

Alternative Internal Audit Structures and Perceived Effectiveness of Internal Audit in Fraud Prevention:

Evidence from Jordanian Banking Industry

LES STRUCTURES ALTERNATIVE D'AUDIT INTERNE ET L'EFFICACITÉ PERÇUE DE L'AUDIT INTERNE DANS LA PRÉVENTION CONTRE LA FRAUDE:

UNE PREUVE DANS L'INDUSTRIE BANCAIRE JORDANIENNE

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Abstract: The purpose of this study is to investigate the perceived effectiveness of internal audit units in fraud prevention in Jordanian banking industry. It examines the effect of internal audit sourcing arrangement on perceived effectiveness of fraud prevention from senior managers' point of view. A survey of forty five executives is selected to gather information's to test the study hypotheses.

The main findings indicate that internal audit units are perceived effective in fraud prevention. Furthermore, in-house internal audit units are perceived more effective than outsourced internal audit functions in fraud prevention. The study surprising result is that internal audit units may fear from retaliation when reporting fraud related top management, however, this may result in weak independence and objectivity of internal auditors.

One of the crucial reasons for these results is that in-house internal audit units have more in depth- knowledge about banks culture, polices and procedures than outsourced auditors . Moreover, senior managers consider that internal audit units have more experience than outsourced auditors in fraud prevention and detection. The study recommends that internal auditors should have comprehensive training programmes to get the sufficient knowledge in fraud prevention and detection in banking industry.

Key words: Accounting; Audit; Structure; Fraud; Banking; Jordan

Résumé Le but de cette étude est d'examiner l'efficacité perçue des unités d'audit interne dans la prévention contre la fraude dans l'industrie bancaire jordanienne. Il examine l'effet de l'audit interne sur l'efficacité perçue de la prévention contre la fraude du point de vue des cadres supérieurs. Une enquête auprès de 45 cadres est sélectionnée pour rassembler des informations afin de tester les hypothèses de l'étude.

Les résultats principaux indiquent que les unités d'audit interne sont perçues efficaces dans la prévention contre la fraude. Par ailleurs, les unités d'audit interne à l'intérieur de l'organisation sont perçues plus efficaces que des fonctions d'audit interne externalisées dans la prévention contre la fraude. Un résultat surprenant de

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L'étude est que des unités d'audit interne auraient peur des représailles lors que la fraude est liée à la haute gestion, cependant, cela peut conduire à l'indépendance et l'objectivité faibles des auditeurs internes.

L'une des raisons essentielles de ces résultats est que les unités d'audit interne à l'intérieur de l'organisation ont plus de connaissances en profondeur sur la culture, les politiques et les procédures de l'industrie bancaire que les auditeurs externalisés. Par ailleurs, les cadres supérieurs considèrent que les unités d'audit interne ont plus d'expériences que les auditeurs externalisés dans la détection et la prévention contre la fraude. L'étude recommande que les auditeurs internes doivent avoir des programmes de formation complets pour obtenir des connaissances suffisantes dans la détection et la prévention contre la fraude dans le secteur bancaire.

Mots clés: Comptabilité; Audit; Structure; Fraude; Opérations bancaires; Jordanie

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INTRODUCTION

In recent years, the internal auditing functions have more emphasis in public and private organisations because Fraud and embezzlement cost organisations millions of dollars annually. Some companies create more demand for internal auditing functions and statistics show that companies have become effective in fraud polices material reduction in financial losses (Suponcic, 2010).

There are two classical categories of audit in businesses, namely, the external and the internal audits. Both started as tools to prevent and detect fraud. While the external audits started in the middle ages to maximize the yield of the serfs, the internal audit started after the 1929 disaster in Wall Street (Barlev, 2004).

IIA, The institute of internal auditors (2004) defined internal auditing as an independent activity that aims at providing reassurances and consultations designed to increase and improve the added-value to the organisation's operations. It helps the organisation to accomplish its objectives by systematic and rigorous approach to evaluate and improve efficiency in risk management, monitor and control processes.

Despite the increasing focus on internal audit, there has been little research on the benefits and importance of this function. Some studies used an agency cost framework to illustrate the value relevance of the internal audit function (e.g., Carey, Tanewski & Simnett 2000; Carcello, Hermanson & Raghunandan, 2005).

