

The Role of Forensic Accounting in Maintaining Public Money and Combating Corruption in the Jordanian Public Sector

Ola Mohammad Khersiat¹

¹Accounting Department, Faculty of Economics and Administration Sciences, Zarqa University, Jordan

Correspondence: Ola Mohammad Khersiat, Accounting Department, Zarqa University, P.O. Box 132222, Zarqa 13110, Jordan.

Received: November 20, 2017

Accepted: December 18, 2017

Online Published: February 2, 2018

doi:10.5539/ibr.v11n3p66

URL: <https://doi.org/10.5539/ibr.v11n3p66>

Abstract

The present study aims at stating the role and responsibility of the forensic accountant in the public sector as well as the challenges he/she faces in the attempt to reduce and detect fraud and corruption. A questionnaire consisting of 39 items was distributed among (100) employees of audit offices and firms, and another (30) among workers of the Accountability Bureau as an external control body that audits government units and departments.

After analyzing and testing the hypotheses using SPSS, results show that forensic accounting has a role in reducing fraud and corruption in the public sector, and that the difference between the profession of forensic accounting and external auditing is of importance. This indicates a strong conviction from the part of respondents regarding the role of forensic accounting in maintaining public money and combating corruption.

Keywords: forensic accounting, fraud, public sector

1. Introduction

After the various economic scandals related to the spread of fraud and financial corruption of all kinds, which shook the world and damaged developed and developing economies and their negative effects on economic, social and political development, accountants and auditors, civil society bodies, press agencies, researchers and academics, regulatory and legislative bodies, as well as accounting bodies around the world have become more concerned about the ways and means of detecting financial and administrative corruption cases.

Accountability and auditing mechanisms used to detect financial and administrative corruption are various. The main of these are: activating the rules and mechanisms of corporate governance and internal and external auditing, employing modern information technology mechanisms, using anti-money laundering mechanisms, developing accountability and auditing standards making them more rigorous, abiding by the accounting and auditing concepts and ethics, and boosting judicial accountability methods to enhance accounting mechanisms(www.academia.edu)

There is a pivotal need of means that comply with the law and are put to practice to fight and prosecute financial crimes.

Forensic accounting practice is probably one of the most indispensable and modern areas that detect and prevent fraud and financial corruption, assess business, resolve professional negligence practice, and assist in conflict resolutions of fraud-related internal investigations.

In developed countries such as the United States of America, several professional organizations, such as the Fraud Lawyers Association and the Association of Certified Fraud Examiners grant certificates that authorize the professional as a forensic accountant, after meeting the requirements for skills acquisition and other sciences. In Jordan, and in the pace of the accelerating development of communication technology and the electronic information transfer employed to accomplish the mission of regulatory authorities in preserving public money and fighting corruption, the importance of administrative and financial forensic investigation has risen. In this regard, the Chairman of the Jordanian Audit Bureau said, during the opening of a workshop on financial, administrative and forensic investigation, that this specialized subject contributes to enhancing public money control. He also assured the continuous cooperation between the Audit Bureau, the Anti-Corruption Commission and the Public Prosecution in the fight against corruption in all its forms(www.assabeel.net).

He added that the region witnessed many aspects of economic openness, development of work systems, institutions, management methods, their diversity and the diversity of their performance and practices forms, which led to an increase in regulatory authorities' responsibilities, particularly in monitoring performance and promoting accountability and transparency through boosting public accountability and transforming supreme regulatory authorities into an institutional reform that effectively contributes to the preservation of public money.

Furthermore, he stressed the responsibility of employees in improving the performance of the department in which they work, and the need to train accountants and auditors and keep them posted with audit updates enabling them to conduct the forensic investigation procedures as per the related standards

Therefore, forensic auditing standards have included observing objectivity and fairness in audits and boosting audit procedures and control outputs with appropriate and substantial evidence.

2. The Problem Statement

With increasing cases of fraud and financial corruption in developing and developed countries, which have a negative impact on economic and social development, and the exploitation of economic and human resources, global crimes as theft, embezzlement and manipulation of public money, the need to effectively combat financial crimes to maintain a sound national economy becomes indispensable. Hence, the importance of knowledge, development and continuous training of auditors and accountants in the public and private sectors on the latest developments in auditing methods, reflecting the improvement achieved in control outputs that enable the accountant to conduct forensic audit, improve job performance and compliance with the legislations applicable in the Kingdom and contribute to the optimal use of public money.

