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#### **RESEARCH ARTICLE**

# The Role of Forensic Accounting in the Detection of the Financial Fraud: Evidence from Saudi Arabia

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Accepted: Oct 20, 2024KeywordsInternal ControlFinancial ReportingExternal AuditorCreative AccountingAuditing StandardsAuditing StandardsMulting Standards	ARTICLE INFO	ABSTRACT
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# **1. INTRODUCTION**

Economic progress and modern innovations have added complexities that require effective methods to deal with them. Therefore, research on discovering financial fraud and corruption aims not only to reveal the causes but also to suggest ways and strategies to prevent recurrence in the future. The recent period has witnessed increased financial scandals related to corruption in developed countries. Therefore, forensic accounting emerged as an effective tool for resolving these issues . (Al Shbeil et al., 2023; Davis et al., 2010) noted that Forensic accounting in developed countries has progressed more than in developing countries. (Huber (2012) noted that forensic accounting in the United States became a profession by law. In addition, it satisfies several accepted sociological criteria. However, developing countries, specifically Saudi Arabia, forensic accounting is getting more attention lately. However, the debate is whether this new accounting field has become a "profession" or just an occupation (Huber 2012; Ismail et al. 2022; Senan & Swalih ,2019) noted that Economic crimes increased at an accelerated pace in terms of volume, as the average annual cost of fraud reached about 5% of corporate revenues, bringing the total cost to trillions. The large volume of financial fraud led to the urgent need for forensic accounting, which involves specialized accounting, auditing, and finance skills. Forensic accounting had become concerned with collecting the required evidence in the case of criminal procedures and was considered one of the (20) best professions in

the future. (Uwojori & Asaolu, 2009) indicated that in the past, detecting fraud was one of the tasks of internal and external auditors through periodic audits. However, the auditor's role was limited to verifying that the accounting records adhere to generally accepted accounting principles, auditing standards, and company policies. The statutory audit could not deal with financial crimes because laws and standards constrained it. Thus, there is a need for forensic accounting services to detect financial fraud. (Institute of Turkwash Hwastory, 1998) defined fraud as an intentional act of misjudgment and misleading one party to participate in a contract without which the party may not participate. Fraud is a global game that takes different forms. Therefore, courts were limited to general rules for examining and eliminating fraud. According to (Demir ve & Bahadır, 2009), fraud in financial statements that conform to accounting standards and principles may be classified as compliance activities because the purpose is to give a good picture of the economic performance. However, Fraud may be classified as financial fraud if managers engage in activities that violate accounting principles and standards.

(Toroslu,2012; Serçemeli,2018) explained that the unfair use of assets and the inaccuracy of financial reports may be attributed to errors or fraud, as the distinction was made between error and fraud based on the intentional criterion. The error occurs in the accounting records, while fraud occurs deliberately by falsifying operations, records, and documents. Fraud is of two types: the first is intended to mislead the users of financial reports, and the second is intended to use the organization's assets for personal purposes without impacting the financial reports. (Bhadin, 2007) noted that Forensic accounting services have witnessed an increasing demand recently. These services include examining financial fraud committed by employees, examining financial disputes, settling the rights of a partner leaving the company, arbitration services, settling disputes, and investigating cases of professional negligence . (Bhasin, 2007) stated that the forensic accountant should have several professional skills and competencies such as an in-depth understanding of financial statements, comprehensive knowledge of fraud methods, a complete understanding of internal control systems, proficiency in the use of information technology, the command of the basics of psychology, practical communication skills, familiarity with civil and criminal law and court administration and the command of corporate governance systems.

(Bologna & Lindquist, 1995) defined forensic accounting as applying financial skills and investigative mentality to uncover issues under rules of evidence. According to this definition, forensic accounting focuses on fraudulent transactions and, therefore, might take the form of document reviews and interviews. (Crumbley et al., 2007) defined forensic accounting as suitable for use in a court of law, and it is a science considering the application of accounting rules and concepts, gathering evidence through auditing methods, techniques, and procedures to solve the legal issue that requires the integrating of investigative, accounting, and auditing skills (Koh et al., 2009).On the other hand, (Okoye & Gbegi, 2013) noted that forensic accounting investigates financial statements and other reports by forensic accountants with excellent knowledge of accounting issues, laws, and related procedures to defect the manipulation and disclose to all relevant parties. (Clavería et al., 2022) noted that the use of forensic accounting and tools contributes to detecting and preventing fraud in financial reports. Hence, forensic accounting is counted as the science of detecting and investigating fraud involved in financial statements and other financial matters. (Saurav & Dutta, 2013) noted that The profession of a forensic accountant is linked to many specializations, including accounting, law, internal control systems, corporate governance, fraud detection, data processing, and statistics. (Crumbley, 2003) defined forensic accounting as applying laws to humans. Law and judiciary scholars were, in fact, examiners and interpreters of evidence and facts in legal matters. Therefore, they need the opinions of forensic accounting in financial matters. (Joshi, 2003) explained that Forensic accounting provides reports on the liability for forgery activities and provides evidence used by the courts to take appropriate administrative measures. (Zysman, 2004) noted that Forensic accounting involves integrating accounting, auditing, and analytical skills. (Coenen, 2005) stated that Forensic reasoning consists of using accounting and auditing Concepts, skills, and procedures to solve problems. (Howard & Sheetz, 2006) defined forensic accounting as a way to interpret and summarize complex financial and non-financial matters in the courts and submit a report, as the forensic accountant is considered an expert. ( Sudhi & Sushama, 2013) defined forensic accounting as a field of specialization in accounting. Forensic accountants use professional accounting skills regarding