Alleyne, Persaud, Greenidge & Sealy (2010) described fraud as any intentional deceit to deprive another person of their property or right, two category of fraud are fraudulent, financial reporting and misappropriation of assets. The Institute of Internal Auditors (2008) defined a fraud as "any intentional act or omission designed to deceive others, resulting in the victim suffering a loss and/or the perpetrator achieving a gain".

As it has been defined in accounting standards reports, fraud is "an intentional act that results in a material misstatement in financial statements that are the subject of an audit" (AICPA, 2008). There are two ways in which a material misstatement could occur with respect to fraud: misappropriation of assets and fraudulent financial reporting. Misappropriation of assets, as the name suggests, refers to the theft of company assets that may result in the company's financial statements being materiality misstated (AICPA, 2008).

DeZoort and Harrison (2008) found that external auditors perceive more responsibility for detecting fraudulent financial reporting than they do for misappropriation of assets and corruption. Rahahleh (2010) indicated that developed countries called for attempts to regulate the internal audit as well as giving it more attention as a tool for achieving monitor and control to reduce the financial and administrative illegal practices.

However, little is known of fraud detection procedures outside the developed countries (Alleyne at al., 2010). In spite of the availability of a framework and standards for the professional practice of internal audit that are fulfilled and applicable worldwide as well as in certain Arab countries, however, no framework for the professional practices of internal audit in Jordan has been adopted or developed (Rahahleh, 2010).

This study assesses the perceived effectiveness of internal audit in fraud prevention. Furthermore, this research examined important issues in corporate governance, (outsourcing versus in-house internal audit) this is special important because outsourcing accounting function including internal auditing has increased rapidly as organisations seek to reduce cost and improve governance and oversight.

Therefore, this study attempts to show the perceived effectiveness of internal audit units in prevention of fraud under IIA standards. Moreover, it will show whether organisations that in-source their internal audit functions are perceived

more likely to prevent fraud than those that completely outsource their internal audit functions from senior managers point of view.

1. THE STUDY AIM AND OBJECTIVES

This study aims at assessing the effectiveness of internal audit units in detecting fraud in banking industry. Accordingly, the following objectives should be achieved:

- (1) To highlight the importance of internal auditing functions in preventing and detecting fraud, its goal and benefit in Jordanian banking sector.
- (2) To show whether banks that in-source their internal audit functions are perceived more likely to prevent fraud than banks that completely outsource their internal audit functions.
- (3) To propose some recommendations to facilitate the implementation of effective internal audit function in preventing and detecting fraud in banks sector in Jordan.

2. LITERATURE REVIEW

Previous research findings highlighted the importance of internal audit functions in fraud prevention. (Mihret and Yismaw 2007; DeZoort and Harrison 2008; Coram, Ferguson & Moroney, 2008; Rahahleh, 2010). Therefore, importance of internal audit will be highlighted. Moreover, auditors' responsibilities in fraud prevention and detection will be discussed. Furthermore, use insource or outsource internal auditors by organisations to prevent fraud will be discussed by showing advantages and disadvantages of each.

2.1 Importance of Internal Audit

Coram *et al.* (2008) assessed whether organisations with internal audit function are more likely to detect and self report fraud than those without internal audit function. They also assessed whether organisations that use an in-house internal audit function are more likely to detect and self-report misappropriation of assets fraud than organisations that completely outsource their internal audit functions. They concluded that organisations with internal audit function are more likely to detect and self report fraud than those that don't have internal audit function, and organisations that having some in-house internal audit function are more effective in detective and self reporting fraud than completely outsourcing internal audit function. Boța-Avram (2008) investigated the evolution of the approaches of fraud from internal audit's point of view, by showing value of internal auditors in fraud prevention and detection and showing differences in approach between organisations that choose to insourcing or outsourcing internal audit. The conclusions drawn were that internal auditors are considered to be more and more important and the value and responsibility in activity of preventing and detecting fraud seems to be bigger, although IIA (2004) states "internal auditor should not have the expertise of a person whose primarily responsibility is to detect and to investigate fraud" (P.18). Outsourcing of internal audit may lead to better independence of internal auditor and insourcing internal audit could has advantage that they know the environment and the culture of the company. James (2003) examined the effects of internal audit structure on perceived financial statement fraud prevention in USA. The study concluded that users perceived greater financial statement fraud protection when internal auditor function reports to the audit committee than when it reports to senior management. They also concluded that there is lack of evidence supporting enhanced user confidence resulting from outsourcing the internal audit function.

