
The Internal Auditing Procedures Effectiveness in Using Accounting Information System to Assess Fraud in Jordanian Commercial Banks

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Abstract Accounting information system (AIS) is critical for managing financial data as well as assets of a bank. However, just as any IT system, AIS faces risks of an information breach, data manipulation, fraudulent entries, system hacks or a takeover aside from common issues like server downtime for cloud-based systems. This study aims at determining the internal auditing procedures effectiveness in using accounting information system to assess fraud in Jordanian commercial banks and the role of management in achieving it. This study utilizes descriptive approach. A questionnaire was used and prepared according to previous literatures such as (arwa 2017, Internal Audit Procedure, and Statement of Guidance-Internal Audit-Banks) was used and distributed to 300 internal auditors in 16 commercial banks in Jordan. Out of the 220 retrieved questionnaires only 155 analyzed by using SPSS. The results show that the commercial banks' internal auditing procedures is efficient in reducing electronic fraud or assess it before happened.

Key words: AIS, Jordanian Commercial Banks, Internal Auditing, Electronic Fraud, Internal Control.

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1. Introduction

Internal audit plays great role in commercial banks in reducing electronic fraud. fraud can be happened in any community, in other word with the new technologies used and available to everyone we can say there is no borders to fraud. Commercial banks plays a very great role in any economy, especially in the developed countries so and according to that the banks depend on AIS and internal audit to achieve the best efficiency in their work. In their study, Uyar et al. (2017) stated that it is likely that well-functioning and trustworthy Accounting Information System (AIS) will enhance the performance of organization, create better world business, while additionally expanding the certainty of speculator and helping the effectiveness of capital markets.

1.1. The Problem of the study and study questions

The main objective of the study is to examine the Internal Auditing Procedures Effectiveness In Using Accounting Information System To Assess Fraud In Jordanian Commercial Banks. According to this objective the following questions will be test :

1. Does the internal auditing departments follow appropriate procedures to improve the efficiency of deducting fraud?
2. Are internal auditors take in consideration the threats may face the bank in the procedures in the internal audit program depending on accounting information system recommendations?
3. How does the high levels in the bank enhance the role of accounting information systems, which mean increase the efficiency in facing the fraud that the bank may face.
4. What is the role of high levels In the bank in applying the corporate governance in order to give independency to internal auditors and accounting information systems?

2. Literature review

2.1 Previous Studies

many studies talking about the internal control a study by Kim, Gangolly, and Elsas, (2017) look at how accounting have displayed and also recorded AIS dependent on the system's stream charts that have been connected and demonstrated valuable for inside control. The investigation noted with cynicism that at whatever point AIS are mind boggling, conveyed or sufficiently expansive, their separate stream charts are entangled to fathom, use, and restricted in degree and potential to help basic leadership in system usage and plan. The investigation suggests evaluating the appropriateness of displayed AIS that address such concerns, and that Petri net model offers a superior option in contrast to complex AIS systems as they offer the most reasonable design for demonstrating AIS systems .

Kristo (2013) distinguishing the internal auditing impact on the banks' execution security from risks and inconveniences confronting them. It additionally looked to discover the viewpoint of examiners towards the capacity of internal auditing in enhancing the tasks enhancement henceforth helping management accomplish objectives.

Studies were finished by Owizy (2013) on evaluating and examined the impact of fraud the Nigerian banks through internal auditing impact in the banks' benefits returns. The examination embraced an explanatory methodology. findings demonstrated that fraud and inconsistencies are counteracted by internal auditing which improves control of internal auditing for banks.

Al-Matari. AlSwidi and Fazul (2014) examine the relationship between the performance of companies and internal auditing in the light of the characteristics of internal auditing . As indicated by the study, the internal auditing division is considered as an important component to help utilize a accounting system for organizations' work assessment noteworthiness. The outcomes also demonstrate that the inside evaluating viability built up crafted by the organization about money related reports readiness with high caliber .

Baker, Cohanier, and Leo (2017) in their study analyzed the failure of AIS in discover the breakdowns in accounting and strategies of management strategies related to control systems pertinent in the real bank's IS concerning fraud that mid-level. They also address the issue of an obvious breakdown in internal control, regardless of whether a solitary acting broker's false exercises brought about disappointments. The exploration reasoned that the administration of the French bank may have neglected the abrogate of the Accounting Information over the bank trading that earned returns. Be that as it may,

quick activity by the administration may address abrogates exuding from the accounting in the event that the exchanging exercises were to make any benefits. The examination decided the significance of AIS in avoiding fraud as used by money related establishments in reporting and getting ready explanations .

Different studies like Hamdan and Hosban (2015) focus on showing the role of internal auditor enhancing the infrastructure for commercial banks in order to assess the risk faced when using systems and it is accessories. The results shows the critical importance of AIS to auditors. The factual examination and model created delivered a noteworthy outcome; the basic significance of accounting data system in an IT domain to reviewers .

