integration of Fraud Risk in the Risk of Material Misstatement and the Effect on Auditors' Planning Decisions. *Journal of Forensic Accounting Research*, Vo. 3 (1), 1-47. DOI: 10.2308/jfar-52228.
- Porcuna-Enguix, L., Bustos-Contell, E., Serrano-Madrid, J., & Labatut-Serer, G. (2021). Constructing the Audit Risk Assessment by the Audit Team Leader When Planning: Using Fuzzy Theory . *Mathematics*, Vol. 9(23), DOI: <https://doi.org/10.3390/math9233065>.
- Razae, Z. (2004). Restoring public trust in the accounting profession by developing anti-fraud education, programmes and auditing. *Manag Audit J*, Vol. 19 (1), 134-148.

ISSN: 0268-6902.

- Tommasetti, R., de Oliveira Leite, R., Maia, V. M., & da Silva Macedo, M. A. (2021). Revisiting the Accounting Fraud Components: A Bottom-Up Approach Using the Twitter Platform . SAGE Open, Vol. 11 (4), DOI: <https://doi.org/10.1177/21582440211058190>.
- Toms, S. (2017). Fraud and financial scandals. In J. Wilson, S. Toms, A. de Jong, & E. Buchnea, Eds The Routledge Companion to business history (pp. 358-372). Abingdon and New York: Routledge.
- Trompeter, G., Carpenter, T., Desai, N., Jones, K., & Riley Jr., R. A. (2013). A synthesis of fraud-related research. Auditing: A Journal of Practice & Theory, 32, 287-321. DOI: <https://doi.org/10.2308/ajpt-50360>.
- van Driel, H. (2019). Financial fraud, scandals, and regulation: A conceptual framework and literature review. Business History, Vol. 61 (8), 1259-1299. DOI: <https://doi.org/10.1080/00076791.2018.1519026>.
- Velte, P. (2022). The impact of external auditors on firms' financial restatements: a review of archival studies and implications for future research. Manag Rev Q, DOI: <https://doi.org/10.1007/s11301-022-00264-x>.
- Wilson, A., McNellis, C., & Latham, C. (2018). Audit firm tenure, auditor familiarity, and trust: effect on auditee whistleblowing reporting intentions. International Journal of Auditing, Vol. 22 (2), 113-130. DOI: <https://doi.org/10.1111/ijau.12108>.
- Xiao, T., Geng, C., & Yuan, C. (2020). How audit effort affects audit quality: An audit process and audit output perspective. China Journal of Accounting Research, Vol. 13 (1), 109-127. DOI: <https://doi.org/10.1016/j.cjar.2020.02.002>.
- Zhao, X., Yang, D., Li, Z., & Song, L. (2021). Multiple large shareholders and corporate fraud: evidence from China. Frontiers of Business Research in China, Vol. 15 (9), DOI: <https://doi.org/10.1186/s11782-021-00106-9>.