3. Study Hypotheses

The study is based on two main hypotheses:

1. No record of the significant role of forensic accounting in reducing and detecting fraud cases in the public sector.
2. The difference between the forensic accounting profession and that of external audit is of no importance.

4. Literature Review

Popoola et al. (2014) investigates the competence requirements of accountants and auditors in the effective and efficient utilization of capability requirements, which have the potentials to usher in the best global practices in fighting fraud in the Malaysian public sector.

Specifically, the paper has the potential to resolve PCAOB (2008) challenges on who has the capability to detect fraud between the forensic accountant and the auditor. It has the possibility to create awareness to the users of public sector accountant and auditor on the mechanisms of fraud scheme significance. These users include the regulatory and enforcement agencies, courts, ministries, departments, and agencies. Finally and most importantly, the ability to prevent, detect, and respond to fraud requires holistic approach through the adoption of the forensic accounting mindset and skills on TPFRA in the Malaysian public sector.

Sidharta et al (2015) presents forensic accounting as a tool for fraud detection and prevention in the public sector organizations with particular reference to Indonesia. They found that the use of forensic accounting do significantly reduce the occurrence of fraud cases in the public sector. Therefore the use of forensic accounting can help better in detecting and preventing fraud cases in the public sector organizations in Indonesia.

Bhasin. M. (2015) conducted, as part of study, a questionnaire-based survey methodology in which 14 specific research questions were asked, and 120 questionnaires were distributed to the preparers" and users" of the company FS(s). Finally, 85 responses from the participants were collected and analyzed using the percentage and frequencies of respondents. The study revealed that the practice of CA is always a deliberate attempt to gain undue advantage for accountants, managers and companies. Therefore, strong punitive measures should be promptly taken against all those found culpable in the act of CA. We recommend that "effective rules and regulation of accounting, audit and CG practices should be put in places, within the corporate-sector, to forestall the negative incidence of CA practices in India."

Nonye et al(2015) determines the uses of forensic accounting as calculation of economic damage, determining the level of bankruptcy or insolvency for an organization, act as a guide in re-organization of organizational financial activities, used to check on security fraud, used for valuation of a business, etc. The basic skills required for the use of forensic accounting in public sectors include: knowledge of preparing financial statements, ability to compute key financial ratios, being informed on the types of audit evidence etc. The researchers conclude that forensic accounting is essential in every organization especially public sectors and recommended

that tertiary institutions offering accountancy and accounting education should ensure that forensic accounting is offered not just in the post graduate level but equally at the under graduate level and to curb the incessant cases of corruption in public sectors in Nigeria, forensic accounting must be professionally practiced in all organizations.

Imam et al (2015) utilize primary source of data collection. A total of 441 questionnaires were retrieved from public sector accountants and auditors, two anti-graft agencies, four professional accounting associations, the forensic section of the Nigeria Police Force and the Nigeria Bar Association using systematic sampling. Analysis was carried out using descriptive statistics, chi-square. The null hypotheses was rejected indicating an acceptance of government's intention that forensic accounting can be applied for preventing and detecting fraudulent financial practices in the Nigerian public sector. It recommended that forensic accounting be made statutory in the public sector to assist in preventing and detecting fraudulent financial practices. The implication of the findings is that rules and regulations are not in place, and professional ethics of forensic are not existent in the public sector. There is a need to adopt forensic accounting services in the public sector.

Claire, et al(2016) found out that the application of forensic accounting in Nigeria's public sector is effective in detecting fraud. There is a significant relationship between forensic accounting and litigation support service in Nigeria's court and lastly the application of forensic accounting in the public sector is effective in preventing fraud. The paper recommended that the public sector should give more credit to in the internal control system and initiate effective and efficient internal check and they should adopt a sound accounting system in principal and effective practices. The forensic accountant should acquire proper training on forensic accounting skills and procedures and officials in the public sector should embrace integrity, objectivity, fairness, accountability as a moral duty to reduce the level of fraud.