complex matters related to actual or potential civil or criminal litigation. Among those matters were accounting and auditing principles and standards, identifying lost assets and net profits, and evaluating internal control systems. (Akkeren et al., 2016) noted that practitioners from the accounting, auditing, and other professions provided Forensic accounting services because forensic accounting specializations overlap with other professional specializations. Professional organizations in accounting and auditing face challenges in regulating and controlling the practice of the forensic accounting profession. (Lowojori & Seoul, 2009) defined Forensic accounting as a specialized area of accounting that describes engagements and litigation arising from actual or expected disputes. The word "forensic" means using it in courts, where the forensic accountant provides expert evidence and applies a set of forensic accounting methods that suit the nature of the engagement assigned to him. The forensic accountant should give the expert evidence in the final trial. (Lamba & Jain, 2020) defined Forensic accounting as one of the emerging fields in the accounting profession. It involves recording records, auditing, and using analytical experts to combat financial crimes. It was a strategic tool for combating financial fraud.

(Ozil, 2020) forensic accounting theory explains why and how methods were chosen to discover creative accounting or manipulation in financial and non-financial reports. These methods depends on the forensic accountant's accounting and non-accounting decisions. Therefore, this theory is helpful for practitioners and academics because it is useful in the problem-solving process. Forensic accounting theory indicates that the choice of methods for detecting fraud and creative accounting practices does not depend solely on the forensic accountant's experience and knowledge but rather on the accounting and non-accounting decisions that the forensic accountant makes at the beginning, during, and after the examination process. The primary goal of the criminal investigation into fraud and creative accounting practices is to uncover the truth and suggest appropriate recommendations to prevent the recurrence of illegal practices in the future, taking into account that the examination results do not lead to the collapse of the violating company or the death of the violating person. (Dozily, Peterson, 2020) provided some accounting and non-accounting decisions that affect the choice of examination methods. For example, by applying the materiality principle, the forensic accountant should determine whether the issue under investigation is material; the forensic accountant should demonstrate superior ability to use advanced accounting techniques. In addition, they provided examples of non-accounting decisions that affect the choice of examination method. Incentives and compensation also affect examination methods, as incentives and compensation must be linked to the examination results that contributed to uncovering outstanding cases. The anonymity of forensic accountancy helps the forensic accountant adopt all methods to uncover pending cases

# Study problem

Forensic accounting is critical in preventing and detecting financial fraud in organizations. However, there was a lack of research on whether there is understanding and awareness of the concept of forensic accounting and whether there is a need for its services. Therefore, this study attempts to assess the role played by forensic accounting in preventing and detecting financial fraud in Saudi Arabia. The services provided by the forensic accountant can be divided into two categories: litigation services, in which the forensic accountant plays the role of an expert, and examination services, in which the forensic accountant uses his skills and tools to deal with financial fraud. Therefore, this study focuses only on investigation services. The results of this study will be paramount to many stakeholders, including forensic accountants, governmental organizations, private sector owners, auditors, and organizations concerned with combating fraud. The study answers whether there is a need for forensic accounting services in Saudi Arabia and whether they are superior to the auditing profession in detecting fraud. The number of previous studies on forensic accounting in Saudi Arabia is limited, as (Alshurafat et al., 2021) addressed the issue from an educational perspective; in addition (Al-Dhubaibi, 2020) discussed the issue from an auditing perspective, while (Alturki, 2017) addressed forensic accounting from a governance perspective. Therefore, the current study tries to fill this gap in the literature in Saudi Arabia.

# 2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The literature review deals with the previous studies separately instead of the traditional method that focuses only on the results without specifying the country of the study, methodology, scope of the study, period of the study, recommendations of the study, limits of the study, etc. Therefore, the author discussed the previous studies in detail, especially forensic accounting can be dealt from different perspectives, such as, education, use of technology, internal control, regulatory framework, governance, profession, and awareness.

