

Importance of the Approach to Forensic Accounting in Reducing Financial Fraud

A Field Study on a Number of Auditing Offices and Judicial Courts Operating in Basra

1- Abdulhussain Tofeeq Shibli 3- Jalil Ibrahim Salih 3- Nahla Ghalib Abdul Rahman

1- Asst.prof

2- Asst.prof

3- teacher

Husainshibli@yahoo.com

Jaleel_kanan@yahoo.com

nahla.jalee@stu.edu.iq

1. University of Barah /Economia & Administration College.

2. Southern Technical University /Technical College of Administration Basra .

3. Southern Technical University/ Technical Institute of Basra .

Abstract

Recently, there has been an increase in international interest in anti- financial fraud activities and their reduction, particularly in light of the technological advancement in the economic domain that makes it imperative for business organizations to fight financial fraud for survival. This is because financial fraud is the main cause for the collapse of many large companies such as, ENRON and WORLD.COM, and on this basis, accountants and auditors' interest has increased concerning the methods and mechanisms of discovering financial fraud issues. Correspondingly, there have been multiple accounting and auditing mechanisms brought forward to discover financial fraud, among which, forensic accounting is often utilized. This research aimed to identify the concept of forensic accounting approach, its significance and followed methods, to determine the role of a forensic accountant in reducing fraud and resolving many lawsuits to discover financial fraud. The study also identified the most prominent obstacles and difficulties that limit the application of forensic accounting to discover financial fraud. To achieve the goals of the study, a pilot study was conducted and 47 questionnaires were distributed, from which, 42 were retrieved, with a response rate of 89.36% . This is an acceptable result in terms of findings generalization to the population. The sample included a group of employees working in accounting and auditing offices and judicial courts in Basra. Among the most important results revealed in this research was that forensic accounting contributes in reducing fraud cases from judicial experts and legal accountants perspectives. In addition, results indicated difficulties and obstacles that deter the application of forensic accounting to discover fraud from the same perspectives.

Keywords: Forensic accounting, Financial Fraud, Accounting Auditing Offices, Judicial Courts.

1 Introduction

Since the early 21st century, media hasn't stopped publishing scandals of fraud or corruption among international business firms, where most of which, participated in immoral processes. These financial scandals weren't limited to the U.S. business firms but also included firms in Italy, Australia, North Korea, China, Japan, Holland and France (Albrecht et al., 2008). The topic of fraud increasingly attracts interest all over the world and firms' fraud and collapse constitute an international phenomenon that has led to a real dilemma in Europe (Altman & Hotchkiss, 2010). Furthermore, large companies collapse such as ENRON, PARMALAT, WORLD.COM, XEROX and AHOLD ROYAL are some examples on accounting collapses that resulted in bad impressions in accounting history for their harmful consequences. There have been

additional collapses that occurred in other countries, for instance, in the banking sector of Turkey such as, Baninter is Bank Irish Allied, Barings and BCCI, with fraud methods indicating an increase in recent times through exploitation of legal gaps or illegal ones, which emerged in large companies and governments' agendas (Omurgonulsen & Omurgonulsen, 2009) . Legislations and laws failed to effectively deter fraud as evidenced by the collapse of major companies like ENRON in 2001, which lost assets amounting to 63.4 billion \$ and this was followed by the collapse of the largest auditing company in the world, Arthur Anderson, due to its involvement in the ENRON company collapse (Kyereboah & Biekpe, 2006).

In the above background, forensic accounting appears to be a significant deterring instrument to be examined. Services offered by forensic accounting are required by individuals, centers, business organizations and courts as it collects financial evidence used in courts for conflicts' resolution or to support or refute claims for compensations for losses and seeking to achieve justice against those who commit fraud on account of their betrayal of trust (Gray, 2008).

The Accountants Canadian Institute of Chartered CICA collaborated with a group of professional organizations and universities in 1998 to establish an alliance that came to be known as the Investigative and Forensic Accounting (IFFF) that awards certificate in forensic accounting to accountants following their completion of the related requirements (Freeman et al., 2008), and in 2006, the CICA issued a group of standards for forensic accountants to practice forensic accounting. In recent years, judiciary, banks, insurance companies and police departments have increasingly needed forensic accountants (Ramaswamy, 2007). Forensic accountants are perceived as a mixture of accounting audits and private inspectors who exhibit multiple skills related to accounting, auditing, finance, law and the quantitative methods, and these skills differ from those required from external accounting auditing (Bierstaker et al., 2006).

