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Evaluating the Reliability of the Internal Control on the Computerized Accounting Information Systems: An Empirical Study on Banks Operating in Jordan.

Eman Al Hanini

Associate Professor, Department of Accounting/ Faculty of Business Balqa Applied University Al Salt- 19117 Jordan *Email: hanini_bau@yahoo.com

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Abstract

This study aimed to evaluate the reliability of the internal control methods on the computerized information systems in banks operating in Jordan. And to achieve this aim, a questionnaire was designed and distributed to the random sample of the study which consisted of 50 respondents of the managers and the employees of the computer units and the branches' managers and the financial managers in the banks operating in Jordan.

After the questionnaire items had been analyzed using the Statistical Package for the Social Sciences(SPSS), it was concluded that the methods of the internal control used in the banks operating in Jordan were reliable because they met the requirements of the availability principle of the system; they adopted policies and control and precautionary procedures to reduce the system's downtime as possible, they met the requirements of the security principle of the system through the protection against the physical and logical access and the protection of the personal computers and the networks. And they also met the requirements of the principle of the system, and the use of the proper procedures of documentations and finally they met the requirements of integration where the banks adopted control procedures on the sources of data, the input , the processes , the outputs and the transfer operations .

The researcher recommended the importance of the participation of the different categories of employees in developing and adjusting the accounting information systems and the bank's concentration on raising the employees' awareness of the importance of the control procedures and their goals before being trained to follow them. The researcher also recommended applying the responsibility accounting principle in the control of the systems inside the bank where the committed employees are awarded and the uncommitted ones are penalized.

Keywords: availability, computerized accounting information systems, integration, possibility of maintenance and adjustment, reliability, security,

1. Introduction

The computerized accounting information systems in the Jordanian banks are considered major basis of providing the necessary information to make decisions where these systems supply different categories of beneficiaries with their needs of information and financial statements which they need in planning, controlling, making decisions and evaluating performance. These information and the financial statements, which represent the outputs of the computerized accounting systems, are characterized of being more understandable where information are presented in sequence, and they are more appropriate for decision- makers through presenting them in the suitable time and with a high degree of reliability and they are more neutral and comparable (Rahahla&Syiam,2006).

The computerized accounting information systems organize the bank's work in an appropriate way achieving a competitive advantage through implementing its affairs with less mistakes, accelerating speed of providing the services, reducing the costs, improving planning and administrative control, having new markets opened(Al-kri,2005) and achieving a long term and distinguished financial performance for that bank.

The computerized accounting information systems interact with the surrounding environment with mutual effective relations and these systems were classified within the open systems that overlap and interact with environment as the elements of the organizational interaction of the accounting information systems are presented by the inflows into the system which are presented in the primary data coming from other systems within the scope of the bank and the changes which are posed by the technological, economic and legislative events while the accounting information represented the outflows of the system into the surrounding

environment (Abdalla and,Katanani,2007,4).

So the computerized accounting information systems face many security threats and there was a need to protect data and information which losing or changing or even reading them may cause many problems as being exposed to threat, abuse and face physical and moral loss where it becomes necessary that the administration of the bank develops strong internal control's systems characterized by reliability and provides a sufficient guarantee to protect the systems of accounting information from any internal or external threat so as to keep the quality of these systems' outputs to participates efficiently in achieving the bank's aims.

And this study aims to evaluate the impact of reliability of the internal control's systems' methods on the computerized accounting information systems in the banks operating in Jordan and which they work basically on protecting the inputs, processors, outputs and the instructions related to the computerized accounting systems from any unauthorized use represented either by reading or copying or damaging or manipulating or any other behavior may damage, intentionally or not, the systems and these behaviors provide the beneficiaries with wrong information causing inappropriate decisions that may affect negatively the banks' achievement of its aims and its financial performance which may lead to bankruptcy.

2. Significance of the study

The banks face great challenges concerning on protecting the computerized accounting systems from internal and external risks that threatened appropriateness, reliability,content safety and the integration and confidentiality of the accounting information so the banks' administration should adopt control systems and methods that provide protection to these systems and make preventive methods that help in discovering the risks which threaten these system before occurrence.

And this is the first study according to the researcher's knowledge that addressed evaluating the impact of the internal control systems on the systems of the computerized accounting information systems in the banks working in Jordan.