(Almashaqbeh et al., 2023 investigated the impacts of the constructs of the professional theory developed by (Pavalko, 1988) on the application of forensic accounting. The study included (154) participants from the CPA holders. The results indicated that the construct of the code of ethics, commitment, Intellectual technique, motivation, training, and relevance to social values significantly impacted the applicability of forensic accounting services. However, autonomy and a sense of community did not have any impact. (Alrawashdeh, 2021) examined the obstacles to using information technology in forensic accounting and the role of information technology in forensic accounting in discovering financial fraud. The study used the survey method for gathering data. The questionnaire was divided into three parts: the first part included demographic information about the participants in the survey. In contrast, the second part included information about the obstacles to using information technology in forensic accounting. In addition, the third part included information about the role of information technology in activating forensic accounting in fraud detection. The results showed that the high technological infrastructure costs and the lack of training constitute significant obstacles to using information technology in forensic accounting. The results also indicated that using information technology leads to the activation of forensic accounting in discovering financial fraud.

(Alshurafat et al., 2021) provided a comprehensive understanding of the strengths and weaknesses of forensic accounting from a professional and educational perspectives. The strengths were represented in the benefits of forensic accounting for students and practitioners of the accounting profession, as it provided new job opportunities and effectiveness in combating fraud. The weaknesses of forensic accounting were it did not have a regulatory framework, lack of rules that define entry controls into the profession, incompatibility regarding methods of teaching forensic accounting: understanding of its essential objective, lack of qualified practitioners, and absence of public recognition of the forensic accounting profession. (Elzain, 2021) examined the importance of forensic accounting and the need to include it within the curricula of accounting departments in Saudi universities. The study relied on the survey method to collect the required data and analyzed the collected data using descriptive analysis. The study sample included (126) faculty members in Saudi universities out of (150) questionnaires, representing (84 %.). The results of the study indicated that all faculty members of the accounting departments in Saudi universities were aware of the importance of forensic accounting and agreed to include forensic accounting within the curricula of accounting were in Saudi universities.

(Eko et al., 2020) evaluated the forensic accounting methods used to prevent or detect fraud in commercial banks in Nigeria. Data processing, ratio analysis, and trend analysis were used to prevent and detect fraud. The study data were analyzed using least square regression models. The results indicated that applying the forensic accounting methods significantly improved the detection and prevention of fraud. The study also showed that most commercial banks' employees lack the ability and awareness of data processing technology . (Akinbowale et al., 2020) developed an innovative approach to combating economic crime through forensic accounting. To reduce fraud, the researchers proposed two theoretical models to integrate forensic accounting methods into organizations' internal control systems: The first model included forensic accounting in the organizational structure, while the second included a comprehensive and detailed analysis of uncovered fraud. (Al-Dhubaibi, 2020) explored the opinions of both the external auditor and the preparers and users of the financial statements regarding the external auditor's responsibility in detecting fraud. The study used the survey method, where (1015) questionnaires were sent to the respondents, and the number of responses reached (261), or (26%). The results of the study indicated that there was a considerable expectation gap in the Kingdom of Saudi Arabia regarding the responsibility of the external auditor for detecting fraud, as the preparers and users of the financial statements assumed that the external auditor should provide absolute assurance that the

financial statements were free of all material misstatements , including fraud, and that any discovery of fraud after approving the financial statements, the external auditor remain responsible that before the beneficiaries.

(Chukwu et al., 2019) assessed the effect of the basic skills of forensic accounting, which include communication skills, evaluation and analysis skills, accounting and auditing skills, and sociopsychological skills, on the credibility of financial reports of companies registered on the Nigerian Stock Exchange in 2018. The study used the survey method, as the study sample included the users of the financial statements, who were the investment advisors. The sample also included the auditors of Nigeria's four major auditing firms. The results indicated that, except for communication skills, which showed a negative effect, the other basic skills of forensic accounting significantly positively impacted the credibility of financial reports. (KURNAZ et al., 2019) explained that despite the advantages of using information technology in reducing time and cost, the use of information technology contributed to finding new methods of financial fraud. This study aimed to identify the essential competencies and effective characteristics in detecting economic fraud in a digital environment. Whereas Manipulation, Misrepresentation and Misapplication, Competence played a role in fraud . The study indicated that forensic audit and accounting reports had become very important . The study relied on the survey method to collect primary data, as the study sample included auditors with the authority to issue transparency reports. The study results indicated that the forensic auditor's essential characteristics and competencies were the same as those of the forensic accountant. However, there was no software to detect fraud in a digital environment in forensic accounting, as the forensic auditor detected financial fraud while auditing financial fraud.