Analyses that have been conducted to identify the causes of large companies collapse have indicated an error in the ethics and practice of accounting and auditing, which included concealing information , inflating the profits of the companies from the real profits, failure in the internal control system, or collusion of companies with auditing firms that were conducting both internal and external auditing, and preference of personal interests over ethical principles and values (Revsine, 2002; Lev, 2002).

There has been increased interest from accountants and auditors in the methods and mechanisms for discovering financial and administrative fraud and corruption cases. In addition, many bodies such as the civil community organizations, media, researchers and academic institutes, control and legislative systems and accounting and auditing entities all over the world have been interested in financial and administrative corruption cases (Moore, et al., 2006). As a consequence of large companies collapse and the subsequent financial and accounting scandals coupled with the increased rate of financial crimes, money laundering, fraud and manipulation of information technology use, there has been an increase in suits and the judges need for experts in accounting field to utilize their experiences and skills to employ them in resolving accounting crimes and violations, which in short, takes the form of forensic accounting, whose requirement has recently skyrocketed (Crawford & Weirich, 2011).

2 Literature Review

There have been many studies that addressed the forensic accounting topic. To begin with, Popoola (2014) aimed to assess the risks of fraud among forensic

accountants and accounting auditors when performing their tasks, utilizing the SPSS IBM software and PLS-SEM for data analysis. The study was based on 15 hypotheses and the results indicated a positive relationship between cognitive and mental skills and thinking methods among forensic accountants and accounting auditors, and risks' evaluation when performing their tasks, there were also differences between forensic accountants and accounting auditors in light of cognitive and mental skills as forensic accountants were revealed to have higher level of such skills compared to accounting auditors. The study recommended that companies operating in the public sector should be interested in forensic accounting to assess fraud risks and discover fraud cases to reduce them, and that accountants and auditors should be encouraged to acquire knowledge and skills of forensic accountancy by enrolling them in training courses to increase their ability to assess, discover and mitigate fraud risks .

In addition, Hegazi et al. (2016) conducted a study in the UK to investigate the nature of forensic accounting concept and to identify the required skills for forensic accounting and the extent of operating organizations' response to the development of this concept in the UK. The researchers used questionnaire as a data collection tool and results indicated that forensic accounting is among the multiple activity fields, with a low possibility that it would be accepted as a career in the current times, but this could be achieved in the long run through teams of individuals with various experiences and skills.

Okaoye and Gbegi (2016) investigated the extent to which forensic accounting reduces fraud cases and identified differences between external accounting auditor and forensic accountant. The sample of the study included a group of employees working in five ministries in Kogi state in Nigeria. The researchers used questionnaire as a study tool and retrieved 350 valid ones for analysis. In addition, interviews were utilized in this study and data obtained were analyzed using schedules and percentages. Hypotheses were tested using the SPSS software and based on the results, forensic accounting leads to reduced fraud cases and there were differences between external accounting auditor and forensic accountant, regarding the contribution of each of them in discovering fraud cases and reducing them. The study recommended designing training courses for external accounting auditors and introducing them to all what is related to forensic accounting and the requirements should be provided by forensic accountants.

Okye's study (2009) aimed to explain the role of forensic accounting in checking fraud cases and supporting suits in addition to identifying the extent to which forensic accounting contributes in providing courts with accounting analysis that helps judges to make the right decisions. Results indicated that forensic accounting contributes in assisting to obtain the main document as evidence for judges to make the right decisions. The study recommended teaching forensic accounting courses in universities and including it in the curriculum of accounting students. It also recommended promoting awareness among accountants regarding the importance of forensic accounting.

Muelmann et al.'s (2012) study aimed to investigate forensic accounting experts in the field of tax-related problems and to give a comprehensive perspective about the extent of the need to use forensic accountants. The study followed the historical, analytical, descriptive and inductive approaches. Results indicated that a forensic accountant plays a role in fraud and tax cases in addition to being as a neutral expert witness in the court after investigating and inspecting the financial facts. The study recommended promoting interest in preparing forensic accounting to face the increased needs in the various life skills and knowledge.

Ozili's study (2015) provided some evidence on fraud and forensic accounting, particularly the skills that should be acquired by a forensic accountant, the mechanisms and methods used for discovering fraud from faculty members in the professional organizations' perspective and issues related to teaching forensic accounting. Results indicated that there is an interest in forensic accounting by faculty members and that audit specialized professional organizations have become increasingly concerned with fraud issues, accurate knowledge of accounting standards, and fraud techniques and this knowledge can assist in understanding fraud and how it can be committed in terms of accounting.

