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## THE IMPACT OF INTERNAL AUDIT ON THE EFFECTIVENESS OF BANKING RISK MANAGEMENT (APPLIED STUDY ON A SAMPLE OF IRAQI BANKS)

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### ABSTRACT

In light of the scientific and technical progress in all aspects of life, banks need a control and auditing system to protect them from the risks they are exposed to as a result of their diverse financial dealings, to reduce or avoid losses and maintain and support banks to carry out their work in a way that enables them to achieve a competitive advantage. The problem is embodied in the extent of the contribution of internal auditing in how to manage banking risks and demonstrate their effectiveness in banks. It aims to stand on the reality of internal auditing and the extent of its application in Iraqi banks, with the importance of identifying the functions of internal auditing in auditing, evaluating and following up on the efficiency and effectiveness of risk management procedures based on the risk-based auditing approach. In addition to the commitment to applying the standards, principles and guidelines issued by the Institute of Internal Auditors or issued by the International Organization for Banking Supervision that govern the performance of the internal auditor and help him identify obstacles and find solutions to support and succeed in risk management in the two banks. The research sample used the questionnaire in the practical aspect to show the effectiveness of internal auditing in managing banking risks and to come up with a number of recommendations, the most important of which are: Continuing work to enhance and develop the skills and knowledge of internal auditors by holding training courses on how to deal with banking risk management to enable them to perform their work effectively, and for

banking institutions to support the components of the independence of the internal auditor to perform his work efficiently.

## KEYWORDS

Internal Audit, Banking Risk Management.

## INTRODUCTION

The business environment is facing rapid changes that have significant impacts on organizations around the world. In response, these organizations are developing themselves and improving their risk management methods to obtain appropriate and reliable information to achieve their goals. In light of these changes, the financial community considers the internal auditor the most qualified in how to manage risks due to the knowledge, experience and skills he possesses that qualify him for this. Accordingly, the internal auditing profession has witnessed major developments since the end of the last century and the beginning of the current century, especially in the United States of America after the issuance of the new concept of internal auditing by the Institute of Internal Auditors, which includes expanding the tasks of internal auditing in addition to evaluating and improving the effectiveness of risk management. The basic feature that governs the activity of banks is how to manage, measure and disclose risks in a way that allows for judging the extent of the bank's ability to

manage and control risks, and then predicting the quantitative and qualitative risks that the bank may be exposed to in the future and making investment decisions and other decisions related to their transactions with the bank.

## METHODOLOGY

### Research Problem

The research problem is embodied in the extent of the contribution of internal auditing in how to manage banking risks and demonstrate their effectiveness in banks?

### Research Importance

The importance of the research is highlighted in identifying the functions of internal auditing in auditing, evaluating and following up on the efficiency and effectiveness of risk management procedures based on the risk-based auditing approach, in addition to the commitment to applying the standards, principles and guidelines issued by the Institute of Internal Auditors or issued by the International Organization for Banking Supervision that govern the

performance of the internal auditor and help him identify obstacles and find solutions to support and succeed in risk management in the two banks that are the research sample.

## Research Objectives

The research seeks to achieve a set of objectives, the most important of which are:

- 1- Standing on the reality of internal auditing and the extent of its application in Iraqi banks.
- 2- Knowing the importance played by risk management in Iraqi banks.
- 3- Knowing whether there is a special interest for auditors in Iraqi banks.
- 4- Highlighting the essential role played by internal auditing in the departments of institutions.

## Research Hypothesis

There are several hypotheses for the research, including:

- 1- There is no statistically significant relationship at a significance level of 0.05 between internal auditing and banking risk management in Iraqi banks.
- 2- There are no statistically significant differences at a significance level of 0.05 between the opinions of employees in Iraqi banks about internal auditing attributed to the job position.
- 3- There are no statistically significant differences at a significance level of 0.05 between the opinions of employees in Iraqi banks about banking risk management attributed to the job position.

## Research Methodology

This research relied on the descriptive approach in the theoretical aspect, and the analytical approach in the applied aspect through a field study of a sample of Iraqi banks represented by Rafidain Bank and Rashid Bank.

## Internal Auditing and Banking Risk Management

### 1- The Concept of Internal Auditing

Auditing is primarily defined as the examination of basic information or data by an independent and neutral person for any institution regardless of its objective, size or legal form. The American Federation of Accountants has defined auditing as: organized procedures for obtaining evidence related to economic statements and events and evaluating them objectively, to determine the degree of relationship between these statements and conveying the results to the beneficiaries (Zouzi, 2015: 6).