Claire, et al(2016) found out that the application of forensic accounting in Nigeria's public sector is effective in detecting fraud. There is a significant relationship between forensic accounting and litigation support service in Nigeria's court and lastly the application of forensic accounting in the public sector is effective in preventing fraud. The paper recommended that the public sector should give more credit to in the internal control system and initiate effective and efficient internal check and they should adopt a sound accounting system in principal and effective practices. The forensic accountant should acquire proper training on forensic accounting skills and procedures and officials in the public sector should embrace integrity, objectivity, fairness, accountability as a moral duty to reduce the level of fraud.

5. The Theoretical Framework of the Study

After the many scandals that shook the world and damaged whole economies, forensic accounting became effectively indispensable in combating fraudulent financial practices in business and economy, in particular, and in the society, in general. Forensic accounting has a much broader aspect than a fraud examination. It involves the application of analytical and investigative skills and embraces various sciences such as Accounting, Criminology, Law and Audit Investigation. The forensic accountant searches beyond records, accounting documents and invoices since they are convinced that appearances do not always reflect reality (Crumbley et al, p2). Detecting and solving problems of the kind prevents new ones from emerging and contributes to setting new standards for corporate conduct and financial reporting (Singleton, et al, 2006).

Forensic accounting is defined as the science of collecting and presenting financial information in a form accepted in courts, against economic criminals (Manning, 2005).

Defining each of the two words – forensic accounting- separately will increase our understanding of this term. The word forensic is related to jurisdiction and law courts, whereas accounting is the recording, classification and recapitulation of economic processes and events in a logical manner in order to provide financial information and communicate it to decision makers (Hopwood, 2008, p3-5).

The combination of the two words carries a broader meaning beyond their simple definition. It refers to the use of accounting and information from other sources to objectively determine the reporting of facts in a way that boosts attitudes and the logical assumptions taken at Court (Hopwood, 2008, p3-5).

The researcher believes that forensic accounting is the science of collection, analysis and investigation in order to solve financial issues in a manner that meets the standards required by the courts of law.

The previous definitions highlight the fact that the forensic accountant has special skills in accounting, auditing, finance, quantitative methods, certain aspects of the law, research, investigative skills to collect, analyze and evaluate the evidentiary case and communicate results effectively.

From the above mentioned, we can deduce that the profession of a forensic accountant is a combination of

accounting and fraud examining where knowledge of professional standards in accounting and law is essential. (Hopwood,2008).

The American Society of Certified Public Accountants classifies forensic accounting into two categories:

1. Investigative services: These are related to fraud examination or audit. They are services in which accounting experts track, detect, prevent and control fraud, embezzlement, misrepresentation and distortion in financial statements that shall or not lead to present before law.
2. Litigation and prosecution services: The forensic accountant acts as an expert and consultant and the fraud examiner testimony is presented before court as well as the forensic accounting services provided to solve assessment issues (Hopwood,2008,p3-5).

Therefore, the forensic accountant shall have skills in many areas. These include: audit skills, knowledge and investigative skills, criminology, accounting knowledge, legal knowledge, information technology, information communication skills and communication so that the results of his investigations and analyses can be communicated correctly and clearly to these services users(Hopwood,2008,p6-7).

The increasing complexity of work in a judiciary- related environment has enhanced the need for forensic accountability. Its applications to public areas can be summarized as follows:

1. Conducting the required investigations in which the forensic accountant helps in dealing with all allegations, adopting a neutral objective position.
2. Judicial support: Judicial support includes assisting lawyers in the investigation, valuation of integrity and amount of profits lost, construction claims, product demands and responsibilities, shareholder disputes, bankruptcies and contract infringement.
3. Criminal and judicial matters and proceedings.
4. Insurance claims.
5. Government (Singleton et al, p44-45).

6. Role and Skills of the Forensic Accountant

The SOX Act and SAS NO.99 laws press the management, audit committees, executive officers, financial managers, independent auditors, internal auditors to implement forensic accounting techniques in their work(AICPA,2002). Given the importance of forensic accounting in the public sector, the Jordanian Accounting Bureau Chairman stressed that crimes against public money are considered crimes against the public resources of the country, such as theft, embezzlement and manipulation of public money. These crimes have become widespread worldwide, regardless of the fact that the exploitation involves public or private money or property (www.assabeel.net/news).