(Alturki, 2017) clarified the role of forensic accounting in detecting fraud in the Kingdom of Saudi Arabia as a developing country. The study indicated the importance of developing appropriate governance rules and mechanisms in response to financial fraud indicators and clarifying the expected role of forensic accounting in companies registered in the Saudi Stock Exchange while analyzing the opinions of academics and regulators regarding the anticipated role of forensic accountant services in companies listed on the Saudi Stock Exchange did not affect the level of financial fraud activities. (Terengganu & Badak, 2014) examined the role of forensic accountants in identifying fraud risk factors using the Fraud Diamond Theory. The study relied on a theoretical approach, as the information was obtained from scientific journals, books, and internet sources. The results indicated that the forensic accountant's use of the fraud theory did not contribute to reducing fraud if it was not eliminated.

(Okoye & Fcna, 2013) examined the role of forensic accountants in detecting and preventing fraud in Nigeria's public sector organizations. The study adopted a mixed approach that included the survey method and the content analysis approach through interviews to collect the necessary data for the study. The study used a regression model and variance analysis to test the study's hypotheses. The results indicated that forensic accounting did not reduce the incidence of financial fraud in public sector organizations and that forensic accountants will replace traditional auditors in the future. (Famous & Okoeguale, 2012) examined the common financial crimes in organizations in Nigeria, mainly because financial crimes caused some financial scandals. This requires professional accounting organizations to think of a new model for dealing with financial crimes away from legal audit. The results indicated that the motives behind financial crimes. The study stressed the importance of introducing forensic accounting to deal with financial crimes through inference.

## **Research hypotheses**

**H**: Forensic accounting tools and techniques positively affect the detection and prevention of all financial fraud in Saudi Arabia.

# **3. METHODOLOGY AND ANALYSIS OF RESULTS**

This study used the quantitative method to analyze data and test the study' hypothesis, using the questionnaire method to collect the primary data. The study sample included workers in Saudi companies' accounting, auditing, and finance departments and participants from diverse

professional backgrounds. The sample was drawn from this target population using a cluster random sampling approach. The population was divided into clusters of different industries, and the sample was drawn randomly from these clusters. The researcher sent (150) online questionnaires, out of which (111) questionnaires were received, representing (74%) of the total questionnaires.

### **Model specifications**

The researcher divided the questionnaire into three parts: The first part deals with demographic information about the participants in the survey as it surveys the respondents' opinions about the concept of forensic accounting and the extent of the need for its services; The second part included financial fraud information as a dependent variable; while the third part dealt with information about the independent variables that were tools and techniques used by forensic accounting in detecting and preventing fraud in all its forms as independent variables.

 $FF = \alpha + Bx1 FAT + \beta X2 FA FR + \beta X3 FA IC + \epsilon$  (1)

Whereas:

FF = Financial Fraud; FAT=Forensic Accounting's Tools; FA FR = Forensic Accounting's Financial Reporting; FA IC = Forensic Accounting's Internal Control; E = Error Term

 $FR = \alpha + Bx1 FAT + \epsilon$ (2)  $FR = \alpha\beta X2 FA FR + \epsilon$ (3)  $FR = \alpha + \beta X3 FA IC + \epsilon$ (4)

## Analysis of results

Cronbach's Alpha was used to measure the internal consistency of the questionnaire, as the scale helped determine whether the survey questions measured the same dependent variable. Cronbach's Alpha was calculated as follows:

 $\alpha$ = (K/(K-1) Sy2–Sum Si2 / Sy2

 $\alpha$  = stands for Cronbach's Alpha; K = stands for the number of items in the scale; Si stands for the sum of the item scores for each item; S stands for the sum of the total scores for all items. Score = 0.9252 Cronbach's alpha of 0.7 or higher was considered acceptable. Therefore, it can be said that survey questions measure the same construct.

The gender analysis in Table (1) indicated that the most significant proportions of the participants were men, which showed that accounting, auditing, and finance professionals were still men, who were the most critical percentage in these jobs.

Gender	Respondents	%
Female	10	9.01%
Male	101	90.99%
Total	111	100%

Table 1: Analysis of participants by gender

The work experience analysis of the Participants in the study table (2) indicated that the most significant percentage were individuals with more than (20) years of experience, which adds accuracy and quality to the study information.

Work Experience	Respondents	%
0-5 Years of Experience	14	12.61%
6-10 Years of Experience	33	29.73%
11-15 Years of Experience	10	9.01%
16-20 Years of Experience	5	4.50%

Table 2: Analysis of participants by work experience

More Than 20 Years of Experience	49	44.15%
Total	111	100

Table (3) analyzes the survey participants according to their department type. It indicates that about (19%) of the participants were from the accounting and finance departments, the largest percentage compared to participants from other departments.