In relation to the above studies, Mackenzie's study (2018) investigated the importance of forensic accounting, the methods followed to discover fraud cases, the skills needed to be acquired by a forensic accountant and the factors that led to the increased interest in forensic accounting. The study also focused on the importance of the internal controls determined in the COSO. Results indicated that the factors that led to the increased interest and the demand for forensic accounting are the increased fraud cases in financial data in international large companies and the increased awareness among people and investors about the risks resulting from frauds when investing their money. The study recommended that companies should be responsible of protecting shareholders and stakeholders when it comes to fraud.

3 Theoretical Framework

3.1 The Concept of Forensic Accounting

There is no agreement among researchers and authors on the concept of the forensic accounting approach as the concept differs from one author to another according to the case in question, but all researchers and authors agree that accounting application can be utilized in supporting the legal procedures in lawsuits. The American Institute of Certified Public Accountants/AICPA (2005) defines forensic accounting as that accounting which includes the application of particular skills related to auditing accounting, financial affairs, the quantitative methods, parts of law and research and investigative skills to collect, analyze and evaluate evidence and explain the results and report them. Kranacher et al. (2008) defined it as an application for accounting knowledge, the law and information technology using a combination of techniques to determine financial fraud and to evaluate financial data based on the approved standards and to provide an honest opinion based on the applied accounting principles with the aim of discovering deviations from standards and to check for the use of accepted auditing and accounting practices, when preparing financial statements. Smith (2009) defined forensic accounting as that type of accounting where an accountant has a high level professional experience and independent enough to offer facts about the validity of legal and administrative financial information lawsuits in question, which assists judiciary to judge them. It is believed that financial accountants look at figures while forensic accountants look beyond figures. Also, Gray (2008) defined forensic accounting as applying the skills of financial, accounting, auditing quantitative methods and particular methods from law and research and investigation skills in collecting, analyzing and evaluating evidence, then explaining and offering the results.

Forensic accounting is not just accounting as it looks beyond figures when dealing with reality and utilizes law and investigation skills to in courts to fairly resolve conflicts. Forensic accounting is also defined as a field of accounting that uses accounting and auditing investigation to discover the economic damages and preparing reports on legal investigations to support litigations in courts (Zadeh and

Ramazani, 2012), while Pedneault et al. (2012) referred to forensic accounting as an application for accounting principles, theories, controls, facts and assumptions in a legal conflict and it includes all accounting knowledge and it consists of two main elements : 1- legal services: which are defined by the forensic accountant's role as an expert or a consultant and 2- investigation services, which depend on utilizing the forensic accountant's skills and do not lead to a witness in courts. (Biswas et al. 2013) indicated that forensic accounting is sometimes called investigative accounting, which is an application of specialized knowledge and particular skills to determine falsified transactions and collecting evidence related to the case in question.

3.2 Development of Forensic Accounting

Forensic accounting emerged in 1817 at the time of bankruptcy represented in Meyer v. Sefton. It was difficult to check and inspect the facts and evidence related to this issue by the court, which required an accountant to investigate the case and give his witness as an expert, and this accountant, from the perspective of the pioneering forensic accounting, was Dr Larry Crumbly and he was the first forensic accountant in history marking the beginning of the emergence of forensic accounting concept (Singleton & Aaron, 2010).

The need and demand for forensic accounting has been present since 1900s when federal income tax was adopted in the United States of America and tax evasion began, as a result of which, the American Tax Department adopted several techniques used in forensic accounting to discover evaders. The first tax evasion from income tax was made by "Al" Capone during the First World War and was detected and The Federal Bureau of Investigation (FBI), with the assistance of more than 500 accountants, who used forensic accounting to check and detect the financial transactions (Stevens, 2008; Miles, 2014).

In 1986, American Institute of Certified Public Accountants (AICPA) issued the practice manual No 7 and it was related to two main aspects namely, investigative accounting and supporting lawsuits (Waweru & Zopiatis, 2010). In March 1997, the American Board of Forensic Accounting (ABFA) was established (Karmbia & Zopiatis, 2010) and currently, there are about 16 American universities that offer training and courses in the field of forensic accounting (Macaulay & Stewart, 2018).

3.3 Services Offered by Forensic Accounting

Forensic accounting offers its services in many aspects (Digabriele, 2008; Aribaba, 2013; Heitger & Heitger, 2018);

A- Investigating financial fraud cases and reducing them to determine the extent of companies' financial statements and records-related illegal activities, helping in protecting assets, retrieving assets and utilizing experts in many cases and in this case, the forensic accountant should look for any error in evaluating stocks or wrong capitalization for expenses with the purpose of distortion of profits and embezzlement. This determination assists in deciding on the necessary procedures to offer evidence either, verbally or as a report, or both.