He also stressed that an employee in any public institution shall be trustworthy in relation to the public interest and within the scope of his work. They shall do their best to contribute effectively to the good performance of the department or institution they work for. He added that the continuing developing, training and education of auditors and accountants and updating them on the latest developments in audit methods and methodologies is positively reflected on the improvement and development of audit outputs, enabling the auditor to carry out the forensic audit in accordance with the relevant standards (www.assabeel.net/news).

The AICPA fraud team has issued a report requiring the forensic accountant to follow the auditing standards. When the forensic accountant realizes that the fraudulent practice has become quite obvious, the audit turns into a forensic investigation. The forensic accountant uses and implements investigative techniques that are not within the scope of traditional financial audit (Durkin, et, al, 2003).

Internal and external auditors must apply forensic measures and procedures to each audit process on the grounds of the failure of the fraud prevention program. Should the internal and external auditors, the fraud audit committee suspect of any fraudulent practice, the forensic accountant is sent for by managers to participate in the audit process. Accordingly, the investigative steps will be: a typical regular review - extensive investigative review –forensic accounting (Crumbley, et, al, 2007).

Jack Burke Co. a judicial competence entity uses seven investigation techniques:

- Analysis of account records and cash tracking.
- Search of people`s backgrounds and past history.
- Developing confidential sources of information.

- Interviewing people, questioning them and finding witnesses.
- Administrating supervision and control processes.
- Leading and directing secret operations.
- Identifying physical evidence, finding and maintaining it. (www.jackburkeassociats.com.)

The forensic accountant must adopt the correct, sound, professional judgment when reading and evaluating financial reports. Business and economic activities are usually clever in concealing those tricks and accounting tricks by using creative accounting techniques. Therefore, the fraud auditor should always be vigilant about financial fraud. Bruce Dubinsky, a forensic accountant, says, "It is not finding what you can see, but seeing what you can find."(Lopez, 2003)

Davia, H.R. classifies fraud audit into two patterns: Proactive/ predictive and the subsequent/ retroactive. In general, the independent external auditor does not conduct predictive audits; rather, he looks for fraudulent practice that has actually occurred and could lead to significant deviations in the financial statements. On the other hand, in predictive audit, the auditor has little evidence of the fraud and therefore the audit procedures of the fraud predictive audit are different from those of the fraud subsequent or reactive audit (Davia, 2000).

The forensic accountant notes faults and small deviations in the way the following work: corrupt executives, employees, thieves, blackmailers, fraudsters, etc. Since criminals may not have the ability to conceal their traces, the forensic accountant looks for that salient part of the hidden financial fraud (Shaw, et, al 2000).

In general, the independent auditor takes the large picture in his review of books, records and control practices, whereas the forensic accountant grasps a small part of the economic activity (Shaw, p81) and uses sophisticated electronic software programs to carefully examine and sieve out: files, links, weak connections, unusual patterns(Lopez,2003).

7. The Role of International and National Institutions in Government Financial Control and in the Fight Against Corruption

The specific objectives of financial control as stipulated in the Lima Declaration regarding the basic principles of financial control are: - The effective and appropriate use of public money, developing a sound financial management, the orderly implementation of administrative activities and communicating information to public authorities and the public through the publication of objective reports reflecting the specific objectives. It is essential for the stability and development of countries to work and be within the objectives set by the United Nations.

The Lima Declaration also comprised the seven basic principles of financial control, the first of which includes general rules and the purpose of financial control. The concept of financial control and its inception are closely linked to the concept of public financial management. This is because managing public funds requires trust and a sense of responsibility. Financial control is not a final goal in itself, but a fundamental part of the control system and its purpose are determined as follows:

- Disclosure of deviation from standard standards (e.g., local and international auditing standards)
- Detecting the violation of the rules of legality, efficiency, effectiveness and saving in the management of funds quickly enough to make it possible to take corrective action in individual cases, placing responsibility on individuals, getting compensation or taking steps to prevent people from committing such offenses or at least making it harder for them to return to such deeds in the future (Lima Declaration on the Fundamental Principles of Financial Control).

