

The Effects of Competence and Auditor Training on Fraud Detection Within Multinational Companies in Sub-Saharan Africa

Ivan Djossa Tchokoté

Catholic University of Central Africa, Yaoundé, Cameroon

Joëlle Tsobze Tiomeguim

Ernst & Young, Douala, Cameroun

The aim of this study is to examine the qualities that auditors engaged in detecting potential fraud within multinational corporations in Sub-Saharan Africa should possess. To achieve this goal, a quantitative approach was used to develop and test a research model based on three theories: agency theory, attribution theory, and cognitive dissonance theory. Responses from a panel of two hundred and nine (209) auditors who conducted a legal audit mission in a Sub-Saharan multinational were analyzed using SmartPLS 3.3.3 software. The results emphasize the crucial importance of auditors' competence and continuous training in fraud detection. However, professional skepticism and time pressure were found to be non-significant in this context. This conclusion provides essential insights for auditors, highlighting the key qualities needed to effectively address fraud detection within multinational corporations in Sub-Saharan Africa.

Keywords: fraud, legal audit, fraud detection, multinationals, Sub-Saharan Africa

Introduction

Economic fraud poses a major challenge for organizations globally, as highlighted by the 2020 PwC survey, revealing that 47% of companies fell victim to fraud in the past 24 months, averaging six cases per enterprise. This pervasive phenomenon in the business world has significantly evolved over the last two decades, reaching global proportions and consuming approximately 5% of an average organization's annual revenue, according to the Association of Certified Fraud Examiners (2016).

Global financial scandals involving major companies and national institutions have profoundly impacted the accounting profession, leading to significant reforms in audit standards in the United States and Europe. Despite these stricter regulations, new scandals have emerged, such as the Wirecard case in Germany in 2020 and the scandal at the Agency for Air Navigation Safety in Senegal in 2018, highlighting the persistent challenges related to fraud. In Cameroon, the 2016 BICEC scandal also underscored vulnerability to fraud, positioning the country with a high fraud and corruption index according to a study by Berthelo and Martin (2019). These incidents have jeopardized investor confidence in published financial information, emphasizing

Ivan Djossa Tchokoté, Ph.D., Head of the Department of Economics and Management, Faculty of Social Sciences and Management, Catholic University of Central Africa, Yaounde, Cameroon.

Joëlle Tsobze Tiomeguim, Master's degree in audit and management control, Ernst & Young, Douala, Cameroun.

the crucial role of auditors in fraud detection while raising questions about the effectiveness of existing regulatory measures.

Faced with the rising tide of economic fraud within businesses, previous research in the African context has explored its main characteristics (Daoui & Maskini, 2021; Nyakarimi, 2022), the reasons individuals commit them (Ikechi & Anthony, 2020; Nyakarimi, 2022), the impact of audit quality on reducing financial scandals (Owolabi, 2012; Sangué-Fotso, 2015), and the audit procedures to be implemented by auditors to better detect these frauds (Mongwe & Malan, 2020). However, few writings have delved into factors that explain fraud detection in companies by external auditors or influence the auditor's ability to detect fraud. Thus, the central question of our research is: What are the determinants of fraud detection by external auditors within multinational corporations in Sub-Saharan Africa?

To answer this question, agency, attribution, and cognitive dissonance theories were employed to assess the contribution of auditor competence, continuous training, the effect of professional skepticism, and the effect of time pressure on the fraud detection capability of external auditors who participated in auditing missions within multinational corporations or multiple multinational corporations in Sub-Saharan Africa. For empirical analyses, the partial least squares (PLS) approach to structural equation modeling was used on two hundred and nine (209) African legal auditors.

This article is structured around four main points. Firstly, we present the theoretical framework of our research with a literature review on the determinants of fraud detection; then, we define the methodological framework with the conceptual model used. Finally, the main results are highlighted and discussed.

Literature Review and Theoretical Background

The concept of fraud is currently a subject of intense debate on the international stage. The Institute of Internal Auditors (2023) defines it as "Any act characterized by deception, concealment, or betrayal of trust perpetrated by individuals or organizations to gain an advantage for themselves or their business." (p. 6). Frank Harding, President of the International Federation of Accountants (IFAC) in 1999, already emphasized the need to combat this international phenomenon well before the current surge in widely publicized cases (Carassus & Cormier, 2003). In light of this reality, auditors play a crucial role in fraud detection, acting as guardians of the financial integrity of businesses and key players in maintaining the trust of stakeholders (Kassem & Turksen, 2021).

Fraud detection, as defined by Fullerton and Durtschi (2004), is the auditor's ability to identify or determine illegal actions resulting in significant inaccuracies, weaknesses in the organizational structure of the company, and abuse of power. To highlight the determinants of fraud detection by auditors, three theories are primarily used: agency theory, attribution theory, and cognitive dissonance theory.