3. Objectives

This study aims basically to evaluate the impact of reliability of internal control's systems' methods on computerized accounting information systems in banks operating in Jordan and the study also aims to achieve the following sub-aims:

- 1- Identify the extent to which internal control's methods over the computerized accounting information systems in the Jordanian banks provide the systems with requirements of availability principal.
- 2- Identify the extent to which internal control's methods over the computerized accounting information systems in the Jordanian banks provide the systems with requirements of security principal.
- 3- Identify the extent to which internal control's methods over the computerized accounting information systems in the Jordanian banks provide the systems with requirements of Maintenance and adjustment principal.
- 4- Identify the extent to which internal control's methods over the computerized accounting information systems in the Jordanian banks provide the systems with requirements of integration principal.

4. Problem of the study

The internal control's procedures of the computerized accounting information systems followed in these banks are considered more important than those followed in the manual accounting information systems or even the followed computerized accounting systems in other companies because they processed a large amount of computerized data using the computer and they perform special functions repeated and non-repeated regarding the rights of depositors, shareholders, customers and others which so the bank's administration should make its effort to check the safety of the entry, registration, processing and reports preparation. The bank also should check the ability of identifying the threats and possible risks that may face the computerized accounting information systems' security and taking the necessary preventive procedures by designing internal control's system characterized by reliability because if the internal control's system is not so in light of globalization era, the bank and the parties whose decisions depend on the bank's information will be harmed. The problem of the study can be formed by the following questions:

1- Do internal control's methods on the computerized accounting information systems in the Jordanian banks provide the requirements of availability principal to the systems ?

- 2- Do internal control's methods on the computerized accounting information systems in the Jordanian banks provide the requirements of security principal to the systems ?
- 3- Do internal control's methods on the computerized accounting information systems in the Jordanian banks provide the requirements of Maintenance principal to the systems?
- 4- Are the internal control's methods on the computerized accounting information systems in the operating banks in Jordan characterized by integration?

5. Theoretical frame and Previous studies

The American institute of certified accountants defined the internal control through standard (1) as the organizational plan, coordinating mean and the measurements followed in the project to protect its assets and to control and audit the accounting data. Internal control encourages the employees to adhere to subjective administrative policies (AICPA, 1987,66).

The internal control in the banks aims to ensure the reliability of information (Al-Sahn and others,2006,25) and to achieve these objectives, the internal control performs its tasks through three types of control:

- 1- Preventive control that predicts the problems and the expected threats.
- 2- Detective control that discovers the problems earlier and solves them.
- 3- Corrective control that includes a set of procedures that identify the cause of the problem and correct the aspects of shortage (Romney and Steinbert, 2003, 195).

So the change of the accounting system in the banks from manual systems to the computerized ones make the design of the control's procedures over these system more complicated and important because of the following reasons: the absence of input documents where data are inserted without documents that support them as in the cases of cash deposit in the banks, the computers' ability of storing great amount of information using means that do not take space compared with records and books(Qasem,2003,356), shortage of random mistakes compared with the increase in the systematic ones because of the electronic operation(Al-Kabani,2003,285), the computer's viruses that affect the work of the computer's system and stealing money through withdrawing and transferring balances from one account to another(Al-Samerai and Al-Zobi,2004,244).

The American institute of the certified accountants (AICPA) and the Canadian Institute of Certified Accountants developed a system to evaluate the internal control of the accounting system called Sys Trust representing an independent test aimed to check the system's reliability and to serve all the beneficiaries as management, clients and others where this system depends on four basic principles:

- a- The system's availability of operation and use in different times that includes basically reduction of the time of the system's downtime, the design of the plans to face disasters and working on avoiding data loss and reducing the expected loss as possible.
- b- The system's availability of security through performing necessary controls' activities represented by the control over the physical and logical access and the protection of personal computers and e-commerce processes.
- c- Possibility of maintenance and adjustment whenever the systems is in need through controls' procedures over developing the project and the administrative changes.
- d- Integration of system's control over the computerized accounting systems includes control procedures concerning data resources, input and data processing operations, outcomes and reports(Romney and Steinbert, 2003)

The researcher did not find any study addressed directly evaluating the impact of the reliability of the internal control's methods on the accounting information systems in the banks or in any other sector, where some of these previous studies aimed at studying the efficiency and the effectiveness of computerized accounting information systems in the process of making decisions for the effect of these systems in identifying the problem, developing substitutes and controlling (Al-Mahasna,2005)(Al-Nadari,1990) whereas other studies addressed the impact of using information technology and systems on the integrated banking services in the Jordanian banks because these system support the bank to achieve the competitive advantage through providing integrated banking services with less cost and best performance (Sabah Hilo,2000). And other studies as (Naesa and Khamis,2009),(Al-kabi,2004) and (Al-Rashid,1999) assured the importance of computerized accounting

systems in improving the administrative and financial performance of the banks and the investment decisions. While the study of Santhanam and Hartono (2004) used some financial indexes to measure the financial performance of the companies which applied computerized accounting systems and compared them with other companies that did not use such systems. The researchers found that there was a relation between the company's adopting of computerized accounting systems and the financial performance of these companies.