As published by the International Organization of Supreme Audit Institutions (INTOSAI) in the International Journal of Government Financial Control, in its volume No. (43) No. (2) of April, 2016, training state auditors is a basic need since human resources are an asset of unequal value in every organization. There is a solid connection between human resources management and institutional performance. Failing to manage human resources in state auditing is a factor that has a negative impact on SAI's (Supreme Audit Institution) overall performance. Training is one of the basic ways to achieve improvement in the human capital competencies sought by supreme supervisory bodies. INTOSAI encourages high-level audit bodies that consider training as an ongoing process and adapt to it on the basis of individual needs. In his speech in September 2011, at the Nanjing Auditing University, China, regarding the critical role of auditors' training, Joseph Moser, Secretary-General of INTOSAI and President of the Austrian Court of Audit, emphasized that, "training is essential to strengthen government audit, improve performance, improve transparency, ensure accountability, maintain credibility, fight corruption, enhance public confidence, and support efficient receipt and use of public resources, which in turn

aim to benefit citizens". (International Journal of Government Financial Auditing, 2016, 18).

At a local level, Jordan has developed and implemented effective policies to consolidate the principles of national integrity by activating an anti-societal culture, and developing effective mechanisms and strategies to combat corruption from 2013-2017, which are capable of fighting the sources of corruption and reducing its spread in society with the participation and cooperation of all Institutions of the public and private sectors, civil society organizations and international institutions, while taking the necessary measures to prevent and eliminate it, and eventually, create an appropriate environment through the development of a modern and effective administrative and legal framework for the public and private sectors and civil society institutions, and increase the effectiveness and efficiency of the anti-corruption agencies financially and administratively in order to enhance confidence in state institutions.

The national anti-corruption strategy is based on the following basic principles:

- A sound political will to promote national integrity and fight corruption.
- Rule of law.
- Respect for human rights and the prevention of personal assassination.
- Consolidating integrity principles at personal and institutional levels.
- Transparency and accountability.
- Independence of the judiciary.
- Cooperation and coordination between the competent authorities.
- Community participation.
- Following up the implementation of the strategy (en.wikipedia.org/wiki/jordanian_Auuti_corruption-commission-JACC).

These strategies have strengthened Jordan's retreat in the global ranking from 45 to 53 points in 2015 to the rank of 57 by 48 points in 2016, as shown by the Transparency International's Corruption Perception Index 2016 report. Most Arab countries have shown a retreat in the index and an increase in corruption rates compared to the results of 2015, except for Tunisia, which advanced one position in the global ranking and three points in the index, jumping from 38 points in 2015 to 41 points in 2016. This is due to the resumption of the Anti-Corruption Commission to its activity since the beginning of 2016, an independent belonging to senior officials in the state. All other Arab countries witnessed a decline in their index ranking as compared to that of 2015.

Qatar, which ranked first in the Arab world and second globally with 71 points, dropped to place 31 with 61 points, giving UAE the first place in the Arab world and 24th globally with 66 points, which is also considered a drop from last year when it ranked 23 with 70 points.

Saudi Arabia has dropped 14 places in the world rankings, ranking 62nd with 46 points, as compared to last year rank of 48th globally by 52 points. Egypt also dropped 20 places, but its number of points has only declined by two.

Iraq, Libya, Syria, Yemen, Sudan and Somalia were among the 15 countries placed last in the world ranking. Somalia ranked last with only 10 points.

In terms of transparency and integrity, no Arab country is among the top 20 countries in the world ranking whereas more than 7 Arab countries are ranked last in the list.

These countries are witnessing wars and disturbances that have, in turn, increased rates of corruption, impunity, mismanagement and the use of power in exceptional circumstances.

According to the Corruption Index, the global ceiling must exceed 50 points in order to qualify a country as having a good rank in combating corruption. According to this global ceiling, most Arab countries, with the exception of the UAE and Qatar, are below the global average, and 12 Arab countries are classified among the most corrupt countries in the world (www.transparency.org/news/feature-perceptions-index-2016).

8. Research Methodology

This section presents the methodology adopted in this study, where statistical methods were used through the SPSS program to analyze the study hypothesis and test it, and analyze the discrepancies in the attitudes of the study sample. The arithmetic mean and the standard deviation are two of the methods used in this study methodology.