Alduwaila, Almarri, and Aldaihani, (2018) examination that concentrated specifically on dissecting the impacts of the effectiveness of the internal accounting control system and also the effects of executing budgetary AIS on the benefit of accounting information and additionally its situation in helping basic leadership. The study the study examine the relationship between the financial accounting information system with special characteristics and stakeholder decision making, the study shows the significance of this relationship .

2.2 Theoretical Literature

Theoretical studies insist that accounting data faced many threats which influence the achieving the objectives of the system.. Thneibat (2006) shows that the impotence of the information characteristics such as reliability, timely, flexibility, and this must be appear in the financial statements. the study also focused in the importance of security concerns because of the highly risk of attacks by fraudulent in the cyberspace.

Each financial institution or bank must take in confederation how to apply effective way to deduct and prevent from fraud. Basias, Themistocles's, and Morabito (2013) in their study prescribed selection of IT Architecture for e-banking that is more reliable to improve the centralization of information to improve decision making and internal control. (arwa,2017) also recommend to enhance the procedures followed in internal control.

Past studies have likewise thought about the viability of AIS in assessing unintended dangers. The method of reasoning is that such dangers are progressively inconvenient to how powerful AIS can perform in monetary foundations and banks. An investigation by Hossin and Ayedh (2016) on the Central bank of Libya discovered that AIS's job in assessing PC or registering related fraud isn't autonomous of data security issues that come in a few perspectives. Such security concerns have a capability of lessening the execution of a accounting system and in addition subverting activities of a system basic for both outside and inward accounting control.

Studies by Peltier (2016) suggest some guidelines to measure fraud and the information system in order to evaluate threats related to computer. Also these measures very important to identify risks and threats that cause weaknesses in banks activities which leads to losses in cash or ant other assets. AIS should, just like any information System architecture autonomously determine a possibility of loss, expanding its scope to a job as well as asset risks conveniently expressed in the form of cash. It needs to reduce the amount of loss or weakness that result from an underlying threat or computing fraud, identify, and eliminate threats that might emanate from recurrent events within the Accounting System. It ultimately has to determine the conditions to deal with main risk issues such as uncertainty. There is also a need for the AIS utilized by Jordanian commercial banks to deduce the efficiency in cost by utilizing the rate of ROI.

The study by Gibson (2014) has also determined that some of the threats targeted at computer-based information systems such as accounting information system are an unintentional injection of inaccurate information, data destruction, and unauthorized entry to the AIS, introduction of malware or viruses to the system and weak physical or human control of the AIS.

Studies conducted on Jordanian commercial banks by Eletter and Yaseen (2017) indicate that AIS plays a critical role in evaluating loan or credit decisions by Jordanian commercial banks. Supported by proper IT infrastructure, the AIS system plays a critical role for these banks in the evaluation of decisions that relate to credit admission. Prior research by Bekhet and Eletter (2012) also supported the importance of AIS in identifying as well as mitigating credit-related risks.

2.3 Current Studies

This study differs from the past research because it focuses on the effectiveness of AIS in evaluating and its role in reducing fraud in the Jordanian banks. Additionally, the current study focuses on how AIS relates to accounting control of Jordanian commercial banks. However, previous studies examined the accounting information system as a whole focused on how internal control impacts the risks associated with AIS, and generalized internal control of banks. The present study utilized a survey data based on the design of a questionnaire depending on many previous studies such as (arwa 2017, Internal Audit Procedure, and Statement of Guidance-Internal Audit-Banks) administered to a simple randomly sampled population of internal auditors.

3. Methodology of research

The methodologies applied by this study include a descriptive, analytical approach in identifying Jordanian commercial banks' internal audit procedures effectiveness. Primary resources like a questionnaire used according to (arwa 2017, Internal Audit Procedure, and Statement of Guidance-Internal Audit-Banks), Statement of Guidance-Internal Audit-Banks and according to Internal Audit Procedure (Issue 3, Revision 0,2015)), to achieve the goals of the current study. Another source of resources includes secondary data such as information from electronic databases was utilized. Articles, published papers, scientific journals, processed survey results available in journals, and books are the primary sources of secondary data (Sekaran & Bougie, 2016). Therefore, they are applicable in attempting to solve the problem of this study.

4. Analysis, findings and discussions

4.1. Population and study sample

The study consists of 300 employee in the internal auditor departments in 16 Jordanian commercial banks. Out of the 220 sample questionnaires, only 155 questionnaires were retrieved as valid for analysis.

4.2. Instrument reliability testing

Cronbach was used to check the reliability of the instrument, and because it had a value of more than 70%) it can be deemed acceptable statistically (Sekaran 2014), and the closer the value is to 100% the higher the degree of reliability on the study's tool.