B- Providing consultancy to draw strategies to deter fraud in companies and in this case, a forensic accountant should evaluate if it is possible to modify the accounting system in question taking into account the weaknesses in the control system and the internal procedures.

C- Forensic accounting analyzes and evaluates commercial transactions and this helps the forensic accountant to determine or estimate the real value for a company in

case of consolidation or acquisition and to ensure that the buyer is fully informed about the targeted company's value and its financial position.

The major four auditing companies (Deloitte , KPMG , E and Y and PWC) work on offering various services in the field of forensic accounting . A study that included a survey for the services offered by these companies in six countries (Australia, Canada, Czech Republic, Hungary, United Kingdom and United States of America) indicated a contrast in the numbers and types of services offered and also indicated that the PWC offered the most forensic accounting services. Furthermore, the four companies offered most services of forensic accounting in Australia as shown in Table 1 below (Zhang & Farhad, 2005).

Table (1)

Country	Four Large Auditing Companies				TOTAL	PERCENTAGE
	PWC	E and Y	KPMG	DELOITTE		
Australia	16	16	19	10	61	21,8
Canada	11		1	17	49	17,6
Czech Republic	5		1	17	24	8,6
Hungary	5		21	17	32	11,5
United Kingdom	9				59	21,1
The USA					54	19,4
Total	62	68	64	85	279	100

3.4 Difference between Forensic Accounting and Auditing :

Forensic accounting isn't auditing and it differs from auditing as follows (Rezaee, 2004; Ramamoorti, 2008);

A- Forensic accounting depends on offering an opinion based on reality and more recently it was discovered that the forensic accountant sees beyond what is seen by the eye while an auditor focuses on a professional opinion and the clarity of financial statements in expressing content.

B- Forensic accounting focuses on the forensic accounting task as an investigator, expert and a witness, while auditing focuses on the auditor's role only as an investigator.

C- There is an increased demand for forensic accounting by various organizations, while auditing is a stable routine process.

D- Forensic accounting focuses on mechanisms that deal with all civil and criminal problems, while auditing deals only with civil ones.

3 Forensic Accounting Role in Iraq

In Iraq, features of forensic accounting haven't emerged yet despite being already a mainstream accounting type in the US. However, this doesn't mean that there is no existence of some evidence indicating some aspects of forensic accounting currently being used including (Aljaily, 2012);

A- Forensic Experts: utilizing a certified expert with knowledge in financial and accounting aspects and is listed in Iraqi courts based on the experts' law in judiciary No 163/ 1964 and its amendments .

B- Consulting the Association of Accountants and Auditors: the association of Iraqi accountants and auditors or faculty members in Iraqi universities is invited to give their opinions regarding some accounting and financial-related lawsuits in courts.

C- Objection Committees: The use of accountants rather than others within the objection committees depends on the problems of tax accounting and the opinion in tax disputes.

4 Fraud

4.1 The Concept of Fraud

Fraud is a real problem and it has become an international phenomenon that attracts the interest of many countries in the world, with evidence from the collapse of ENRON firm in the USA and the failure of major firms in other countries in Europe (Altman et al., 2010). Forensic accounting is based on a group of skills for accounting and auditing and is one of the modern methods in the field of discovering fraud and administrative corruption and has a great role in investigating and inspecting fraud in Europe and the US (Yogi, 2013).

Peter (2009) claimed that financial fraud isn't a new phenomenon but existed since old times, but the new aspect is the size of the phenomenon that has increased to an extent where it has become a threat for many societies and developing countries in particular. Developed countries are where fraud originated from but it extended to developing countries in light of globalization where fraud is committed by individuals and organizations alike for the purpose of obtaining money, properties or services, to avoid paying back, for losing services or for securing personal or commercial benefits. There is no clear agreement among authors and researchers on the concept of financial fraud. Nia (2015) defined fraud as a broad concept that is represented by two kinds of practices, the first is assets embezzlement and the second is the preparation of false data. Assets embezzlement includes activities such as embezzlement, clear theft, and the misuse of assets, while fraudulent data preparation is the intended distortion of facts in financial data such as, inflating the sales prices and purchases' revenues or reporting false expenses or not reporting receipts, and fraudulent acts are carried out with our without management knowledge.