8.1 The Study Sample

The sample of the study consists of 100 employees of the Jordanian Audit Bureau and 30 forensic accountants working for accounting companies and audit offices.

8.2 Practical Side

Aiming to achieve the objectives of the study, the previous relevant literature was reviewed. Accordingly, the study tool was designed in the form of a questionnaire based on the Likert Quintet Scale, consisting of (39) items that adopted the five-level item format (strongly agree, agree, neutral, disagree, strongly disagree). The scores given to the items were (5, 4, 3, 2, 1), respectively.

8.3 Internal Consistency among Scales

The Cronbach Alpha coefficients were obtained for the internal consistency among the scales. The Cronbach Alpha coefficient among all items of the first questionnaire reached (84.4%), and (86.8%) for the second questionnaire. This is a high value reflecting sufficient stability values for conducting this study as the acceptable value for significance on the stability of the study tools would be (60%).

8.4 Analysis of the Results and Hypothesis Testing

The responses on the role of forensic accounting in preserving public money and combating corruption were analyzed to obtain the study sample points of view regarding responses to the following study questions:

1. No record of the significant employment of forensic accounting in reducing and detecting fraud cases in the public sector.
2. There is no significant consideration of the difference between the forensic accounting profession and that of external audit.

In order to answer the previous questions and identify the role of forensic accounting in reducing cases of fraud and corruption in the public sector, the following table shows the descriptive statistics (arithmetic mean, standard deviation) for each of the items of this study.

One- sample statistics (Table 1)

	N	Mean	Std. Deviation	Std. Error Mean
Forensic accounting includes knowledge of several disciplines such as accounting, auditing, law, psychology, communication and information technology.	130	4.1769	.48967	.04295
The criminal accountant conducts investigations, provides legal advice and expert services, helping to prosecute fraud and financial crimes in the public sector.	130	3.4077	1.17266	.10285
Average	19	3.8221	.22604	.05186

The table(1) shows that the item stating "Forensic accounting includes knowledge of several sciences such as accounting, auditing, law, psychology, criminology, communication and information technology" came first in relation to the items measuring the role of forensic accounting in reducing cases of fraud and corruption in the public sector, with an arithmetic mean of (4.1769), and a standard deviation of (.78967), while item "The criminal accountant conducts investigations, provides legal advice and expert services, helping to prosecute fraud and financial crimes in the public sector" came last among items with an arithmetic mean of (3.4077), and a standard deviation of (1.17266). results indicate that the arithmetic mean for all items is (3.8221), which is a strong indicator that forensic accountability has a role in reducing fraud and corruption cases in the public sector.

One-Sample Statistics (Table 2)

	N	Mean	Std. Deviation	Std. Error Mean
The external auditor shall submit his opinion in the financial statements regardless of the future use of that opinion by third parties. The investigator shall seek to confirm or deny the existence of a particular problem and if any, report its extent and possible causes.	130	3.9462	.73991	.06489
The work of the external auditor does not normally involve immunity, whereas the forensic investigation is organized to be performed in an environment which involves immunity since there is a possibility of addressing judicial support. services.	130	2.8923	1.33089	.11673
Average	20	3.4795	.29996	.06707

Table(2) shows the arithmetic mean and the standard deviation for each item of the study hypothesis "The difference between the forensic accounting profession and the external audit is important." The table shows that "The external auditor expresses his opinion regarding financial statements regardless of the future use of that opinion by third parties, whereas the investigator seeks to confirm or deny the existence of a particular problem, and in case of any, report on its range and possible causes." came first with an arithmetic mean of (3.9462) and a standard deviation of (0.3991). On the other hand, the item " The external auditor's work is not subject to immunity, whereas the forensic examiner's work is organized to be performed in an environment subject to immunity due to the possibility of addressing judicial support services. "Came last with an arithmetic mean of (2.8923) and a standard deviation of (1, 33089). Results show that the arithmetic mean for all items (3.4795), which is a strong indicator that the difference between the profession of forensic accounting and external audit is important. "

8.5 Testing Hypotheses

The researcher used one-sample test to test the current study hypotheses at the confidence interval of the difference of 95%. The results of the hypothesis test are as follows:

8.5.1 Results of Testing the First Hypothesis

The first hypothesis states that, "there is no significant role for the use of forensic accounting to reduce and detect fraud in the public sector." To test this hypothesis, one-sample test was used for a single sample using Test Value = 3 as a reference value representing Likert scale. Table(3) shows this test's results:

One-Sample Test(Table 3)

	Test Value = 3				
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference Lower Upper
VAR00001	15.853	18	.000	.8221	.7132 .9311

The table above shows that $sig = 0.00$ is less than (0.05) indicating the significance of the difference between the arithmetic mean of the sample adopted according to the measuring tool (3), meaning that there is a significant role for the use of forensic accounting in reducing and detecting cases of fraud in the public sector. Therefore, the null hypothesis that "there is no significant role for the use of criminal accounting in the reduction and detection of cases of fraud in the public sector" is just refuted.

8.5.2 Results of Testing the Second Hypothesis

The second hypothesis states that "The difference between the profession of forensic accounting and external auditing is of no importance." To test this hypothesis, One-Sample Test was used for a single sample using Test Value = 3 as a reference value representing the Likert scale. Table(4) shows the results of this test:

One-Sample Test(Table 4)

	Test Value = 3				
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference Lower Upper
Average	7.149	19	.000	.4795	.3391 .6199

The table above shows that $sig = 0.00$ is less than (0.05), which indicates the significance of the difference between the arithmetic mean of the sample adopted according to the measuring tool (3), meaning that the difference between the forensic accounting profession and the external audit is of importance. Therefore, the null hypothesis stating that, "The difference between the forensic accounting profession and the external audit in of no importance" is just refuted.

9. Conclusions and Recommendations

9.1 Conclusions

The researcher has reached the following conclusions:

1. There is an urgent need to modernize and develop the methods, mechanisms and methodologies of traditional auditing to become a more efficient and effective tool in the pace of the accelerating development of communication technology and the electronic information transfer employed to accomplish the mission of regulatory authorities in preserving public funds and fighting corruption.
2. Constantly educating and improving auditors and keeping them updated with audit methods and

methodologies to reflect positively on the improvement and development of control outputs, which enables the auditor to perform the audit in accordance with related standards.

3. The field study showed that there is a "role for forensic accounting in reducing cases of fraud and corruption in the public sector," based on Table (3), which shows that $siq = 0.00$ is less than (0.05), indicating the significance of the difference between the arithmetic mean of the approved sample according to the measurement tool (3), indicating that the difference between the profession of forensic accounting and external auditing is of importance.
4. The field study also showed that the difference between the profession of forensic accounting and external auditing is of importance, based on Table (4), which shows that $siq = 0.00$ is less than (0.05) indicating the significance of the difference between the arithmetic mean of the sample, (3), indicating that the difference between the profession of forensic accounting and external auditing is of importance.

9.2 Recommendations

Based on the previous results, and in addition to the annual report of the Integrity and Anti-corruption Commission of 2016, including 635 cases investigated, of which 151 were referred to the Prosecutor(www.jordan-times.com/news/), the researcher suggests the following recommendations:

1. Working on the continuous coordination and cooperation between the regulatory bodies and anti- corruption entities. This has a pivotal role in the application of forensic audit standards.
2. The need to raise the efficiency of those working for the Audit Bureau through holding workshops specialized in the areas of forensic auditing, administrative control, performance control, internal control and government tenders control and management of government deposits and budgets.
3. Amending the Integrity and Anti-Corruption Act 2016, and unifying the legislations governing the issuance of government tenders and procurement.
4. Expanding the e-government system to reduce bribery and fight corruption.
5. Revising the policy of appointing directors and members of boards of directors in companies whose shares are owned by the Government.