2.2 Auditors' Responsibilities

To highlight auditors responsibilities in fraud detection, Lee, Ali & Gloeck (2008) identified financial report users' perceptions of the extent of fraud in Malaysia to determine their perceptions of the auditor's responsibilities in detecting fraud and the performance of related audit procedures. Moreover, Krummeck (2000) investigated the importance of ethical considerations, culture, and control mechanisms that will discourage fraud. Fraud had been investigated by many studies that focused on how to reduce risks of fraud by focusing on soft control. Hooks, Kaplan, Schultz and Joseph (1994) emphasised open communication as a crucial component of effective control environment. They stated that communication improvement will have favorable effects in fraud detection.

The importance of effective audit committee in fraud prevention directors was examined by Beasley (1996) who investigated the relation between board composition and financial statement fraud. They concluded that the proportion of outside members of board of director is lower in firms experiencing financial statement fraud compared to non-fraud firms.

Some studies investigated that importance of corporate governance as tool which is designed to monitor management behavior (Cohen, Krishnamoorthy & Wright, 2002; Majid, Gul & Tsui, 2001). Cohen et al. (2002) emphasized the importance of corporate governance such as board of directors and audit committee on audit processes to deter fraud. Thirty six interviews were conducted with practicing auditors from 4 US large firms, they concluded that auditors view that senior manager and board of directors is the most important issue to deter fraud and the second importance is audit committee. Moreover, Cohen et al. (2002) also concluded an auditor felt that corporate governance is important when client risk is high than low and it is important for multinational and public organisations than domestic private organisations. Risk assessment regarding fraud was examined by (Majid et al. 2001). They aimed to show auditors perceptions of the importance of selected red flag factor in risk assessment where they found that the misstatement detected in prior years and indications of going concern problem are the most important risk factors.

Auditor's responsibilities for detecting fraud were examined by many studies (Collier, Dixon and Marston, 1991; Salehi and Azary 2008; Stribu, Moraru, Farcane, Blidse & Popa 2009; Mui 2010). Stribu *et al.* (2009) aimed to show the perception of financial reporting users of auditors' responsibilities in fraud prevention and detection. They found that users put high expectation on auditor duties of fraud prevention and detection. They also found lack of understanding among respondents of the statutory duties of auditor. This suggests that education of users through better communication by auditors and reduces gap between auditor and users. Another study regarding auditors responsibilities for fraud was examined by (Collier *et al.*, 1991), they aimed to investigate where the responsibility for computer fraud prevention and detection resided within the organisation, and to examine the role of the internal audit department in prevention and detection computer fraud, they concluded that information services function is most commonly held responsible for computer fraud prevention and detection. This indicates that organisations do not consider computer fraud to be high priority matter. this study suggest to educate relevant staff and allocation of responsibilities for prevention and detection of fraud and the importance of action plan in response to threat of fraud and careful detection measure must be in motion and should be cost effective.

Salehi and Azary (2008) investigated the expectation gap in auditor's responsibility between auditors and bankers in Iran. They concluded that the bankers have reasonableness expectations from auditors. According to the Iranian regulations, the Iranian auditors have limited responsibility to detect fraud and illegal acts. To reduce the gap, they recommended that more communication is needed between auditors and bankers.

There are three conditions referred to fraud triangle, namely, incentive/pressures, opportunities, and attitudes/rationalisation. Incentive/pressures refer that management or other employees have incentive or pressures to commit fraud. Opportunities indicate to circumstances provide opportunities for management or employees to commit fraud. Whereas attitude/rationalization refer to an attitude, character, or set of ethical values exists that allow management or employees to commit a dishonest act, or they are in an environment that imposes sufficient pressure that causes them to rationalize committing dishonest act (Elder, Beasley & Arens, 2010). Moreover, DeZoort and Harrison (2008) summarized the results of an international study of internal auditors' perceived responsibility for fraud detection. Although internal audit standards prescribe professional responsibilities related to fraud, little is known about the extent that internal auditors perceive responsibility for fraud detection.

Alleyne at al. (2010) investigated the use of audit techniques in detecting fraud, especially in the stock and warehousing cycle in Barbados as a small developing country. The study indicates that there is a moderate to high perceived effectiveness of standard audit procedures in the detection of fraud in the stock and warehousing cycle in Barbados.

Therefore, in the light reviewing the literature, many studies investigated internal auditors' perceived responsibility for fraud detection. However, very few studies have been conducted in developing countries especially Jordan.