Department	Respondents	%
Accounting & Finance, Auditing	7	18.92%
Administration	17	15.32%
Human Resources	9	7.10%
Information Technology	9	9.11%
Marketing	2	1.80%
Operations	21	6.31
Other	46	41.44%
Total	111	100

Analysis of the participants in the survey by the type of sector in Table (4) indicated that the most significant percentage of the participants were from the healthcare sector, with a rate of 37.84.

Department	Respondents	%
Health care	42	37.84%
Information & Communications Technology	8	7.21%
Manufacturing & Commodities	4	3.60%
Media & Entertainment	3	2.70%
Oil & Gas	30	27.03%
Other	22	19.82%
Retail	2	1.80%
Total	111	100

Table 4: Analysis of participants by sectors

Table (5) clearly shows that all survey participants, except for 2, knew the concept and services of forensic accounting.

Table 5: Do you understand the concept of forensic accounting?

Yes	Respondents	109
No	Respondents	2
Total		111

Table (6) clearly shows that all survey participants, except for 2, were aware of their organizations' need for forensic accounting services.

Table 6: Does the organization where you work need the services of a forensic account	untant?
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Yes	Respondents	109
No	Respondents	2
Total		111

#### Analysis of results

The statistical analysis results of the least square regression model in Table (7) indicated that the model is statistically significant according to the parameter of P-value and the F-test. The analysis of variance showed a statistically significant and positive impact of all independent variables on financial fraud in all its forms as the dependent variables. Despite the significance of the model, the explanatory power of (36.19%) is under average, that is, the forensic accounting' tools, Forensic

Accounting's Financial Reporting and Forensic Accounting's internal control collectively and positively improved the detections of final fraud.

Multiple R	0.6206			
R Square	0.5351			
Adjusted R Square	0.5119			
Standard Error	0.6908			
F	16.5995			
Significance F	0.0000			
ANOVA	Coefficients	<b>Standard Error</b>	t Stat	P-value
Intercept	1.9839	0.2585	7.6745	0.0000
Forensic Accounting				
Tools	0.0644	0.1020	0.6310	0.00200
Forensic Accounting's				
Financial Reporting	-0.0524	0.1059	-0.4951	0.0040
Forensic Accounting's				
internal control	0.2792	0.0942	2.9655	0.0037

#### Table 7: Model (1) overall model

To find out the individual effect of the forensic accountant's skill and efficiency in detecting, examining, and preventing fraud, least squares models were run, and we found results that were different from those of the overall model. The results of the second regression model in Table (8) indicated that the model is statistically significant and that there is a positive and statistically significant impact of Forensic accounting' tools on detecting fraud, with an explanatory power of (33.7%).

Table 8: Model (2) forensic accounting's tools

Multiple R	0.5857			
R Square	0.3431			
Adjusted R Square	0.3370			
Standard Error	0.7352			
F	56.9227			
Significance F	0.0000			
ANOVA	Coefficients	Standard Error	t Stat	P-value
Intercept	2.2954	0.2296	9.9957	0.0000
Forensic accounting'				
tools	0.4535	0.0601	7.5447	0.0000

## Predictor: financial fraud

The results of the third regression model in Table (9) show that the model is statistically significant and that forensic accounting's financial reporting tools had a positive and statistically significant impact on detecting and preventing financial fraud, with an explanatory power of about (23 %.)

Table 9: Model (3) forensic accounting's financial reporting

Multiple R	0.4804	]		
R Square	0.2308			
Adjusted R Square	0.2237			
Standard Error	0.7955			
F	32.6990			
Significance F	0.0000			
ANOVA	Coefficients	Standard Error	t Stat	P-value
Intercept	2.4868	0.2661	9.3447	0.0000
Forensic Accounting's				
Financial Reporting	0.3980	0.0696	5.7183	0.0000

#### Predictor: FF predictor - Significance Level 5%

The results of the fourth regression model in Table (10) indicate that the model is statistically significant and that Forensic Accounting's internal control had a positive and statistically significant

impact on detecting and preventing financial fraud in all its forms, with an explanatory power of about (34%).

Multiple R	0.5833	]		
R Square	0.3402			
Adjusted R Square	0.3341			
Standard Error	0.7368			
F	56.1999			
Significance F	0.0000			
ANOVA	Coefficients	<b>Standard Error</b>	t Stat	P-value
Intercept	2.1676	0.2473	8.7644	0.0000
Forensic Accounting's				

Table 10: Model (4) forensic accounting's internal control

#### Predictor: Financial fraud

The statistical analysis results clearly showed that forensic accounting tools, such as Forensic Accounting's Financial Reporting and internal control, positively contributed to the detection and prevention of financial fraud; therefore, the study accepted all the alternative hypotheses.