References

- Ahmed, A. (2013). Analytical study for the role of Forensic Accounting in developing accounting processing mechanisms for anti-corruption inside Egyptian listed companies. Retrieved from <http://www.academia.edu/31499078>
- Albrecht, W. S., Albrecht, C. C., Albrecht, C. O., & Zimbelman, M. F. (2009). "Fraud Examination", 3rd Edition, 2009(OH: South-Western Cengage Learning.
- American Institute of Certified Public Accountants, Statement on Auditing Standards (SAS) No 99, Consideration of Fraud in the Financial Statement Audit (Codified in AICPA Professional Standards -U.S Auditing Standards--AU,316)(New York:AICPA,2002).
- Bhasin, M. (2015). Creative Accounting Practices in the Indian Corporate Sector: An Empirical Study. *British Journal of Education*, 3(8), 55-62.
- Claire, A., & Jude, I. (2016). Forensic Accounting and Fraud Detection In Nigerian Public Sector *Igbinedion University Journal of Accounting*, 2149-173.
- Crumbly, D. L., Heitger, L. E., & Smith, G. S. (2007). *Forensic and Investigative Accounting* Chicago: CCH Incorporated, 2007.
- Crumbly, D. L., Heitger, L. E., & Smith, G. S. (2005). *Forensic and Investigative Accounting* Chicago: CCH Incorporated.
- Davia, H. R. (2000). *Fraud 101* NY: John Wiley & Sons.
- Durkin, R. L. et, al (2003). "Incorporating Forensic Procedures in an Audit Environment," *Litigation and Dispute Resolution Services Committee* (NY:AICPA,2003)
- Golden, T. W., Shalak, S. L., & Clayton, M. M. (2006). *A Guide to Forensic Accounting Investigation*. 2006 New Jersey; John Wiley & Sons, Inc, 2006.
- Hopwood, W. S., Leiner, J. J., & Young, G. R. (2008). *Forensic Accounting 1st Edition* (NY: McGraw Hill companies, Inc., 2008.

- Imam, A., Kumshe, A. M., & Jajere, M. S. (2015). Applicability Of Forensic Accounting Services For Financial Fraud Detection And Prevention In The Public Sector OF Nigeria. *International Journal of Business and Management Studies*, 04(01), 123-131.
- Intosai, International organization of supreme audit institutions. *Journal of Government Financial control*, 43, April, 2016.
- Intosai, International organization of supreme audit institutions, Lima Declaration on the Fundamental Principles of Financial control.
- Jack, B. (2017). Associates, LTD .Firm Philosophy: Inrestgitive techniques. Retrieved from <http://www.jackburkeassociats.com>
- Jordan times newspaper (2017, August 6). King urges anti-graft attitude within Community through education. Retrieved from <http://www.jordantimes.com/news/local/King-urges-anti-graft-attitude-within-community-through-education>
- Jordanian Audit Bureau, Work shop on financial administrative and forensic investigation, 2015. Retrieved from <http://asabeel.net/news/23/3/2015>
- Lopez, L. (2003). Forensic Accounting Uncovers Teachers Union Scandal, "FOX News Channel, April38, 2003. Retrieved from <http://www.Foxnews.com/story/0.2933,8560,00.htm>
- Manning, G. A. (2005). Financial Investigation and to Forensic Accounting, 2ed Edition/ (Boca Raton, FL: CRC Press, 2005.
- Nonye, A., & Okoli, B. E. (2015). Forensic Accounting Veritable Tool for Efficient Management of State Owned Public sectors in Ebonyi State: The Accounting Perspective. *British Journal of Education*, 3(8), 55-62.
- Popoola, O., Che-Ahmad, A., & Samsudin, R. (2014). Forensic Accounting and Fraud: Capability and Competence Requirements. In Malaysia. *Journal of Modern Accounting and Auditing*, 10(8), 825-834.
- Shaw, P., & Bologna, J. (2000). Preventing Corporate Embezzlement"(Boston: Butter Worth.
- Sidharta, E., & Fitriyah, F. (2015). Forensic Accounting and Fraud Prevention Indonesia Public Sector. *International Journal of Business and Management Studies*, 04(01), 123-131.
- Singleton, T. W., Singleton, A. J., Bologna, G. J., & Lindquist, R. J. (2006). Fraud Auditing and" Forensic Accounting "3rd Edition New Jersey; John Wiley & Sons, Inc, 2006.
- The National Anti -Corruption Strategy .Retrieved from en.wikipedia.org/wiki/Jordanian_corruption_commission-JACC
- Transparency international Secretariat Corruption perceptions index, 2016, Retrieved from <http://www.transparency.org/news/feature-perceptions-index-2016>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).