2.3 Outsource Versus Insource Internal Audit

Some researches tried to show advantages and disadvantages of sourcing or out-sourcing internal audit functions (Widener and Selto, 1999; Ramirez-Blust, 2007; Abbott, Parker, Peters & Rama, 2007; Mui, 2010). Fore example, Ramirez-Blust (2007) suggested that by outsourcing internal auditor function we can avoid the costs of recruitment, training, and turnover of personnel and minimized fixed costs by paying for resources only when needed, improve independence of the function, gain access to skilled auditors with specialised knowledge in IT fraud and other specific risk area. Decision between outsource or insource internal audit functions was also examined by (Abbott et al., 2007), they distinguished between sourcing of internal audit for routine and non routine activities, the research conclusion that there are fundamental difference between activities outsourced to external auditors vis-à-vis outside service providers where companies outsourced a much greater (lower) percentage of specialised, nonrecurring internal auditors activities to external auditors, and effective audit committees were negatively associated with the outsourcing of routine internal audit

activities to the external auditor. Widener and Selto (1999) ask why companies outsource internal audit activities in USA; they argued Environmental uncertainty and asset specificity and frequency of internal auditors activities interact to affect decisions of sourcing internal audit functions. The conclusions drawn were that asset specificity and firms that use internal audit frequency are significantly related to insourcing internal audit function.

Regardless of using outsource or insource internal audit, Fraud, as discussed by corporate fraud literature, is difficult to detect for several reasons; first, perpetrators may be familiar with accounting procedures, and they have the ability to cover up the fraud (Krambia-Kapardis, 2001). Second, auditors lack adequate training in fraud nature and investigative methodologies, and hence they have reduced capability in fraud detection (Bayou & Reinstein, 2001; Dycus, 2002; Grazioli, Jamal, & Johnson, 2006). Third, the time and budgetary constraints associated with external audit results in external auditors increasing their reliance on management's representations of financial statements (Krambia-Kapardis, 2001). Fourth, external auditors can experience an agency problem of an inherent conflict of interest because they are investigating the party that paid for their services, thus creating a built-in conflict for auditors (Gavious, 2007). Fifth, auditors have relatively infrequent experience of fraud in their career due to the low base-rate of fraud detection (Loebbecke, Eining, & Willingham, 1989), which results in the lack of opportunity for auditors to develop fraud detection expertise (Johnson, Grazioli & Jamal, 1993). Therefore, understanding the unique nature of fraud and the difficulty in detecting fraud is fundamental to understanding the fraud detection task (Mui, 2010).

Accordingly, this study is conducted to answer the following questions:-

- (1) To what extent the perceived effectiveness of internal auditing units in preventing fraud in banks sector in Jordan from senior managers' point of views?
- (2) Which is better for preventing fraud from senior manager's point of views, using in-source internal auditing or completely outsource internal auditing in Jordanian banking industry?

3. THE STUDY HYPOTHESES

To achieve the study aim and objectives, the quantitative approach is adopted. More specifically, two main hypothesis related to **Internal Audit** are developed after reviewing prior research findings. To be consistent with prior research, the study predicts positive effect of internal audit units in fraud prevention. Several controversial issues related to sourcing of internal audit are discussed in prior research. External auditors are seen to be more objective, independent, flexible, and experienced than internal auditors. Banks managements have considered external auditor legally liable for their works; however, internal audit has greater and more in-depth knowledge with banks culture, policies, procedures, and powerful management tool that have frequent existence in banks which could increase ability to prevent fraud. Moreover, confidential information in banks could motivate management to use internal auditor units.

According to the findings of prior research, and based on the study aim and objectives, the following hypotheses can be formulated:

H1: There is no significant relationship between internal auditing units and preventing fraud from senior manager's point of view in Jordanian banking industry

H2: senior managers perceive in-house internal audit units more effective in fraud prevention than out-sourced internal audit functions.

4. THE STUDY METHODOLOGY

This part explains and evaluates the research methods which are employed in this study. In addition, it describes the population of the study and its main contents, the sample of the study and its data sources, procedures that will be adopted to gather and analysis of data, and testing of the study hypotheses. Jordanian banks sector has been selected as the study population for its importance to motivate investments and effective participation in the development of the Jordanian economy. Moreover, this sector has regional recognition and presence; Jordanian banks are classified into commercial, investment, and Islamic banks.