Moreover, Sharma and Panigrahi (2012) revealed that fraud lead to firm's operations and business according to the followed system in a manner that results in false profits - although it is not necessary for such an act to lead to legal consequences, that is, fraud is an intended act against law. The American Institute of Certified Public Accounts (AICPA) defines fraud as a wide legal concept that depends on whether or not the mistake is intended (Goldmann, 2010). Fraud is the knowledge in offering misleading information and facts or hiding the physical evidence that includes other harmful activities (Pedneault, 2009). Fraud is defined by the Association of Certified Fraud Examiners (ACFE) as the process of deception intentionally performed by the individual or a company, which leads to the realization of benefits to that individual, company or any third party (Robinson, et al., 2012). Arens et al (2012) indicated that

the financial fraud concept can be viewed from two angles; 1) from a legal perspective - it is an intended deception that aims to deprive a person or an organization to benefit from properties or rights and, 2) from a financial perspective, where fraud is the intended distortion of financial statements for stealing assets or for distorting financial statements.

4.2 Fraud Elements

The act of fraud includes a group of associated factors that are present when fraud occurs at all levels within any organization and these factors form the fraud triangle (Doruminey et al., 2010). The theory behind this triangle dates back to 1940 and was theorized by Donald Cressey, a student from Indiana University who focused his PhD thesis on fraud (Wells, 2007). The AIFE referred to these three elements as the fraud risk factors and they are (Vona, 2008);

A-Opportunity: a fraudulent act should reach assets to wrangle or the ability to manage control procedures in addition to amendments that allow the individual the opportunity to commit fraud (Power, 2013). There is a direct relationship between the availability of the opportunity to commit fraud and the ability to cover it. In addition, great trust associated with the weak internal control system and the weak supervision creates an opportunity for fraud (Trompeter et al., 2014).

B- Pressures or Motives: pressures represent acts that occur within an organization or an individual's life. With such pressures, individual's needs become more important than morals or the organization's needs and goals as the motive to commit fraud acts. In fact, fraud is usually related to personal pressures or organizational pressures on individuals, and whenever there is an opportunity, the motive increases or encourages fraudulent acts (Gucciardi et al., 2008).

C- Rationalization: with the various reasons, we always find that rationalization exists, and after rationalization, a seemingly wise decision supports the commission of fraud (Cohen, 2013). In this regard, there are always justifications adopted by individual who commit fraud, such as, "I am borrowing money and I will put it back as soon as I can", "This company is going to collapse without me and I deserve this as I am only taking my rights", "Others will understand once they know how much I need this" (Peterson & Zikmund, 2004).

5 Hypotheses

This study proposes the following hypotheses for testing;

H1: Forensic accounting approach does not contribute in reducing fraud acts from forensic experts and legal accountants' perspective.

H2: There are no difficulties and obstacles that limit the application of forensic accounting to discover fraud from forensic experts and legal accountants' perspective.

6 Testing the Questionnaire's Validity and Consistency

6.1 Face Validity

To check for the questionnaire's validity and to judge it, the researchers forwarded it to a group of specialized academics and some faculty members specialized in auditing and forensic work as professional people with wide experience. The researchers have modified the tool based on the specialist's opinions and notes and came up with its final version.

6.2 Consistency Test

The consistency of the tool was verified using the Cronbach's alpha correlation test as it depends on individual's performance coordination from an item to another and it indicates the strength of correlation and coherence among items. In addition, alpha correlation provides a good estimation for consistency and the values are shown in Table (2);

Table (2)

Dimension	Items No.	Cronbach's Alpha
1st	10	93.40%
2nd	9	89.93%
Total		90.47%

Table (2) indicates that Cronbach's alpha value reached (90.47%) and this is an acceptable value for the purposes of this study as Cronbach's alpha value has to be at least 60% for such a study.

7 Methodology

7.1 Sample of the Study

The sample of the study is represented by a group of external accounting auditors and forensic experts, numbering 47 individuals, working in Al-Basra governorate, who were randomly selected. Questionnaires were distributed to them manually with the assistance of researchers' assistants. The researchers retrieved 42 questionnaires with a response rate of 89.36% and this rate is acceptable for the purposes of this study and the generalization of results.

7.2 Data Collection

The researchers utilized the questionnaire as a tool for data collection as it is among the main tools to collect the necessary data to achieve the research goals and to test the research hypotheses; accordingly, the SPSS software was used. The questionnaire items were prepared by the researchers depending on the theoretical framework of this research. The instrument included 19 items and response strength was determined by using the 5- point Likert scale to indicate participants' opinions . Each case had a scale equal to the following level; strongly agree (5 points), agree (4 points), neutral (3 points), don't agree (2 points) and strongly don't agree (1 point). The results were tested and analyzed based on the appropriate statistical approaches to test the research hypotheses.