One of the recent studies that addressed the internal control's systems is a study by Ghneimat and Syiam(2011) entitled by: "Effective elements in the efficiency of the internal control's systems in the Jordanian ministries", which aimed to identify the effective elements in the efficiency of the internal control's systems in the Jordanian ministries and the most important obstacles hindering these systems' efficiency. A questionnaire was distributed to 126 managers and employees who work in internal control's departments in the ministries. The study showed that the most influential elements in the efficiency of the internal control's systems is the accounting system and its components and the computerized means used at work while the least influential one was the employees' efficiency and performance ' control in addition to the most important obstacles that hinder these systems which are leadership's weakness and lack of legislations.

A study by Hildni and Al-Anan(2010) entitled by: "Internal control's role in light of electronic accounting information system ", that aimed at identifying the internal control and its methods to reveal the extent of its participation in achieving the banking safety in light of electronic accounting information system. The study revealed the need to an effective internal control that keeps up with development in the field of information technology that facilitates its integration with administrative and financial systems. The study also revealed that there is a statistical significant moral role of general control's methods and control over applications in achieving reliability of information prepared by banks.

And a study of Zweilf(2009) entitled by: "Nature of threats of electronic accounting information systems' security," aimed to shed light on threats facing security of electronic accounting information systems and to identify extent of its existence in the Jordanian insurance companies. The results showed that the most important threats represented by: employees' unintentional entry of wrong data, employees' unintentional damage of data and guiding wrongly the outcomes to unauthorized people to receive them.

Abo-mosa's study (2006) which is entitled by: "Examining risks concerning computerized accounting systems in the developing countries: field study on Saudi organizations", aimed at identifying the risks that threaten computerized accounting systems in Saudi companies. And the study concluded that the intentional or unintentional wrong entry of data, unintentional damage of data, the employees' share the password and the viruses' entry into the devices are considered as the most important risks facing computerized accounting systems and there is no difference attributed to the type of the company or the economic sector it belongs to.

Witman's study (2003) which is entitled by: "threats of information security", which aimed to identify risks facing information security, their degree of danger and number of occurring monthly in the American companies. The results revealed the existence of real and dangerous risks and it is difficult to protect the systems which are exposed to threats. The study focused on the administration role of paying attention to these threats and work on increasing their awareness in the field of understanding information security and the its surrounding environment.

A study by Warren(2002) entitled by: "Security Practices" aimed at studying the problems facing information system in a sample consisted of Australian, English and American companies. The study revealed that the system's most important in information system in the English and Australian companies was weakness of technological security procedures and deliberate wrong entry of the financial data in the American companies.

This study is distinguished for its aim; it aims at evaluating the reliability of internal control's methods on the computerized accounting information systems in the banks operating in Jordan because of the importance of providing the necessary protection to these systems from the possible threats and risks inside and outside the bank and because of what these systems achieved of the competitive advantages to the banks which are represented in improving the administrative and financial performance and in the increase of integration and quality of banking services presented to the clients and achieving the interests of different categories of Beneficiaries as administration, clients, employees, shareholders and others. This study, according to the researcher's knowledge, is the first one which addressed this topic.

6. Hypotheses

Major hypothesis: the system of internal control does not provide the reliability requirements on the computerized accounting information systems in the Jordanian banks.

The first null hypothesis: the methods of internal control do not provide the availability requirements of the systems on the computerized accounting information systems in the Jordanian banks.

The second null hypothesis: the methods of internal control do not provide the security requirements of the systems on the computerized accounting information systems in the Jordanian banks

The third null hypothesis: the methods of internal control do not provide the maintenance and adjustment requirements of the systems on the computerized accounting information systems in the Jordanian banks.

The fourth null hypothesis: the methods of internal control do not provide integration requirements of the systems on the computerized accounting information systems in the Jordanian banks.