The sample which is used to test hypotheses consists of fifteen banks that are listed in Amman stock exchange as a framework of the selected sample. Questionnaires are sent to senior managers in selected banks because they have direct interaction with auditors and have greater knowledge about fraud issues in their banks. The questionnaire questions have been developed based upon literature review and the interviews with practical people to get the most important issues. Five Likert scale was used to score the responses.

The questionnaire has been translated into Arabic to enable the respondents to understand the questions and answer them easily. The questionnaire consists of three parts. The first part involves four demographic questions which are designed to get information about respondents. The second part of the questionnaire is designed to measure the perceived effectiveness of internal audit units in fraud prevention, This part includes 15 questions, The third part of the questionnaire is prepared to examine the effect of internal audit sourcing arrangement on perceived effectiveness of fraud prevention; more specifically, to identify whether senior managers perceived in-house internal audit units more effective in fraud prevention than out-sourced internal audit functions, this part includes 11 questions.

5. DATA ANALYSIS AND HYPOTHESIS TESTING

The questionnaire is used as data collection instrument. Seventy five questionnaires are distributed to senior managers in selected Jordanian banks because they have direct interaction with auditors in their banks. Only 45 questionnaires are returned. The response rate is 60 percent. The questionnaire validity indicates to the ability of a research instrument to measure what it is purported to measure or does the instrument really measure what its designer claims it does (Cooper and Schindler, 2003).

To ensure the validity of the questionnaire as a data collection tool, it is reviewed by different professors in the research field. The questionnaire is pre-tested by two marketing executives in two different Jordanian banks, therefore, their opinions and suggestions were taken into consideration prior to data collection stage. To ensure the questionnaire reliability, Cronbach's alpha is used as a measure of internal consistency of the questionnaire. A widely cited minimum threshold for the Cronbach Alpha is 0.70 (Nunnally, 1978). However, Cronbach's Alpha was calculated for this study which was 70.4%.

As shown in Table 1, the major characteristics of the questionnaire respondents are presented in terms of gender, educational level and years of experience. In term of gender, the study respondents can be classified into 66.7% as male and 33.3% as female which suggests that high status jobs in banks sector are male-dominated. Most participants were aged between 36-45 years (37.8%). The majority of participants have a masters' degree (48.9%). Finally, regarding to experience years, most of respondents have 16 – 20 years experience (42%) because the study sample consists only of executive levels of senior managers.

Table 1: Demographics Profile of Study Respondents (n = 45)

Gender	characteristic	Frequency	Percentage
	Male	30	66.7%
	Female	15	33.3
Age			
	26 – 35	12	26.7%
	36 – 45	17	37.8%
	46 – 55	9	20%
	>56	7	15.6%
Education			
	Bachelor	17	37.8%
	Masters	22	48.9%
	Doctoral	6	13.3%
Experiences			
	6 - 10	2	4.4%
	11 – 15	9	20%
	16 – 20	19	42%
	More than 21	15	33.3%

5.1 Test Hypothesis One

H1: There is no significant relationship between internal auditing units and preventing fraud from senior manager's point of view in Jordanian banking industry.

To test this hypothesis, mean, standard deviations and one sample T test were calculated to examine if there is significant relationship between internal audit units and preventing fraud, as shown in table 2 in the appendices, the mean for all questions is (3.758513) and the standard deviation for all questions is (0.861877) which clearly indicates that internal audit units are perceived effective in fraud prevention. The highest mean refers to question number (9) which states that " internal audit units reduce the losses from fraud", whereas the lowest mean refers to question number (2) which states that "The use of internal audit units help us in solve the problems related to fraudulent financial statement

from top management" and question (4) which states that " Internal audits units conduct meeting with you to discuss audit plan and business environment and your requests to know the risks that encounter bank especially those related to prevent fraud". Result of one- sample T test shows that the null hypothesis is rejected and alternative hypothesis is approved.