7.3 Statistical Methods

A number of statistical methods were used and employed for the purpose of describing and analyzing data related to the variables of the study and to test the study hypotheses via computer. SPSS V.20 software as well as means and standard deviations were used to analyze data, whereas the t-test was used to test the hypotheses.

8 Results and Discussion

This section includes a description of the results of participants' responses using means and standard deviations. The research included 19 factors that might be significant for the forensic accounting approach in reducing financial fraud in Iraq.

Respondents were asked to determine the significance of each factor based on a 5-point Likert scale.

8.1 Results Related to the Research 1st Hypothesis:

Forensic accounting approach does not contribute in reducing fraud acts from forensic experts and legal accountants' perspective.

Table (3) shows the results related to the research first hypothesis.

Table (3)
Statistical Analysis for the Axis of Forensic Accounting Approach Contribution in Reducing Fraud

Items	Mean	Standard Deviation	Rank	Sig
Forensic accounting provides litigation advice on disputes arising from the professional liability of the courts of law.	4.07	0.98	2	High
Forensic accounting contributes to the availability of means, and evidence to enable judicial courts to assess claims for compensation in cases of financial and administrative corruption and to make judgments of their own	3.92	0.91	4	High
Forensic accounting provides methods and means that contribute to the detection of financial and administrative fraud method	3.85	0.86	5	High
Forensic accounting contributes in reducing companies' preparation for misleading financial statements.	3.82	0.92	6	High
Forensic accounting has an important role in checking and obtaining electronic evidence within electronic business environment.	3.62	1.07	10	High
Forensic accounting increases investors, shareholders and lenders assurance regarding their financial rights.	4.02	0.70	3	High
Forensic accounting contributes in checking the damages resulting from financial fraud acts and determines the value and the compensations for them.	4.12	0.85	1	High
Relying on forensic accounting leads to improving efficiency of the various control systems which in turn leads to reducing fraud.	3.72	0.76	7	High
Forensic accounting is complementary to the work of auditor and not a part of it and it starts from the point the auditor's work ends.	3.75	1.21	8	High
Forensic accounting contributes in reducing	3.66			

companies' illegal tax evasion either through offering false statements or not offering them at all.		1.33	9	High
Total	3.855	0.959		

Table (3) indicates the following;

1- The participants agreed that forensic accounting contributes in determining the damages resulting from financial fraud acts and in determining the value of these damages and the consequent compensations based on the international accounting standards and this item had a mean of 4.12 and a standard deviation of 0.85.

2- The participants agreed that forensic accountant offers litigation consultancy regarding conflicts emerging from professional liability of the courts. This element had a mean of 4.07 and a standard deviation of 0.98.

3- The participants agreed that forensic accounting increases investors, shareholders and lenders' contentment to receive their financial rights. This element had a mean of 4.02 and a standard deviation of 0.70.

4- The participants agreed that forensic accounting offers methods that contribute in uncovering financial and administrative fraud methods. This element had a mean of 3.85 and a standard deviation of 0.86.

5- The participants agreed that forensic accounting contributes in reducing the preparation of misleading records and financial statements by companies. This element had a mean of 3.82 and a standard deviation of 0.92.

6- The participants agreed that depending on forensic accounting leads to improving the efficiency of the various control systems which in turn leads to reducing fraud. This element had a mean of 3.72 and a standard deviation of 0.76.

7- The participants agreed that the forensic accounting work is complementary to the work of external auditors and not just a part of it as forensic accounting starts from the point where auditing stops. This element had a mean of 3.75 and a standard deviation of 1.21.

8- The participants agreed that forensic accounting contributes in reducing companies' illegal tax evasion either through provision of false statement or not providing any statement at all. This element had a mean of 3.66 and a standard deviation of 1.33.

9- The participants agreed that forensic accounting has a significant role in checking and uncovering electronic evidence within electronic business environment. This element had a mean of 3.62 and a standard deviation of 1.07.

As indicated in Table 3 above, the means of the participants' responses ranged from (3.62-4.12) and they perceive forensic accounting to contribute in checking for damages resulting from financial fraud acts and determining the values and compensations for these damages based on the international accounting standard. They also indicated that forensic accountant provides advice on conflicts arising from the professional liability of courts and increases judicial accountability in reassuring shareholders, lenders and investors' financial rights. These items have a great importance as the mean of participants' responses as a whole exceeded 3.5. Also, these items had the top three ranges as shown in Table (3). The total mean was 3.855 with a standard deviation of 0.959 and this value indicates the extent to which the axis values are separated from the mean of items as a whole.