# CONCLUSIONS

This study examined the forensic accountant's role in preventing and detecting fraud in the Kingdom of Saudi Arabia. The study used a survey tool to collect the primary data necessary to achieve the objective and test the study's hypotheses. Descriptive statistics and the least square regression model were used to analyze and interpret the data. The study divided the questionnaire into three sections: The first section included the respondents' information and their opinions about the concept of forensic accounting and the extent to which organizations in the Kingdom of Saudi Arabia need forensic accounting services; the second section includes questions that measure the concept of fraud and its types as a dependent variable. The third section included questions to measure the effectiveness of forensic accounting in preventing and detecting fraud compared to tools of the traditional external auditor. The results of the overall regressions model incorporating Forensic accounting tools, Forensic Accounting Financial Reporting, and Forensic Accounting's internal control as independent variables show that Forensic accounting' positively and moderately contributed to the detection and prevention of financial fraud as the adjusted R Squared recorded (0.5119). To estimate the individual impact of each component separately, the results show that all models are statistically significant, and the adjusted R Squared recorded (0.3370), (0.2237), and (0.3341) for Forensic accounting tools, Forensic Accounting's Financial Reporting and Forensic Accounting's internal control, respectively, indicating low positive impacts on fraud detection. The results showed average impact and that might be due to obstacles such as the absence of a regulatory framework, governance issues, lack of training issues, and social barriers.

## REFERENCES

- Ahmed Abdullah Al-Dhubaibi, (2020). Auditors' Responsibility for Fraud Detection: Views of Auditors, Prepwerers, and Users of Financial Statements in Saudi Arabia. Accounting, 6, pp 279–290
- Akinbowale, O.E., Klingelhöfer, H.E. and Zerihun, M.F. (2020). An Innovative Approach in Combating Economic Crime Using Forensic Accounting Techniques. Journal of Financial Crime, Vol. 27 No. 4, pp. 1253-1271. https://doi.org/10.1108/JFC-04-2020-0053.
- Al Shbeil, Seif, Hashem Alshurafat, Noor Taha, Al Shbail, and Mohannad Obeid.( 2023). What Do We Know About Forensic Accounting? A Literature Review. In European, Asian, Middle Eastern, North African Conference on Management & Information Systems. Cham: Springer
- Almashaqbeh, Razan Nayef, Hashem Alshurafat, and Hamzeh Al Amosh. (2023). The Impact of Professionalism Theory Constructs on the Applicability of Forensic Accounting Services: Evidence from Jordan. International Journal of Financial Studies 11: 141. https:// doi.org/10.3390/ijfs11040141