Agency Theory

The agency theory, developed by Jensen and Meckling (1976), is based on the principal-agent relationship in a context of information asymmetry between shareholders (principal) and managers (agents). This theory explores the inherent conflicts of interest in this relationship, where shareholders seek to maximize the company's value while managers aim to optimize their income. It relies on two behavioral assumptions: individual utility maximization and the ability to benefit from incomplete contracts.

This agency theory has been used to understand the relationship between internal audit and corporate governance (Prasad, Nandan, & Sharma, 2022). For these authors, this contractual dimension generates conflicts

of interest, which, in turn, represent cost factors. The theory helps understand the positioning of external audit as a control and monitoring mechanism for the behavior of the agent (manager). In the context of fraud determination, this theory explains how the external auditor, through the relationship with the company, needs the appropriate skills to fulfill their duties and produce quality work for the company.

Attribution Theory

The attribution theory, formulated by Heider (1946), explores the process by which individuals associate causes with the events and outcomes they experience. Heider suggests that individual behavior results from internal and external forces. Personal skills such as nature, character, attitude, ability, expertise, and effort represent internal forces impacting individual performance. In parallel, factors beyond an individual's control, such as pressure, situations, difficulties, or chance, constitute external forces (Wahidahwati & Asyik, 2022). The crucial distinction between internal behavior, considered under the individual's personal control, and external behavior, perceived as resulting from external causes, is fundamental in this theory (Arifin, 2022). Applied to the auditors' mission, the attribution theory aims to understand the factors influencing the auditor, particularly their personal quality. In our study, this theory will help us understand how auditors detect fraud, which factors influence their ethics. Additionally, the attribution theory aids in understanding the impact of fraud audit training and the influence of auditors on fulfilling their role in detecting potential fraud.

Cognitive Dissonance Theory

The cognitive dissonance theory, developed by Leon Festinger (1957), explores the psychological discomfort resulting from contradictory beliefs. It emphasizes that faced with dissonance, individuals seek to reconcile their beliefs and attitudes to reduce discomfort. Mechanisms to achieve this include changing opinions to align with behavior, introducing consistent elements, or minimizing the importance of beliefs. This influential theory in social psychology is applied to decision-making, information search, attitude changes, behavior, and the impact of personality.

The cognitive dissonance theory can play a role in fraud detection by auditors. According to a study by Hobson, Mayew, Peecher, and Venkatachalam (2015), auditors' experience and their ability to consider executives' cognitive dissonance can influence financial fraud detection. When encouraged to take executives' cognitive dissonance into account, experienced auditors outperform novice auditors in fraud detection.

In our study, this theory is addressed to explain the effect of the auditor's professional skepticism and the factors influencing fraud detection.

Development of Research Hypotheses

The exploration of key factors influencing fraud detection revolves around the competence, professional skepticism, time pressure, and continuous training of legal auditors. These elements constitute crucial variables in assessing auditors' ability to identify fraud within multinational corporations.

Competence of Legal Auditors

According to Tofan, Eny, and Dirga (2021), competence is the set of knowledge, skills, abilities, and work attitudes, plus personality attributes, that a person possesses. Auditor competence refers to the ability of the auditor to apply acquired knowledge and experience in the execution of the audit process objectively, prudently, and accurately (Zahmatkesh & Rezazadeh, 2017). In audit theory, to conduct a quality audit, the auditor must adhere to generally accepted standards and regulations (Chaplais, Mard, & Marsat, 2016). Therefore, a high

level of competence can enhance the ability to detect fraud. Numerous studies have provided evidence that audit competence has a positive impact on fraud detection (Kertarajasa, Marwa, & Wahyudi, 2019; Wahyudi, Handayani, & Chairunesia, 2019). Based on the above statements, the first research hypothesis is developed as follows:

Hypothesis 1: The competence of legal auditors is positively related to fraud detection within multinational corporations in Sub-Saharan Africa.

Professional Skepticism of Legal Auditors

Professional skepticism is a critical attitude in assessing the reliability, relevance, and appropriateness of assertions or evidence obtained to obtain sufficient confidence in the evidence (Yuniati & Banjarnahor, 2019). Audit standards 200 of the 2013 SPAP emphasize the importance of professional skepticism for an auditor in evaluating audit evidence. Fullerton and Durtschi (2004) assert that highly skeptical auditors will enhance their ability to detect fraud by developing inquiries. Based on the explanation above, the second research hypothesis is formulated as follows:

Hypothesis 2: The professional skepticism of legal auditors has a positive influence on their ability to detect fraud within multinational corporations in Sub-Saharan Africa.