7. Sources of collecting data

- 1- Secondary sources represented by books, studies and previous articles related to the subject of the study.
- 2- Primary sources represented by personal interviews with some managers of computer departments and branches' departments of banks operating in Jordan and by a questionnaire that is consisted of 46 items designed according to Lickert's scale.

8. Population and sample of the study

The population of the study consisted of all managers and employees of the computer's departments, the branches managers and the financial managers in the banks operating in Jordan. Sample of the study which was selected randomly consisted of 50 respondents from different categories of the population of the study. The sample of the study is described in the following table:

Gender	N	Percent
Male	47	94%
Female	3	6%
Scientific major	Ν	Percent
Business administration	8	16%
Accounting /finance	10	20%
Computer	26	52%
Accounting information systems	6	12%
Experience	Ν	Percent
Less than 5 years	5	10%
5-10 years	19	38%
11-15 years	23	46%
More than 15 years	3	6%
Job title	N	Percent
Manager of computer department	11	22%
Employee in the computer department	23	46%
Financial Manager	6	12%
Branch manager	10	20%

Table(1):sample	of the	study
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9. Statistical analysis

The researcher used the following statistical methods in analyzing data and testing the hypotheses according SPSS program:

1- Testing reliability of tool of the study

The questionnaire was arbitrated by three academic staff who teach courses of accounting information systems to check the reliability of the questionnaire where Cronbach Alpha was used to measure the internal reliability of the questionnaire's items and the internal consistency between respondents' reactions where Alfa value was 88% and it is a good percent and its results can be generalized because it is higher than acceptable percent 60%.

2- Normal Distribution (Kolmogrov- Smirnov):

Normal distribution was used to test the extent to which data followed the normal distribution and the results showed that data were distributed normally where Z value of all the hypotheses bigger than level of significance 5% as it illustrated in the following table:

Table (2): Normal Distribution Test						
Hypothesis Major First Second Third Fourth						
Sig. Z	2.204	2.254	2.313	2.079	2.068	

3- Testing the hypotheses

The hypotheses were tested using One Sample T-Test at level of significance 5% and according to decision rule the hypothesis is accepted if value of calculated T is less than the value of tabulated one.

4- Descriptive analysis method which includes frequencies, means and standard deviation was used to accept or reject items of the hypothesis and the results were as follows:

10. Testing the hypotheses

Major hypothesis:

The methods of internal control over the computerized accounting information systems in the Jordanian banks do not provide requirements of reliability and this hypothesis was tested through all the items of the questionnaire, and the results were as follows:

Mean	Result	Sig. T	T tabulated	T calculated
4.01	Rejection	0.00	1.96	31.32

Table (4): Results of major hypothesis

Because calculated T is bigger than tabulated T, the null hypothesis is rejected and the alternative one is accepted which indicates that internal control's methods over the computerized accounting information systems in the Jordanian banks provide requirements of reliability.

First hypothesis: the internal control's methods over the computerized accounting information systems do not provide requirements of availability principal for the systems and this hypothesis was tested through items(1-8) of the questionnaire and the results were as follows:

Table(5): Results of testing first hypothesis					
Mean	Result	Sig. T	T tabulated	T calculated	
4.03	Rejection	0.00	1.96	29.923	

Because calculated T is bigger than tabulated T, the null hypothesis is rejected and the alternative one is accepted which indicates that internal control's methods over the computerized accounting information systems in the Jordanian banks provide requirements of availability principal to the system. The following table shows mean and standard deviation of every item ordered ascending according to its mean:

Ν	Item	Mean	Std
8	Employees are trained on special procedures concerning reducing the time of system's stop as possible.	4.28	.560
2	The bank makes preventive maintenance to the computerized information system periodically and regularly.	4.18	.438
3	There is a substitute electric supplier that reduces time of the system stop to least possible time.	4.08	.560
5	The banks makes appropriate procedures of insurance to reduce loss of system when it stops.	4.08	.444
1	The bank adopts policies and procedures for fast dealing with computerized accounting information system's mistakes to achieve a continuous availability to the system.	4.06	.316
7	Employees are trained to make substitute copies of the programs.	3.98	.377
4	The bank adopted plans for facing the unexpected disasters to help the bank retrieve data and information when there is a need.	3.88	.480
6	Substitute copies are prepared and kept in safe places.	3.76	.625