Table 1. The reliability coefficient and dimensions of the tools

Study's tool	Reliability coefficient
Does the internal auditing departments follow appropriate procedures to improve the efficiency of deducting fraud	86.80
Are internal auditors take in consideration the threats may face the bank in the procedures in the internal audit program depending on accounting information system recommendations?	87.50
How does the high levels in the bank enhance the role of accounting information systems, which mean	80.46

increase the efficiency in facing the fraud that the bank may face.	
What is the role of high levels In the bank in applying the corporate governance in order to give independency to internal auditors and accounting information systems?	82.09
Total	83.54

4.3. Analysis and results

4.3.1. Demographic data analysis

Table 2. Sample summarized demographic information based on valid responses

Demographic variables	Number	Per %
5-10 years	80	52%
10-15 years	36	23%
More than 15 years	39	25%
auditor	108	70%
Senior auditor	30	19%
Auditor	17	11%
CPA	11	7%
JCPA	115	74%
CIA	14	9%
Other	15	10%

The sample Demographic characteristics have proof that most of the respondents are qualified to according to their qualifications and experience. And as shown in table (3), alternate extents appear to be near each other with respect to people's understanding. This investigation utilizes the passage midpoints, rank (significance of the section), and standard deviations to demonstrate the sig=000. reviewing strategies of utilizing the accounting data system in assessing the hazard related with electronic fraud arranged on a Likert scale.

Table 3. Respondents means and standard deviations' answers of executive procedures achieving internal audit effectiveness.

N	Item	M	Std
1	Does the internal auditing departments follow appropriate procedures to improve the efficiency of deducting fraud	4.52	0.70
2	Are internal auditors take in consideration the threats may face the bank in the procedures in the internal audit program depending on accounting information system recommendations?	4.35	0.65
3	How does the high levels in the bank enhance the role of accounting information systems	3.98	0.76
4	What is the role of high levels In the bank in applying the corporate governance in order to give independency to internal auditors and accounting information systems?	4.54	0.69
	Total	4.36	

4.3.2 Study hypothesis testing

First Hypothesis

The first hypothesis ‘Does the internal auditing departments follow appropriate procedures to improve the efficiency of deducting fraud’ was checked using T-test. As per the table, four illustration results show that the Sig=0.000 which mean to a reject the first hypothesis.

Table 4. T-test results for the first hypothesis and its respondents from the perspective of the respondents

Hypothesis	df	Sig	Result
Does the internal auditing departments follow appropriate procedures to improve the efficiency of deducting fraud	154	000	Rejection

A set of implementation programs are not included in the auditing program to achieve the commercial banks' internal auditing effectiveness.

Second Hypothesis

The second hypothesis “Are internal auditors take in consideration the threats may face the bank in the procedures in the internal audit program depending on accounting information system recommendations?” was checked using the T-test. As per illustration in table 5 the results indicate that the Sig=0.000 which mean to a reject the second hypothesis.

Table 5. Results of T-test of the second hypothesis and it sub-hypotheses in the perspective of the respondent

Hypothesis	df	Sig	Result
Are internal auditors take in consideration the threats may face the bank in the procedures in the internal audit program depending on accounting information system recommendations?	154	000	Rejection

The third hypothesis

The third hypothesis: “How does the high levels in the bank enhance the role of accounting information systems, which mean increase the efficiency in facing the fraud that the bank may face.” was checked with the use of Test. Table 6 illustrates showing the results that the Sig=000 which mean to a reject the third hypothesis.

Table 6. T-test results for the third hypothesis and its sub-hypothesis from the perspective of the respondents

Hypothesis	df	Sig	Result
How does the high levels in the bank enhance the role of accounting information systems, which mean increase the efficiency in facing the fraud that the bank may face.	154	000	Rejection

the fourth hypothesis

The fourth hypothesis “What is the role of high levels In the bank in applying the corporate governance in order to give independency to internal auditors and accounting information systems?” was checked using T-test as shown in Table 7 below with the results indicating a higher Sig=0.000 than its stipulated value hence the rejection of the second hypothesis.

Table 7. The result of the fourth hypothesis’ T-test and its sub-hypotheses in the perspective of respondents

Hypothesis	df	Sig	Result
What is the role of high levels In the bank in applying the corporate governance in order to give independency to internal auditors and accounting information systems?	154	000	Rejection

5. Conclusions and recommendations

The auditing program includes participating banks' executive procedures sets achieving internal audit efficiency the interest if the banks in providing such procedures are shown. Also according to the results we note there is a great role for high levels in enhancing the effectiveness of internal auditors specially in matters related to fraud detection which mean more efficiency in assess and reducing the electronic fraud in banks.

The internal auditors also take in consideration the risks that may face the banks ,and according to these risk they try to improve the procedures in order to deduct these electronic frauds.

The results also showed that the high levels has great role in enhancing the independency of the internal auditor by enhancing the concept of corporate governance, in order to make internal auditors work free of pressures which mean more efficiency in assessing and deducted electronic fraud

4.3.4 Recommendations

Jordanian commercial banks' high levels recommendations include internal auditing followed procedures' implementation for effectiveness. Much attention is required from the board of directors to verify the independency of internal auditor. It is also very important to enhance the internal auditors skills in information technology, in order to increase there abilities in facing risk and electronic fraud, and this will never achieved without the management motivation and through training courses related to computer fraud specially in financial electronic fraud.

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