8.2 Results Related to the Research 2nd Hypothesis: There are no difficulties and obstacles that limit the application of forensic accounting to discover fraud from forensic experts and legal accountants' perspective.

Table (4) shows the results related to the research second hypothesis.

Table (4)
Descriptive statistical analysis for the axis of difficulties and obstacles that limit the application of forensic accounting approach

Items	Mean	Standard Deviation	Rank	Sig
The lack of standards and legislations and approved instructions that regulate forensic accounting work is among the factors that limit forensic accounting application.	4.07	0.93	3	High
The lack of practically and scientifically qualified staff to work as forensic accountants is among the factors that limit forensic accounting application.	3.30	0.87	9	High
The judges depend on forensic experts who are selected by layers based on personal criteria and this is among the factors that limit forensic accounting application.	4.39	0.73	1	High
The lack of awareness among society members toward the importance of forensic accounting is among the factors that limit forensic accounting application.	3.92	0.91	5	High
The lack of accounting institute that grants a forensic accountant certificate similar to the one that grants legal accountant certificate is among the factors that limit forensic accounting application.	3.67	0.94	8	High
The lack of interest by accounting departments in Iraqi universities and the lack of qualified graduates in the field of forensic accounting are among the factors that limit forensic accounting application.	3.97	0.88	4	High
The lack of judicial courts' interest in the importance of forensic accounting is among the factors that limit forensic accounting application.	3.25	0.98	7	High

The lack of awareness within the Iraqi environment toward the importance of forensic accounting in resolving financial and commercial conflicts is among the factors that limit forensic accounting application.	3.82	0.89	6	High
Companies and businessmen's non readiness to accept the application of forensic accounting is among the factors that limit forensic accounting application.	4.24	0.83	2	High
Total	3.90	0.88		

Table (4) indicates that;

1- The participants agreed that judges in courts depend on forensic experts who are delegated by lawyers who in turn depend on their personal judgment and this is among the factors limiting the application of forensic accounting approach. This element had a mean of 4.39 and a standard deviation of 0.73.

2- The participants agreed that the businessmen and companies' lack of readiness to accept the application of forensic accounting is among the factors that limit the application of forensic accounting approach. This element had a mean of 4.24 and a standard deviation of 0.83.

3- The participants agreed that the lack of legislations and regulations and approved instructions to regulate the work of forensic accounting is among the factors limiting the application of forensic accounting approach. This element had a mean of 4.07 and a standard deviation of 0.93.

4- The participants agreed that the lack of interest by accounting faculties and divisions in Iraqi universities in graduating qualified people in the field of forensic accounting is one of the factors that limit the application of forensic accounting approach. This element had a mean of 3.97 and a standard deviation of 0.93.

5- The participants agreed that the lack of awareness within the Iraqi society of the importance of forensic accounting is among the factors limiting the application of forensic accounting approach and this element had a mean of 3.92 and a standard deviation of 0.91.

6- The participants agreed that the lack of awareness in the Iraqi environment of the importance of forensic accounting approach in resolving commercial and financial conflicts is among the factors limiting the application of this approach. This element had a mean of 3.82 and a standard deviation of 0.89.

7- The participants agreed that the lack of attention by the judicial courts (the judiciary) toward the importance of judicial accounting is one of the factors that limit the application of forensic accounting, and this element had a mean of 3.25 and a standard deviation of 0.98.

8- The participants agreed that the lack for an accounting institute that awards a legal accountant certificate similar to that of the institute, which grants a certificate of legal accountant is one of the factors that limit the application of judicial accounting. This component had a mean of 3.67 and a standard deviation of 0.94.

9- The participants agreed that the lack for practically and scientifically well qualified staff to work as forensic accountants limits the application of forensic accounting approach.

Table (4) indicates that the means of the participants' responses ranged from 3.30 to 4.39 and they indicated that judges in courts depend on forensic experts who are delegated by lawyers who in turn depend on their personal judgment as among the top factors limiting the application of forensic accounting approach. In addition, clear that businessmen and companies' lack of readiness to accept the application of forensic accounting as well as the lack for legislations and regulations and approved instructions to regulate the work of forensic accounting are among the top factors limiting the application of forensic accounting approach. These items have great importance because of their high mean which exceeded 3.5. These items occupied the three ranges as shown in Table (4) with a total mean of 3.90 and a standard deviation of 0.88 and this value indicates the separation of this axis from the mean of the items as a whole.