Time Pressure on Legal Auditors

Time budget pressure is a situation in which auditors are required to finish on time and demand that the auditor achieves a time gain compared to the prepared time budget (Otley & Pierce, 1996). According to Braun (2000), the presence of time constraints has an effect on the auditor's focus, emphasizing the main task of collecting evidence rather than the underlying factors of fraud on financial statements. Tarigan, Sitanggang, and Aulia (2023) demonstrated through their study that time pressure has a negative effect on the auditor's ability to detect fraud. This leads us to formulate our hypothesis as follows:

Hypothesis 3: Time pressure negatively affects fraud detection by legal auditors in multinational corporations in Sub-Saharan Africa.

Continuous Training of Legal Auditors

The external auditor is a person with expertise, a high level of knowledge, skills, and abilities, and by following international audit standards, ensures more effective control (McKee, 2006). Fraud detection is challenging, and one reason auditors struggle to trace and detect irregularities is that they lack sufficient experience in identifying falsified financial data (Hammersley, Johnstone, & Kadous, 2011). Sudarmadi (2020) measures competence with the number of certifications held by auditors and their participation in relevant seminars, symposiums, workshops, and activities for their professions. He states that this way, they will be better able to enhance their capabilities and performance so that reliable audit results can be produced. In line with this, we formulate our final hypothesis as follows:

Hypothesis 4: Continuous training of legal auditors positively influences their ability to detect fraud within multinational corporations in Sub-Saharan Africa.

Research Model

The previously formulated research hypotheses can be summarized in the following research model.

This first part allowed us to present the theoretical framework of our analysis. It encompassed, on one hand, a synthesis of empirical literature, and on the other hand, we presented the main determinants of fraud detection

by legal auditors in light of the previously identified theories. The second part of this research will be dedicated to presenting the methodological framework that will be deployed to test the stated hypotheses.

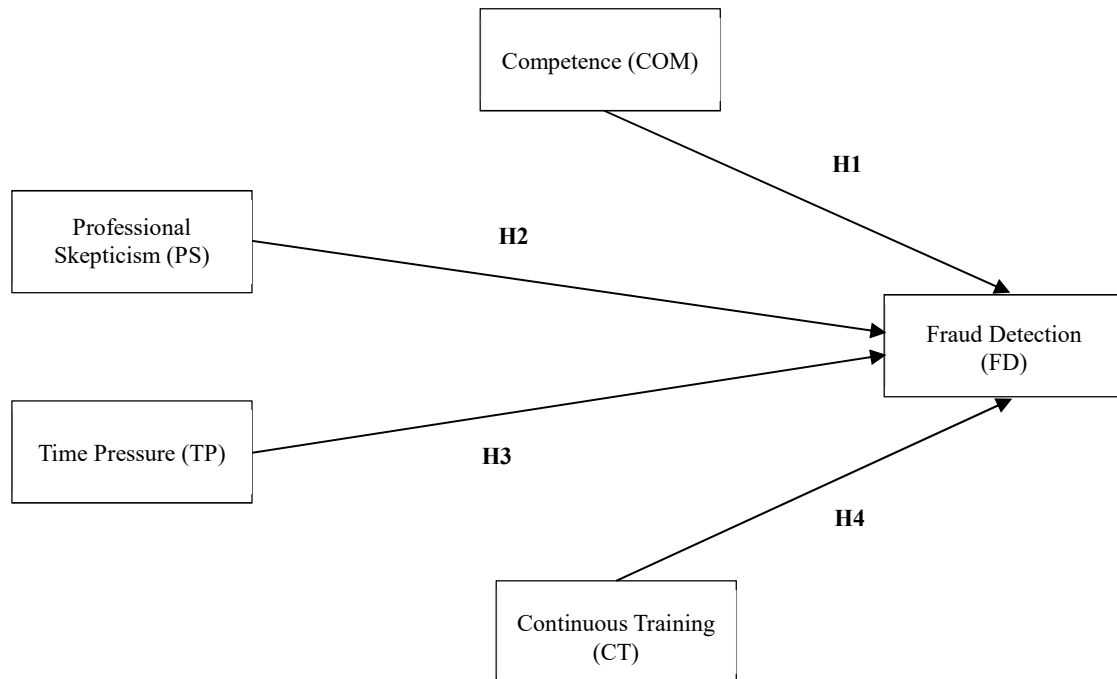


Figure 1. Conceptual research model. Source: authors.

Methodological Approach

The positioning of epistemology plays an essential role in defining the researcher's perception of the world (Gavard-Perret, Gotteland, Haon, & Jolibert, 2008). Therefore, the nature of our research topic favors the adoption of a positivist epistemological position. This decision is justified by the need to demonstrate objectivity in examining current reality. Similarly, the chosen methodological approach includes the operationalization of variables, the application of a sampling technique, and the use of an analytical method.