Table 2: One Sample T Test (Relationship Between Internal Auditing Units and Preventing Fraud from Senior Manager's Point of View)

Questions	Mean	Std. Deviation	Sig. (2-tailed)	t
1. The use of internal audit units help you in solve of problems related to misappropriation of assets from employees	3.6667	1.02247	0	4.374
2. The use of internal audit units help us in solve the problems related to fraudulent financial statement from top management	3.5333	0.75679	0	4.727
3. Internal audit units inform you and board in case of discovering weaknesses of internal control	3.8444	0.70568	0	8.027
4. Internal audits units conduct meeting with you to discuss audit plan and business environment and your requests to know the risks that encounter bank especially those related to prevent fraud	3.5333	1.09959	0.002	3.254
5. Audit reports that sent to you increase your ability and board to put procedures that prevent embezzlement and fraud	4.0222	0.86573	0	7.921
6. the control activities that internal audit units perform that include policies and procedure help in reducing risks of fraud	3.7556	0.85694	0	5.915
7. the audit plan that internal audit unit perform were comprehensive to achieve objectives within the scope and time and recourses allocated	3.7111	0.84267	0	5.661
8. The information that available in audit report is enough to achieve objectives to prevent risks of fraud.	3.6889	1.01852	0	4.537
9. The use of internal audit units reduce the losses from fraud	4.1111	0.64745	0	11.512
10. Internal audits units contribute in continuous improving of internal control and increase your concerns regarding fraud prevention	3.9333	0.80904	0	7.739
11. Internal audits units provide objective assurance and consulting activity to you and board that help in preventing fraud	3.8667	0.78625	0	7.394
12. The Internal audits units flow up and communicate on need basis to improve internal control and resolve problems that could prevent fraud	3.5778	0.8916	0	4.347
13. The Internal audits units draw priorities that reflect relevant risks that encounter bank especially those related to risks of fraud	3.7111	0.81526	0	5.851
14. The Internal audits units make sure that all employees know and understand code of conduct to minimize the risks of fraud.	3.7778	0.90174	0	5.786
15. The audit reports that sent to you was correct and relevant and easily to understand and not conflicted which enabled you to take appropriate active regarding fraud.	3.6444	0.90843	0	4.759
Average	3.758513	0.861877	0.000133	6.120267

- 95% confidence level, the k value is 1.96

5.2 Test Hypothesis Two

H2: senior managers perceived in-house internal audit units more effective in fraud prevention than out-sourced internal audit functions.

Mean, standard deviations and one sample T test were calculated to examine this hypothesis, as shown in table 3 in the appendices, the mean for all questions is 3.585864 and the standard deviation for all questions is 0.774552 which clearly indicates that senior managers perceived in-house internal audit units more effective in fraud prevention than out-sourced internal audit functions. The highest mean refers to question number 6 which states that " In-house internal auditors are the best source available to you comparing with out-sourced internal auditors because they had knowledge about banks policies and procedures and culture which could assist you to prevent fraud", and the lowest mean refers to question number (9) which states that " In-house internal auditors are seen as objective and independent and they do not fear from retaliation when reporting fraud related to top management comparing with out-sourced internal auditors. Therefore, you prefer to use in-house internal auditors".

Table 3: One Sample T Test (Is Senior Managers Perceived In-House Internal Audit Units More Effective in Fraud Prevention Than Out-Sourced Internal Audit Functions)

Questions	Mean	Std. Deviation	Sig. (2-tailed)	t
1. In case of discovering weakness of internal control, usually you prefer to use in-house internal auditors instead of outsourced auditors to assist you in correcting the problems.	4.1778	0.74739	0	10.571
2. In case of suspected fraud whether from employees or from top management usually you prefer to use in-house internal auditors instead of outsourced auditors to investigate for fraud.	4.0889	0.79264	0	9.215
3. You prefer to use in-house internal auditors instead of outsourced auditors in auditing the risks of fraud and embezzlement.	4.0444	0.85162	0	8.227
4. You seen in-house internal auditors more effective comparing with out-sourced auditors to assist you in fraud risk assessment which could prevent fraud.	4.0889	0.79264	0	9.215
5. In-house internal auditors are seen experienced so they seen to be the best available source comparing with out-sourced to assist you in risk assessment related to fraud risk.	3.9556	0.85162	0	7.527
6. An in-house internal auditors are the best source available to you comparing with out-sourced internal auditors because they had knowledge about banks policies and procedures and culture which could assist you to prevent fraud.	4.2667	0.71985	0	11.804
7. Overall, the cost of using in-house internal auditors is less than the cost of out-sourced internal auditors which in result it is more efficient to use in-house internal auditor to assist to put active anti-fraud program.	2.2889	0.78689	0	-6.062-
8. Confidentiality of information could encourage you to use in-house internal auditors instead of out-sourced internal auditors especially these issues related to fraud.	3.5111	0.62603	0	5.477
9. In-house internal auditors are seen an objective and independent and don't fear from retaliation when reporting fraud related to top management comparing with out-sourced internal auditors, therefore, you prefer to use in-house internal auditors.	1.7778	0.73512	0	-11.153-
10. The frequent existence of in-house internal auditors compared with flexibility (time management) of using out-sourced internal auditor aided you to reduce to losses of fraud.	3.8222	0.7772	0	7.097
11. In-house internal audit units had more specialized knowledge of IIA standards than out-sourced auditors so they helped you to capture and communication all risks exposure related to fraud.	3.4222	0.83907	0.002	3.376
Average	3.585864	0.774552	0.000182	8.056556