9 Testing the Hypotheses

Hypotheses were tested using the data of the actual responses of the investigation of participants, who constituted a representative sample for external auditors and forensic experts working in Basra courts. This was conducted using the t-test at the level of 0.05 and the hypotheses were checked based on the prior sequence indicated as follows;

9.1 Testing the Research 1st Hypothesis

"Forensic accounting approach does not contribute in reducing fraud acts from forensic experts and legal accountants' perspective".

The t-test was performed on the mean as indicated in Table (5) below.

Table (5)

t-test results to identify the extent to which forensic accounting contribute in reducing fraud acts from forensic experts and legal accountants' perspective

Factor	Mean	Sample Size	T		Hypothesis Test Results
			Calculated	Scheduled	
All Items	3.855	42	5.778	1,682	Hypothesis Rejected

Table (5) indicates that t calculated value is (5.778), which exceeds scheduled t, which is (1.682). Therefore, the null hypothesis, which states that forensic accounting approach doesn't contribute in reducing fraud acts from forensic experts and legal accountants' perspective is rejected and substituted by that which states "Forensic accounting approach contributes in reducing fraud acts from forensic experts and legal accountants' perspective".

9.1 Testing the Research 2nd Hypothesis:

There are no difficulties and obstacles that limit the application of forensic accounting to discover fraud from forensic experts and legal accountants' perspective. The t-test was performed on the mean as indicated in Table (6).

Table (6)

t-test for the difficulties and obstacles that limit the application of forensic accounting to uncover fraud acts from forensic experts and legal accountants' perspective

Factor	Mean	Sample Size	T		Hypothesis Test Results
			Calculated	Scheduled	
All Items	3.90	42	6,628	1,682	Hypothesis Rejected

Table (6) indicates that the t calculated value of 6.628 is above that of scheduled t which is 1.682 , therefore the null hypothesis that states that there are no difficulties and obstacles that limit the application of forensic accounting to discover fraud from forensic experts and legal accountants' perspective is rejected and substituted by the hypothesis that states that there are difficulties and obstacles that limit the application of forensic accounting to discover fraud from forensic experts and legal accountants' perspective.

10 Conclusion and Future Research

The 47 questionnaires were distributed among a group of employees in industrial companies operating in Basra governorate in Iraq and 42 questionnaires were valid for analysis with a response rate of 84%. The researchers in their study assumed two main hypotheses;

H1: Forensic accounting approach does not contribute in reducing fraud acts from forensic experts and legal accountants' perspective.

H2: There are no difficulties and obstacles that limit the application of forensic accounting to discover fraud from forensic experts and legal accountants' perspective.

Questionnaires were analyzed using the SPSS software and hypotheses were tested using the t-test. The study concluded that the forensic accounting approach contributes in reducing fraud acts from forensic experts and legal accountants' perspectives, and there are difficulties and obstacles that limit the application of forensic accounting approach to reduce fraud acts from forensic experts and legal accountants' perspective. In addition, it was concluded that the work of financial accountant, who prepare financial statements within companies differs from that of a forensic accountant as forensic accountant work comes at the point where a financial accountant work ends. There is a difference between the skills exhibited by forensic accountant and those exhibited by external auditor and the services they offer. Results indicated that the top factors that limit the application of forensic accounting approach include, lack for specific and clear standards for practicing and applying forensic accounting, the judges dependence on legal experts who are selected by lawyers based on personal criteria in addition to the lack for businessmen and companies' readiness to accept the application of forensic accounting, and there is a need for identifying the

extent to which forensic accounting is applied in other sectors than courts. We recommend that future studies answer such need.

11. Recommendations

In light of the results presented above, the study provides the following recommendations:

* Preparing qualified accountants practically and scientifically in the field of forensic accounting in order to meet the needs of the judiciary and members of the community.

* Specific standards and clear guidelines should be worked out to rationalize the practice of judicial accounting.

* The dissemination of a culture of awareness of the concept of forensic accounting and its importance and methods should be activated because they have a role in solving financial and commercial disputes.

*Granting professional forensic accountant certificate by the relevant entity similar to the one that grants legal accountant certificate.

An accounting institute (for judicial accountants) should be established. *

*Forensic accounting and its methods should be taught as a basic and independent material in the accounting departments of Iraqi universities.

*Specialized judicial tribunals should establish a forensic accounting department within the existing sections of the court.

*Conferences should be held on the professions of accounting and auditing, highlighting the role of forensic accounting as a mechanism of accounting and auditing and working on developing them.

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