Operationalization of Variables

To effectively operationalize the variables examined in our research, we used measurement elements from the literature (Appendix 1). These measurement elements were formulated according to the seven-point Likert scale, ranging from 1 "Strongly Disagree" to 7 "Strongly Agree", as recommended by Hair Jr. et al. (2019). The questionnaire, developed in French and English, was tested by a committee of 15 people from various backgrounds, including students, accountants, and auditors. Through this testing process, the content and comprehensibility of the questionnaire were improved and clarified. After minor adjustments based on suggestions from respondents in the pilot study, the final version of the questionnaire was distributed.

Sampling Technique

In our study, we opted for a non-probabilistic sampling approach. To reach legal external auditors who have already participated in an audit mission, we conducted voluntary sampling (Letourmy, 2017). Consequently, the minimum sample size was determined using the GPower 3 software following the guidelines provided by Hair Jr. et al. (2014), namely a Type I error risk (α) of 5%, an effect size (f^2) of 0.15, and a statistical power to achieve $1-\beta$ of 80%. By integrating all these parameters, the minimum sample size was ninety-two (92) individuals.

Participants in this study were contacted via email and through the professional network LinkedIn using Google Forms. This is how two hundred and nine (209) responses were collected. The personal information of these respondents is recorded in Table 1 and Table 2.

Table 1

Demographic Profile of the Sample

Characteristics	Elements	Workforce	Frequency
Gender	Male	130	62%
	Female	79	38%
Number of years' experience	[0-5]	73	35%
	[6-10]	38	18%
	[11-15]	33	16%
	[16-20]	31	15%
	[21-25]	21	10%
	More than 25 years	13	6%
Professional grade	Junior assistant	60	29%
	Senior assistant	41	20%
	Assistant manager	22	11%
	Manager	25	12%
	Senior manager	15	7%
	Director	21	10%
	Partner	25	12%
Firme size	1-9	53	25%
	10-49	78	37%
	50-499	60	29%
	500-999	9	4%
	1,000 and more	9	4%
Highest diploma degree	BAC+2 (BTS, DUT)	4	2%
	BAC+3 (Bachelor)	24	11%
	BAC+4	25	12%
	BAC+5 (Master)	87	42%
	BAC+8 (PhD, DEC, ACCA)	69	33%
Total		209	100%

Source: authors.

Table 2

Sample Country of Origin

Country	Workforce	Frequency
Cameroon	84	40.2%
Republic of Congo	14	6.7%
Democratic Republic of Congo	6	2.9%
Ivory Coast	17	8.1%
Ghana	15	7.2%
Central African Republic	18	8.6%
Nigeria	4	1.9%
Tchad	11	5.3%
Equatorial Guinea	6	2.9%
Senegal	4	1.9%
Gabon	5	2.4%
Guinea Bissau	1	0.5%
Kenya	4	1.9%
Togo	3	1.4%
Benin	9	4.3%
Burkina Fasso	8	3.8%
Total	209	100%

Source: authors.

Data Analysis Technique

The data analysis for this research was conducted using the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique. The PLS-SEM approach is a multivariate analytical method that has the advantage of handling non-normal data distributions, analyzing samples of relatively small size, and uniquely testing the effect of latent variables, which is not allowed in other techniques (Hair Jr. et al., 2019). The PLS approach allows the study of relationships between constructs and examines the predictive power of the target construct. Therefore, the PLS-SEM approach proves suitable for achieving the objectives of our study. For its implementation, the SmartPLS 3 software was used.

Results of the Research

The presentation of the results unfolds through the meticulous evaluation of the measurement model, a crucial step emphasizing the robustness of the indicators used. In parallel, the validation of the structural model provides in-depth insights to test the hypotheses.

Measurement Model Evaluation

The evaluation of the measurement model involves checking internal reliability, convergent validity, and discriminant validity of the constructs in our model.

In this study, internal reliability was examined through outer loadings, which should be above the threshold of 0.7 or, alternatively, fall between 0.4 and 0.7 (if convergent validity is respected). Regarding convergent validity, Cronbach's alpha coefficient (which should be above 0.70), composite reliability (CR above 0.70), and average variance extracted (AVE above 0.5) were used as recommended by Hair Jr. et al. (2019). These results presented in the table indicate that all constructs are reliable and valid.