- Alrawashdeh, B; Afaneh, M.K.; Alfawwereh .N. (2020). The Role of Technology for Activating the Use of Forensic Accounting in Financial Fraud. Academy of Strategic Management Journal, Volume 20, Special Wassue 2, 2021.PP1-10
- Alshurafat, H., Al Shbail, M.O. and Mansour, E. (2021). Strengths and Weaknesses of Forensic Accounting: An Implication on the Socio-Economic Development. Journal of Business and Socio-economic Development, Vol. 1 No. 2, pp. 135-148. https://doi.org/10.1108/JBSED-03-2021-0026
- Alturki, K.H. (2017). Corporate Governance and the Role of Forensic Accountants in Saudi Arabia. International Journal of Accounting and Financial Management Research (IJAFMR) WASSN (P): 2249-6882; WASSN (E): 2249-7994 Vol. 7, Wassue 2, Apr 2017, 17-24. TJPRC Pvt. Ltd.
- Bhadin, M. L. (2007). Forensic Accounting: A New Paradigm for Niche Consulting. The Chartered Accountant. .https://www.researchgate.net/profile/Madan-Bhadin/publication/286711517\_Forensic\_Accounting\_A\_New\_Paradigm\_For\_Niche\_Consult ing/links/566d291208ae62b05f092c41/Forensic-Accounting-A-New-Paradigm-For-Niche-Consulting.pdf
- Bologna, G. Jack, and Robert J. Lindquist. (1995). Fraud Auditing and Forensic Accounting: New Tools and Techniques. New York: Wiley. Botes, Vida, and Ahmed Saadeh. 2018. Exploring evidence to develop a nomenclature for forensic accounting. Pacific Accounting Review 30: 135–54. [CrossRef]
- Coenen TL. (2005). Fraud in Government. Wiscons in Law Journal Article? 5. Posted By Casafamar Sun Dip, Available on Http://Www.Google.Com.
- Crumbley, D.L. and Aposolou, N.G. (2005). The Expanding Role of the Forensic Accountant. The Forensic Examiner, Vol. 14, No. 3, Retrieved June 3, 2011, http://www.google.com
- Davis, Charles, Ramona Farrell, and Suzanne Ogilby. (2010). Characteristics and skills of the Forensic Accountant. American Institute of Certified Public Accountants 2010: 11–26
- Demir, V.ve Bahadır, O., (2009). Muhadebe Manipülasyonu Yöntemler Ve Teknikler. Mali ÇözümDergwasi, Wassue: 94, pp.1-18.
- Eko, E. U., Adebwasi, A. W., & Moses, E. J. (2020). Evaluation of Forensic Accounting Techniques in Fraud Prevention/Detection in the Banking Sector in Nigeria. International Journal of Finance and Accounting, 9(3), 56-66. DOI:10.5923/j.ijfa.20200903.02 .
- Elzain, E. O. (2021). Should Forensic Accounting Be Included In Curricula Of Accounting Departments: The Case Of Saudi Arabia? International Journal of Higher Education, 10(4), 258-267. doi:10.5430/ijhe.v10n4p258
- Famous, I. and Okoeguale, I. p. (2012). Forensic Accounting And Financial Crimes: Adopting The Inference, Relevance And Logic Solution Approach. African Research Review, an International Multidisciplinary Journal, Ethiopia Vol. 6 (4), Serial No. 27, October 2012 WASSN 1994-9057 (Print) WASSN 2070--0083 (Online) DOI:10.4314/arrive.v6i4.9
- Howard S. and Sheetz M. (2006). Forensic Accounting and Fraud Investigation for Non-Experts. New Jersey: John Wiley and Sons Inc. 2006
- Huber, Wm. (2012). Is forensic accounting in the United States becoming a profession? Journal of Forensic & Investigative Accounting 4: 255–84
- Institute of Turkwash Hwastory. (1998); http://en.wikipedia.org/wiki/Institute\_of\_Turkwash\_Studies
- Ismail, Sawsan, Abdallah Bader Al-zoubi, Firas N. Dahmash, Safaa Ahmad, and Mahmoud Mahmoud. (2022). A Review on Forensic Accounting Profession and Education: Global Context. Preprints.org 2022110369. [CrossRef]
- Joshi MS. (2003). Definition of Forensic Accounting. 2003. available online on Http://Www.Forensicaccounting.Com
- Koh, Adrain Nicholwa, Lawrence Arokiasamy, and Cristal Lee Ah Suat. (2009). Forensic accounting: Public acceptance towards occurrence of fraud detection. International Journal of Business and Management 4: 145–49. [CrossRef]
- Kurnaz, N.; köksaL, I.; ulusoy, I (2019). Forensic Accounting in Financial Fraud Control in Digital Environment: A Research on Independent Auditors. Turkwash Studies Volume 14 Wassue 3, 2019, p. 1609-1627.DOI: 10.29228/TurkwashStudies.22536 WASSN: 1308-2140 Skopje/MACEDONIA-Ankara/TURKEY