Table (6): Items of first hypothesis

The previous table shows the respondents' positive attitudes towards providing internal control's methods over the computerized accounting information systems in the Jordanian banks the requirements of availability where mean for all the items was more than 3 and the standard deviation was less than 1 for most of the items. Second hypothesis: the internal control's methods of the computerized accounting information systems in the Jordanian banks do not provide the requirements of system's security principal, and this hypothesis was tested

Table (7) Results of testing second hypothesis					
Mean	Result	Sig. T	T tabulated	T calculated	
3.95	Rejection	0.00	1.96	29.176	

through items from(9-23) of the questionnaire. And the results were as follows:

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Because calculated T is bigger than tabulated T, the null hypothesis is rejected and the alternative one is accepted which indicates that internal control's methods over the computerized accounting information systems in the Jordanian banks provide requirements of security principal of the system. The following table shows mean and standard deviation of every item of the hypothesis:

	Table (8): Items of second hypothesis		
Ν	Item	Mean	Std
10	The bank takes appropriate procedures to make a separation between separating jobs of analysts, programmers and operators.	4.14	.452
23	Updating continuously the antivirus used in the computerized systems.	4.06	.470
15	The authorized employee to access into data uses ID and password.	4.06	.550
14	Authorized employees are allowed to access into data for addition or deletion or making the necessary modifications.	4.02	.553
17	Employees are trained on the procedures of protecting the personal computers.	4.02	.622
18	The bank takes special control procedures prevent transferring the computers outside.	4.00	.535
19	Sensitive data is kept in the main devices.	4.00	.571
16	The bank uses physical selector as fingerprints or eyes' to access into data.	3.96	.533
9	The bank uses appropriate procedures to separate duties, tools and functions of the system's administration from net administration.	3.94	.512
12	Employees of computer department use cards and ID for entry and exit of their work.	3.94	.586
20	Bank's administration trains employees on viruses' risks and ways of protecting them.	3.90	.544
13	The bank takes suitable steps to protect the main devices by keeping them away from danger and in fire resistant places.	3.90	.614
22	There is a special procedure in coding important data when communicating with other bets.	3.84	.618
21	Personal computers are programmed to be locked electronically after finishing work with a limited period of time.	3.80	.756
11	Major computers are kept in closed place and the authorized people are allowed to access in to it.	3.78	.582

Table (8): Items of second hypothesis

Previous table shows respondents' positive attitudes towards all second hypothesis's items where mean was bigger than 3 and standard deviation for every item was less than 1.

Third hypothesis: the internal control's methods of the computerized accounting information systems in the Jordanian banks do not provide the requirements of system's Maintenance & adjustment principal, and this hypothesis was tested through items from (24-29) of the questionnaire. And the results were as follows:

Table (9) Results of third hypothesis

Mean	Result	Sig. T	T tabulated	T calculated
4.02	Rejection	0.00	1.96	23.563

Because calculated T is bigger than tabulated T, the null hypothesis is rejected and the alternative one is accepted which indicates that internal control's methods over the computerized accounting information systems in the Jordanian banks provide requirements of maintenance & adjustment principal of the system. The following table shows mean and standard deviation of every item of the hypothesis:

Ν	Item	Mean	Std
26	The bank's administration uses special measures to evaluate the performance of system development	4.14	.535
24	The bank's administration makes sure of having detailed strategic plan to develop the system.	4.06	.586
25	The bank's administration cares of getting software and information system officially.	4.04	.450
28	The bank's administration makes sure that modifications of the system happened in the appropriate official way.	4.04	.570
27	Bank's administration reviews periodically the computerized accounting systems to identify the modifications that should be done.	3.96	.493
29	Make sure of documentation when change happens.	3.88	.689

Table (10): Items of third hypothesis

Previous table shows the respondents' positive attitudes for all the hypothesis items where mean was more than 3 and standard deviation was less than 1.