Table 3

Reliability and Convergent Validity of Constructs

Construction	Indicators	External charges	Cronbrach's alpha	Composite reability	Average
Fraud detection (FD)	FD1	0.841	0.731	0.675	0.528
	FD4	0.699			
	FD6	0.647			
Competence (COM)	COM1	0.798	0.764	0.849	0.585
	COM2	0.773			
	COM4	0.751			
	COM5	0.736			
Professional skepticism (PS)	PS1	0.836	0.779	0.857	0.601
	PS2	0.720			
	PS3	0.762			
	PS4	0.778			
Time pressure (TP)	TP2	0.751	0.766	0.811	0.590
	TP3	0.684			
	TP4	0.860			
Continuous training (CT)	CT1	0.859	0.746	0.838	0.565
	CT2	0.750			
	CT3	0.654			
	CT4	0.730			

Source: authors.

As for discriminant validity, it is examined using the Fornell-Larcker test, which states that the square root of the Average Variance Extracted (AVE) should be greater than all values both below and to the left of it. Here is the discriminant validity.

Table 4

Discriminant Validity of Constructs

	COM	FD	CT	TP	PS
COM	0.765				
FD	0.533	0.726			
CT	0.764	0.499	0.752		
TP	0.459	0.310	0.505	0.768	
PS	0.664	0.492	0.680	0.471	0.775

Source: authors.

Thus, considering the adherence to the conditions of internal reliability, convergent validity, and discriminant validity, we can conclude that our model is robust.

Structural Model Validation

To test our hypotheses, the bootstrapping technique was employed to assess the statistical significance and relevance of the path coefficients (Hair Jr. et al., 2019). The table below presents the result of this hypothesis testing.

Table 5

Bootstrapping Results

Hypothesis	Sample	Average sample	Standard deviation	<i>t</i> -value	<i>p</i> -value
H1: Competence-Fraud Detection	0.293	0.289	0.102	2.868	0.004
H2: Professional Skepticism-Fraud Detection	0.131	0.140	0.106	1.228	0.220
H3: Time Pressure-Fraud Detection	-0.014	-0.015	0.069	0.205	0.838
H4: Continuous Training-Fraud Detection	0.202	0.210	0.075	2.689	0.007

Source: authors.

The criterion used to test our hypotheses is the *p*-values. A hypothesis is validated when this *p*-value is less than 0.1, as indicated by Henseler, Ringle, and Sinkovics (2009). Thus, we note that hypotheses H1 and H4 have been validated with a threshold of 99%. The beta value (β), which verifies the direction of the relationship between constructs, is provided by the initial sample (O). The following table summarizes the hypothesis testing results:

Table 6

Summary of Hypothesis Testing Results

Hypothesis	Expected signs	<i>p</i> -value	Level of significance	Conclusion
H1: Competence-Fraud Detection	+	0.004	99% ****	Accepted
H2: Professional Skepticism-Fraud Detection	+	0.220	/ /	Rejected
H3: Time Pressure-Fraud Detection	-	0.838	/ /	Rejected
H4: Continuous Training-Fraud Detection	+	0.007	99% ****	Accepted

Source: authors.

Note that the coefficient of determination is used to measure the model's ability to explain the variation in the dependent variable. Table 7 below shows that the adjusted *R*-squared value is 0.325, meaning that 31.2% of the fraud detection variables are influenced by auditor competence, continuous training, time pressure, and professional skepticism. Thus, the remaining 68.8% is influenced by other factors not included in this research model.

Table 7

Model's Coefficient of Determination

Dependent variable	Coefficient of determination (R^2)	R^2 adjusted
Fraud detection	0.325	0.312

Source: authors.

Discussion

Validated Hypotheses

Hypothesis 1: Legal auditors' competence is positively related to fraud detection within multinational corporations in Sub-Saharan Africa.

Our results indicate that auditor competence emerges as a crucial variable in the literature on fraud detection determinants. This conclusion aligns with the work of Sulistyowati and Supriyati (2016), emphasizing the importance of expertise and professionalism in the legal audit process. They highlight that experience, in addition to formal education, contributes to increasing the auditor's expertise, enhancing the accuracy of their work, retaining information related to the field, deepening understanding, and consequently, improving their ability to detect fraud. Various studies, including those by Gunawan, Riyanal, and Handoko (2022), Wahyudi et al. (2019), and Cormier and Lapointe-Antunes (2006), have also demonstrated a significant positive relationship between auditor competence and fraud detection. Thus, competence leads to a more extensive retention of domain-specific information, a deeper understanding, and, consequently, an enhanced ability to provide coherent explanations for anomalies in financial statements. Moreover, this consolidated expertise strengthens the auditor's ability to detect fraud, emphasizing the crucial importance of experience in the legal audit process.

Hypothesis 4: Continuous training of legal auditors positively influences their ability to detect fraud within multinational corporations in Sub-Saharan Africa.