- Lamba, J. and Jain.E (2020) .Forensic accounting: A Way to Fight, Deter and Detect Fraud. International. Research journal. Vol. 10No. 012020- p-WASSN 2202-2821 e-WASSN 1839-6518
- LOwojori, A.A and Asaolu T. O. (2009) .The Role of Forensic Accounting in Solving the Vexed Problem of Corporate World. European Journal of Scientific Research .29 (2)83-187InternationalJournal of Business and Social Science 4 (7)183-187.
- N Chukwu, T O Asaolu2, O R Uwuigbe, U Uwuigbe, O E Umukoro, L Nassar and O Alabi (2019). The Impact of Basic Forensic Accounting Skills on Financial Reporting Credibility among Lwasted Firms in Nigeria. IOP Conference Series. Earth and Environmental Science, Volume 331, International Conference on Energy and Sustainable Environment 18–20 June 2019, Covenant University, Nigeria
- Okoye, E.I and Fcna, F. (2013) .Forensic accounting: A Tool for Fraud Detection and Prevention in the Public Sector. (A Study of Selected Ministries in Kogi State. International Journal of Academic Research in Business and Social Sciences, Vol. 3, No. 3 WASSN: 2222-6990
- Okoye, Emmanuel Ikechukwu, and Do Gbegi. (2013). Forensic accounting: A tool for fraud detection and prevention in the public sector. (A Study of Selected Ministries in Kogi State). International Journal of Academic Research in Business and Social Sciences 3: 1–19.
- Ozil, p. k. (2020) .Forensic Accounting Theory. SBN: 978-1-80043-096-9, ISBN: 978-1-80043-095-2
- Ozili, P.K. (2020), "Forensic Accounting Theory", Özen, E. and Grima, S. (Ed.) Uncertainty and Challenges in Contemporary Economic Behaviour (Emerald Studies in Finance, Insurance, and Risk Management), Emerald Publishing Limited, Leeds, pp. 49-60. https://doi.org/10.1108/978-1-80043-095-220201005
- Saurav K. Dutta (2013) .Statistical Techniques for Forensic Accounting: Understanding the Theory and Application of Data Analysishttps://play.google.com/store/books/details?id=xX5V83o2kHgC&rdid=bookxX5V83o2kHgC&rdot=1&source=gbs\_vpt\_read&pcampaignid=books\_booksearch\_viewport
- Senan, N. A. M., & Swalih, M. (2019). A Brief Overview of Forensic Accounting and Its Present Position in a Middle East Country. Pacific Business Review International, 12(1), 107-115.
- Serçemeli, M. (2018). Muhdebe Ve Denetim Mesleklerinin Dijital Dönüşümünde Yapay Zuka. Turkwash Studies Economics, Finance and Politics Volume 13/30, fall 2018, p. 369-386 DOI:10.7827/TurkwashStudies.14373 WASSN: 1308-2140 Skopje/MACEDONIA-Ankara/TURKEY
- Sudhi, Y.and Sushama, Y. (2013). Forensic Accounting: A New Dynamic Approach to Investigate Fraud Cases. EXCEL International Journal of Multidwasciplinary Management Studies., Volume: 3, issue: 7 First page: (1) Last page: (9) Online WASSN: 2249-8834.
- Terengganu, K. and Badak, G. (2014) .Forensic Accounting and Fraud Risk Factors: The Influence of Fraud Diamond Theory. The American Journal of Innovative Research and Applied Sciences. www.american-jiras.com.
- Toroslu, M. V., (2012). Yeni Türk Ticweret Kanunu Kapsamında Finansal Tablolar Denetimi, Sekin Yayıncılık, First Edition, Ankara.
- Van Akkeren, V.; Buckby, J.; Sherrena, B. & Julie-Anne, T. (2016). Forensic Accounting: Professional Regulation of a Multi-Disciplinary Field. Australian Business Law Review, 44(3), pp. 204-215.
- Zysman A. (2004). Forensic Accounting Demystified, World Investigators Network Standard Practice for Investigative and Forensic Accounting Engagements. Canadian Institute of Chartered Accountant Available on <u>www.forensicaccounting.com</u>

# **APPENDIX: SURVEY QUESTIONNAIRE**

The Questionnaire Will Be Divided Into Three Sections Namely:

- a) Demographic Information
- b) Forensic accounting, internal controls, and financial frauds in Saudi Arabia.
- c) Fraud Detection By Forensic Accounting

Section (A) Demographics Information

Q1. What was your gender?

Answer).

- a) Male
- b) Female

### Q2. What was your department?

Answer

- a) Accounting & Finance
- b) Marketing
- c) Human Resources
- d) Operations
- e) Information Technology
- f) Administration
- g) Other (please specify)

Q3. What was your work experience?

Answer

- a) 0 5 years of experience
- b) 6 10 years of experience
- c) 11 15 years of experience
- d) 16 20 years of experience
- e) More than 20 years of experience

Q4. What was the industry to which your organization belongs?

Answer

- a) Oil & Gas
- b) Healthcare
- c) Retail
- d) Media & Entertainment
- e) Information & Communications Technology
- f) Manufacturing & Commodities
- g) Others (please specify)

Q5. Do you understand the concept of forensic accounting?

Answer

- a) Yes
- b) No

Q6. Does the organization at which you work need the services of a forensic accountant?

Answer

- a) Yes
- b) No

Section (B) Dependent Variables

Q1. Forensic accounting helps in reducing all forms of misappropriation of assets.

Answer

a) Strongly Agree

- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly Disagree

Q2. Forensic accounting helps identify perpetrators of financial fraud.

- a. A Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly Disagree

Answer

Q3. Forensic accounting helps in the early detection of financial fraud.

Answer

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly Disagree

Q4. Forensic accounting helps in detecting creative accounting practices.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly Disagree

Section (C) Forensic Accounting - independent Variables

Q1. Forensic accounting' tools and techniques were more effective than the external auditor's tools and techniques in detecting and preventing financial fraud.

Answer

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly Disagree

Q2. The use of forensic accounting tools improves the quality of financial reporting by detecting and preventing practices that were inconsistent with generally accepted accounting principles.

Answer

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly Disagree

Q3. The use of forensic accounting tools improves the design of the internal control system to prevent and detect financial fraud.

Answer

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly Disagree