Fourth hypothesis: the internal control's methods of the computerized accounting information systems in the Jordanian banks do not provide the requirements of systems integration principal, and this hypothesis was tested through items from (30-46) of the questionnaire. And the results were as follows

Table (11) Results of test	ing fourth hypothesis
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Mean	Result	Sig. T	T tabulated	T calculated
4.04	Rejection	0.00	1.96	21.941

Because calculated T is bigger than tabulated T, the null hypothesis is rejected and the alternative one is accepted which indicates that internal control's methods over the computerized accounting information systems in the Jordanian banks provide requirements of integration principal of the system. The following table shows mean and standard deviation of every item of the hypothesis:

Table (12): Items of fourth hypothesis			
Ν	Item	Mean	Std
44	The sensitive outputs are protected from unauthorized access.	4.20	535
42	The compatibility between inputs and outputs are reviewed daily.	4.18	.560
46	There are control procedures for protecting information when they are transferred via nets as coding and checking of the transmission.	4.12	.689
41	All the system's outputs are revised in terms of logic and formation accuracy.	4.10	.614
43	Computer's reports are distributed into the appropriate users.	4.08	.396
31	Control over documents exists in all stages as designing, implementing and insertion.	4.08	.528
39	Files of data are named with appropriate names.	4.08	.634
35	Make sure of the computer's response to every item of the inputs	4.08	.665
38	Make periodically the settlements' procedures between sub accounts computerized information systems.	4.06	.424
33	Fields' frequency and their capacity are reviewed and high and low limits are examined to check the reliability and accuracy of the inputs	4.04	.533
36	Computerized accounting information systems includes a pointer appeared as a message whenever something wrong happened in input process.	4.00	.535
32	There are special tests to make sure of the integration of input data to check data validity before processing.	4.00	.571
37	There are policies and procedures concerning steps of processing and storing for computer's operators.	3.98	.515
40	There are policies and procedures concerning steps of processing and storing for computer's operators.	3.98	.622
30	Banks' administration develops procedures to make sure f the completion and accuracy of documents that represent sources of data.	3.94	.712
45	Any mistake in the outputs is corrected when it is discovered.	3.0	.678
34	Data is inserted by authorized people.	3.86	.756

Previous table shows the respondents' positive attitudes for all the hypothesis items where mean was more than 3 and standard deviation was less than 1.

11. Results

After using the appropriate statistical analysis, the study came up with the following results:

1- Methods of Internal control of computerized accounting information systems in operating banks in Jordan provide the requirements of availability; the bank makes a preventive maintenance of the computerized accounting systems Periodically and regularly, it uses the appropriate procedures of insurance in the insurance company to reduce the system's stop's loss and it adopts fast procedures to deal with system's mistakes in case they occur, it designs plans for facing unexpected disasters, it trains employees to use specific procedures to reduce time of the system's stop and to make substitute copies.

- 2- Methods of Internal control of computerized accounting information systems in operating banks in Jordan provide the requirements of systems' security; the banks in Jordan carry out appropriate procedures to separate functions, they are also protect the system from physical and logical access (e.g using password)from unauthorized people through keeping the major computers in indoor fire resistant places, taking necessary procedures to prevent unauthorized employees to access into the computer, adopting strategies concerning in addition to take some control procedures regarding the employees' personal computers as using electronic lock. the banks also train their employees on updating antivirus continuously.
- 3- Methods of Internal control of computerized accounting information systems in operating banks in Jordan provide the requirements of systems' maintenance and adjustment where banks prepared a special plan at developing or modifying the systems and revise them periodically in addition to make the necessary documentation for the processes of development and modification.
- 4- Methods of Internal control of computerized accounting information systems in operating banks in Jordan provide the requirements of integration where the bank's administration makes sure of the documents' accuracy and completion and carries out special test to make sure of its integration. And the banks' operating administration adopted policies and procedures of processing and storing steps implemented by the computer's operators, carried out periodical settlement's procedures, revised the system's outputs in terms of their compatibility with inputs, logic and formation accuracy.

12. Recommendations

The study recommended the following:

- 5- The banks' administrations allow the largest number of their employees to participate in developing the computerized accounting systems and designing the system's control's procedures so as the these employee's satisfaction and their ability of using the system will be increased affecting positively their performance and the bank's performance.
- 6- To aware the banks' employees in general and who work in computerized accounting information systems in particular of the importance of compliance with control's procedures of system's protection and the risks facing these systems before they were trained on these systems.
- 7- To activate the banks' application of the responsibility accounting principal where the banks control the employees' performance and their extent of applying the control's procedures. The administration rewarded the committed employee and questioned the uncommitted one.
- 8- Banks keep up with the technological development concerning providing the largest amount of reliability to the internal control's systems over the accounting information systems.
- 9- Studying the relation between the banks' employees' compliance with control's procedures over the accounting information systems and between these banks' performance, studying the relation between internal control's methods over accounting information systems in banks operating in Jordan and the profits of these banks.

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