The hypothesis regarding the continuous training of auditors and its influence on the ability to detect fraud has been validated in our study. This result is supported by other research, including Fullerton and Durtschi (2004) and Putra and Dwirandra (2019), who also found a significant positive correlation between the auditor's continuous training and their ability to detect fraud. These consistent results align with the idea that the frequency and regularity of continuous training enhance the ability of legal auditors to identify fraud warning signs. However, these conclusions differ from the work of Hilmi (2011) and Adnan and Kiswanto (2017), suggesting that continuous training has no effect on the auditor's ability to detect fraud. This divergence highlights a potential variability of results depending on the context and regional specifics. Our study reinforces the notion that continuous training is a key element to improve the sensitivity of legal auditors to fraud indicators. These results provide an important perspective for continuous training practices in the field of financial auditing while emphasizing the need to consider contextual nuances.

Rejected Hypotheses

Hypothesis 2: Professional skepticism of legal auditors has a positive influence on their ability to detect fraud within multinational corporations in Sub-Saharan Africa.

The hypothesis of professional skepticism as a determinant of the ability to detect fraud is refuted in our study. This conclusion contradicts the theory predicting that auditors who are highly professionally skeptical would enhance their ability to detect fraud by seeking additional information in the face of cheating signs. Our

results diverge from previous research, such as Fullerton and Durtschi (2004), Putra and Dwirandra (2019), and Jahari and Kiswanto (2017), which support that professional skepticism is crucial for fraud detection. The lack of support for our hypothesis suggests that, in our African context, other factors may influence the relationship between professional skepticism and fraud detection, thus requiring in-depth investigations for a more nuanced understanding of this complex dynamic.

Hypothesis 3: Time pressure negatively affects fraud detection by legal auditors within multinational corporations in Sub-Saharan Africa.

The hypothesis that time pressure has a negative impact on the ability to detect fraud could not be demonstrated in our study. This conclusion differs from previous works, notably Jahari and Kiswanto (2017), who supported that time pressure has a significant negative effect on the ability of legal auditors to spot fraud. Time constraints can lead to negligence on the part of the auditor, preventing them from paying attention to details and considering crucial evidentiary elements for detecting fraud-related anomalies in financial statements. These results suggest that, in the specific context of our study, time pressure may not play a significant role in influencing the ability of legal auditors to detect fraud, emphasizing the need for contextualized approaches to understand the complex dynamics surrounding fraud detection in African environments.

Conclusion

In conclusion, our research focused on the determinants of fraud detection by legal auditors within multinational corporations in Sub-Saharan Africa. Our main concern in this study was to provide answers to our research question: What are the determinants of fraud detection by legal auditors within multinational corporations in Sub-Saharan Africa? To achieve this, we used agency theory, attribution theory, and cognitive dissonance theory to develop a research model highlighting the determinants of fraud detection by auditors. Our results, provided through the PLS approach, highlighted the crucial importance of competence and continuous training to enhance fraud detection by legal auditors in Sub-Saharan Africa within multinational corporations. The study thus offers a unique contribution by focusing specifically on this complex context, providing new insights into existing literature. The agency and attribution theories proved relevant, confirming hypotheses related to competence and continuous training.

Our study has both theoretical and managerial implications. Theoretically, our research enriches the literature by demonstrating the applicability of agency and attribution theories to fraud detection in multinational corporations in Sub-Saharan Africa. Managerially, we provide practical recommendations to audit firms, multinational corporations, and regulators, emphasizing the importance of competence and continuous training. Auditors aiming to stay competitive must constantly update their knowledge through various training directly or indirectly related to their profession and growing sectors. This can also be achieved through participation in various conferences and/or seminars organized within their profession.

Every research work inevitably has limitations that pave the way for future investigations. Our study is no exception as we covered only sixteen (16) out of the forty-seven (47) countries in Sub-Saharan Africa, resulting in a coverage rate of 34.04%. Moreover, we studied the specific case of multinational corporations in Sub-Saharan Africa, making our results not generalizable to small or medium-sized enterprises.

The aforementioned limitations suggest several extension perspectives for our research. In-depth investigations could assess the impact of training programs on the performance of legal auditors, thus extending our understanding of the determinants of fraud detection. Additionally, interregional comparisons could be made

to evaluate similarities and differences in the determinants of fraud detection between Sub-Saharan Africa and other regions worldwide.