- 95% confidence level, the k value is 1.96

Consequently, result of one- sample indicates that senior managers perceived in-house internal audit units more effective in fraud prevention than out-sourced internal audit functions.

6. THE STUDY RESULTS

This study explores the perceived effectiveness of internal audit units in fraud prevention. Moreover, it investigates the internal audit structure in Jordanian banking industry. The study found that respondents perceived internal audit units effective in fraud preventions, it is also found that senior managers consider that In-house internal audit units more effective in preventing fraud than outsourcing internal auditors.

The results are important for many groups like senior managers and regulators because they provide evidence on the importance of internal audit functions in fraud prevention. This study offers an important theoretical contribution about the impotence of internal auditors and the effect of sourcing decisions on perceived effectiveness of internal audit functions in fraud prevention from senior mangers point of views.

Moreover, the study also concluded that In-house internal auditors have more knowledge about banks culture and policies and they also are more experienced than outsourced internal auditors, another result is that senior managers

consider that the cost of in-house internal auditor is more than the cost using out-sourced auditors. The study's surprising result is that internal auditors fear from retaliation when reporting fraud related to top managers and they seem less independent and objective than out-sourced auditors. This can be resolved by fully complying with IIA standards, where comply with standards aids internal auditors to do their tasks in perfect manner. The dual-reporting relationship, an unrestricted access to senior managers, the role of audit committee, the internal audit charter all these issue should be carefully given concern to maximise the benefit that may be obtained from internal audit functions especially in fraud prevention and detection.

Banks should be aware of the importance of building effective policy for fraud prevention, where sometimes effective fraud policy is not expensive since some control is for the purpose of changes to policies that are already in place, and auditors understanding of an organisation's objectives, risk, risk management priorities, regulatory environment, and the diverse needs of critical stakeholders including executive management, the board, employees, and shareholders to minimize the risk of fraud.

7. THE STUDY IMPLICATIONS

This study can be considered as one of few studies that deal with fraud prevention in banking industries especially in Middle East. The study provides the Jordanian banks with a framework for needed effectiveness of internal auditing units in preventing fraud. The study also has brought out the importance of internal auditing units in fraud prevention facilitates for banks to understand positive results of internal audit approach. Moreover, the study has indicated that success of banks depends on financial performance; hence, the role of internal auditing units is critical to maximize shareholder wealth. The fraud risk management strategy has three objectives, namely, fraud prevention; fraud detection; and response to fraud. Internal auditors must have sufficient knowledge which is needed to evaluate the risk of fraud in a bank, but are not expected to have the expertise of a person whose primary responsibility of detecting and investigating fraud. The internal audit activity must evaluate the potential of occurrence of fraud and how the banks manage fraud risk.

8. THE STUDY RECOMMENDATIONS

In the light of the study findings, the current study proposes some recommendations for banking practices. First, two corporate control mechanisms available to management to address fraud risk are the internal audit function and the external audit function; however, the role of internal auditors is critical in this issues and they must consider the probability of significant errors, fraud, noncompliance, and other exposure when developing the engagement objectives. Second, internal auditors should have comprehensive training programmes to get the sufficient knowledge in fraud prevention and detection. Moreover, fraud risk should be assessed periodically to identify potential schemes and events that a bank needs to mitigate.

Third, feasible prevention techniques should be established to avoid potential key fraud risk events and to mitigate possible organizational effects on banks. Finally, reporting process should be in place to solicit input on potential fraud, and a coordinated approach to investigate and take corrective action should be used to ensure that potential fraud is addressed appropriately and timely.

9. THE STUDY LIMITATIONS

The study scope was limited to senior managers in Jordanian banking industry. To test the proposed hypotheses, the quantitative approach was adopted to analyse the gathered data. Consequently, the future research can extend the proposed variables into other industries. Moreover, the qualitative evidence can be used to enhance the quantitative approach in the real context.

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