References

- ACFE. (2016). Étude mondiale sur la fraude interne et les abus professionnels. Retrieved from <https://www.crcc-paris.fr/wp-content/uploads/2020/09/RTTN-2020-Principales-conclusions.pdf>
- Adnan, J., & Kiswanto, K. (2017). Determinant of auditor ability to detect fraud with professional scepticism as a mediator variable. *Accounting Analysis Journal*, 6(3), 313-325.
- Arifin, J. (2022). Determinants of the effectiveness of audit procedures in revealing fraud: An attribution theory approach. *International Journal of Research in Business and Social Science*, 11(6), 378-387.
- Berthelo, K. W., & Martin, N. (2019). La relation auditeur-audit  et l'ind pendance des commissaires aux comptes dans le contexte du Cameroun. *Revue Internationale des Sciences de Gestion*, 38, 63-89.
- Braun, R. L. (2000). The effect of time pressure on auditor attention to qualitative aspects of misstatements indicative of potential fraudulent financial reporting. *Accounting, Organizations and Society*, 25(3), 243-259.
- Carassus, D., & Cormier, D. (2003). Normes et pratiques de l'audit externe l gal en mati re de pr vention et de d tection de la fraude. *Comptabilit -Contr le-Audit*, 9(1), 171-188.
- Chaplais, C., Mard, Y., & Marsat, S. (2016). L'auditeur face aux dilemmes  thiques: l'impact d'une formation   l' thique sur la conformit  au code de d ontologie. *Accounting Auditing Control*, 22(1), 53-83.
- Cormier, D., & Lapointe-Antunes, P. (2006). The auditor's assessment and detection of corporate fraud: Some Canadian evidence. *International Journal of Accounting, Auditing and Performance Evaluation*, 3(2), 133-165.
- Daoui, M., & Maskini, N. (2021). Fraude: caract ristiques et d fis. *International Journal of Financial Accountability, Economics, Management, and Auditing (IJFAEMA)*, 3(3), 90-103. Retrieved from <https://doi.org/10.52502/ijfaema.v3i3.63>
- Festinger, L. (2017). *Une th orie de la dissonance cognitive*. Paris: ENRICK.
- Fullerton, R., & Durtschi, C. (2004). The effect of professional skepticism on the fraud detection skills of internal auditors. *SSRN Electronic Journal*, 10(1), 51-73. Retrieved from <https://doi.org/10.2139/ssrn.617062>
- Gavard-Perret, M.-L., Gotteland, D., Haon, C., & Jolibert, A. (2008). *M thodologie de la recherche: r ussir son m moire ou sa th se en sciences de gestion*. London: Perarson.
- Gunawan, K., Riyanal, M. F., & Handoko, B. L. (2022). The effect of auditor competence, professional skepticism, red flag, and internal control system on fraud detection. *Journal of Applied Finance and Accounting*, 9(2), 73-88. Retrieved from <https://doi.org/10.21512/jafa.v9i2.8972>
- Hair Jr., F. J., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106-121.
- Hair, J. F., Gabriel, M. L. D. S., Silva, D. D., & Junior, S. S. B. (2019). Development and validation of attitudes measurement scales: Fundamental and practical aspects. *RAUSP Management Journal*, 54(4), 490-507.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24.
- Hammersley, J. S., Johnstone, K. M., & Kadous, K. (2011). How do audit seniors respond to heightened fraud risk? *Auditing: A Journal of Practice & Theory*, 30(3), 81-101.
- Heider, F. (1946). Attitudes and cognitive organization. *The Journal of Psychology*, 21(1), 107-112.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In *New challenges to international marketing* (Vol. 20, pp. 277-319). New Delhi: Emerald Group Publishing Limited.
- Hilmi, F. (2011). Pengaruh pengalaman, pelatihan dan skeptisisme profesional auditor terhadap pendektasian kecurangan: studi empiris pada Kantor Akuntan Publik di Wilayah Jakarta (M.Sc. thesis, Universitas Islam Negeri Syarif Hidayatullah, 2011).
- Hobson, J. L., Mayew, W. J., Peecher, M. E., & Venkatachalam, M. (2015). Auditors' ability to detect financial deception: The role of auditor experience and management cognitive dissonance.
- Ikechi, K. S., & Anthony, N. (2020). Fraud theories and white collar crimes: Lessons for the Nigerian banking industry. *International Journal of Management Science and Business Administration*, 6(6), 25-40.
- Jenson, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.

- Kassem, R., & Turksen, U. (2021). Role of public auditors in fraud detection: A critical review. In S. Grima and E. Boztepe (eds.), *Contemporary studies in economic and financial analysis*. Leeds: Emerald Publishing Limited.
- Kertarajasa, A. Y., Marwa, T., & Wahyudi, T. (2019). The effect of competence, experience, independence, due professional care, and auditor integrity on audit quality with auditor ethics as moderating variable. *Journal of Accounting, Finance and Auditing Studies*, 5(1), 80-99.
- Letourmy, P. (2017). Recueil planifié des données: compléments sur l'échantillonnage. Retrieved from https://agritrop.cirad.fr/587534/1/Compl%C3%A9mentEchantillonnage_RPD5.pdf
- McKee, T. E. (2006). Increase your fraud auditing effectiveness by being unpredictable! *Managerial Auditing Journal*, 21(2), 224-231.
- Mongwe, W. T., & Malan, K. M. (2020). A survey of automated financial statement fraud detection with relevance to the South African context. *South African Computer Journal*, 32(1), 74-112.
- Nyakarimi, S. (2022). Probable earning manipulation and fraud in banking sector. *Empirical study from East Africa. Cogent Economics & Finance*, 10(1), 2083477.
- Otley, D. T., & Pierce, B. J. (1996). Auditor time budget pressure: Consequences and antecedents. *Accounting, Auditing & Accountability Journal*, 9(1), 31-58.
- Owolabi, A. A. (2012). The role of auditors in the financial crisis: An African perspective. *African Journal of Accounting, Auditing and Finance*, 1(3), 299-308.
- Prasad, V. H., Nandan, R., & Sharma, N. L. (2022). Implications of internal audit effectiveness on corporate governance: Research agenda. *Corporate Ownership & Control*, 19(3), 182-194.
- Putra, G. S. A., & Dwirandra, A. A. N. B. (2019). The effect of auditor experience, type of personality and fraud auditing training on auditors ability in fraud detecting with professional skepticism as a mediation variable. *International Research Journal of Management, IT and Social Sciences*, 6(2), 31-43.
- Sangue-Fotso, R. (2015). Qualité de l'audit et réduction des scandales financiers en contexte camerounais. *Revue de Management et de Stratégie*, 2(1), 1-17.
- Sudarmadi, D. (2020). The impact of competency and professionalism on audit quality. *JASa (Jurnal Akuntansi, Audit dan Sistem Informasi Akuntansi)*, 4(3), 347-355.
- Sulistiyowati, L., & Supriyati, S. (2016). The effect of experience, competence, independence, and professionalism of auditors on fraud detection. *The Indonesian Accounting Review*, 5(1), 95-110.
- Tarigan, A. E. B., Sitanggang, R. F., & Aulia, D. (2023). The impact of ethical awareness, auditor experience, skepticism attitude, and time pressure on detecting fraud in public accountant offices in the city of Medan. *Journal of Research in Business, Economics, and Education*, 5(3), 1-12.
- Tofan, W., Eny, R., & Dirga, L. (2021). Determinant of quality of internal audit results with work experience as a moderation. *International Journal of Business and Management Inventon (IJBMI)*, 10(05), 36-43. Retrieved from <https://doi.org/10.35629/8028-1005013643>
- Wahidahwati, W., & Asyik, N. F. (2022). Determinants of auditors' ability in fraud detection. *Cogent Business & Management*, 9(1), 2130165.
- Wahyudi, S. M., Handayani, R., & Chairunesia, W. (2019). The influence of corporate governance mechanism against fraud in financial statements. *Saudi Journal of Economics and Finance*, 3(12), 595-600.
- Zahmatkesh, S., & Rezazadeh, J. (2017). The effect of auditor features on audit quality. *Tékhné*, 15(2), 79-87.

Appendix: Table of Constructs and Measurement Items

Fraud detection

- A company with a lot of internal struggles for positions of power attracts my attention.
- A manager who often seeks different legal advice is suspected.
- An employee who is afraid of being made redundant is suspected.
- An employee who refuses to take holidays is suspected.
- An employee who complains a lot about his salary is suspected.
- A company that makes a lot of adjusting entries before the auditor arrives is suspected.

Professional scepticism

- The auditor rejects statements unless he has proof that they are true.
- The auditor does not make decisions before examining all available information.
- The auditor likes to try to determine whether what he reads or hears is true.
- Auditors rarely question the way people behave.
- Auditors are confident in their abilities.
- Auditors accept the explanations of others without investigating further.

Competence

- The statutory auditor understands how the audited company operates, as well as its information system.
- The statutory auditor has a good knowledge of the specific features of the company, its sector, and the risks associated with its activity.
- The statutory auditor is specialised in the business sector of the audited company.
- The statutory auditor has a good knowledge of the accounting policy of the audited company.
- The statutory auditor has a good knowledge of the regulations governing the sector in which the audited company operates.

Time pressure

- During the course of an assignment, I have already had to accept weak explanations from clients because of the time constraints.
- During an assignment, I have already had to carry out superficial reviews of client documents because of time constraints.
- During an assignment, I have sometimes signed off a stage of the audit program without completing the work or noting omissions, given the time constraints.
- During an assignment, I have already reduced the amount of work to be done on an audit stage in view of the time involved.

Continuous training

- The statutory auditor continues to train in order to improve his skills.
- Statutory auditors regularly attend seminars organised within the framework of their profession.
- Statutory auditors regularly take part in workshops organised within the framework of their profession.
- The statutory auditor regularly participates in colloquia organised within the framework of his profession.
- The statutory auditor has already undergone training in banking.