Auditing is also defined as: an independent evaluation activity within the facility that aims to examine, evaluate and achieve accounting, financial and other operational aspects, carried out by an internal body independent of the facility's management, to demonstrate the effectiveness of procedures, measure performance and achieve the objectives of internal control methods (Issa, 2014: 6).

The Institute of Certified Public Accountants (AICPA) defined it as: reviewing the operations and restrictions that are carried out on an ongoing basis, as they are implemented by persons appointed according to special conditions (Al-Madhoun, 2011: 13).

Auditing is also defined as the process of examining the accounts of an economic unit, as well as examining the data and documents of this unit, and it is an organized critical examination to ensure their accuracy and in a manner that enables the auditor to submit his report on the extent to which the financial statements represent the financial position and the results of business in a specific period (Ghosh & another, 2016: 6). It is also defined as "a review of the accounts of a company that includes studying its work and the systems followed in carrying out its operations and the method of control and supervision over it and examining its records and final accounts and verifying its assets and liabilities or verifying any other financial statements with the aim of verifying that the accounting work carried out by the audit certificate represents the company's financial operations correctly to help management in making sound economic decisions (Al-Maghribi, 2018: 16).

The concept of auditing can be defined as is the examination, verification and reporting of information by a competent and independent person to obtain evidence related to management's assertions regarding the company's financial and non-financial data in order to express an opinion on the reliability of this data and its reliance by the beneficiary parties in making their sound investment and economic decisions.

## 2- Types of Internal Audit

There are many types that fall under the framework of internal audit, which are as follows (Zouzi, 2015:6):

- 1- Financial Audit: It means analyzing the economic activity of the institution and evaluating the accounting systems, information systems and financial reports, and the extent of reliance on them.
- 2- Compliance Audit: It means reviewing the regulatory, financial, operational and operational controls to judge the quality and suitability of the systems that have been put in place to ensure compliance with regulations, legislation, policies and procedures.
- 3- Operational Audit: It means a comprehensive review of the various functions within the facility, to ensure the efficiency, effectiveness and suitability of these functions by analyzing the organizational structures and evaluating the efficiency of other methods used to judge the extent to which the facility's objectives are achieved through these functions.
- 4- Administrative Audit: It includes the process of evaluating the quality of the risk management and control method within the scope of the facility's objectives.

## 3- Internal Audit Standards and Procedures

### 1- Internal Audit Standards

The International Institute of Internal Auditors (IIA) defines standards as: A general framework that governs the function or the standards and rules that are relied upon in evaluating and measuring the audit

department's operations, as the standards represent a model for practicing internal auditing, and these standards can be divided into two categories: attribute standards (general) and performance standards, as follows:

1- Attributes of (General) Standards: Meyer addresses the attributes (Series of Two Thousand) that include the characteristics of organizations and individuals who practice internal auditing activities.

2- Performance Standards: Performance standards (two thousand series) classify internal audit activities and the standards through which that entity performs (Halima and Basheera, 2018: 15).

Attribute standards and performance standards apply to internal audit services in general, and the table below shows these standards:

Standard Number	Attribute Standards	Standard Number	Performance Standards
1000	Purpose, Authority and Responsibility	2000	Managing the Internal Audit Activity
1100	Independence and Objectivity	2100	Nature of Work
1200	Due Professional Skill and Care	2200	Planning the Internal Audit Task
1300	Quality Assurance and Improvement Program	2300	Performing the Internal Audit Task
---	----	2400	Communicating Results
----	----	2500	Monitoring Workflow
----	----	2600	Communicating Risk Acceptance

Source: Prepared by the Researcher

2- Internal Audit Procedures

There are some steps followed when conducting the internal audit process, which are as follows:

1- Clear Definition of the Objectives of Internal Control:

General objectives are often determined by the general management of the bank, and although

each facility has its own characteristics and objectives, they do not differ much from the basic objectives that grant internal control to achieve the following objectives, including:

- Maintaining insurance.
- Improving the effectiveness and quality of services.



- Ensuring that the objectives set by senior management are fully achieved (Radwan, 2012: 24).

**2- Using the Procedures Manual:** It is considered an effective means of controlling operations and correct implementation, especially since the banking activity has a high degree of risk, so individuals and officials must be directed to implement less risky banking operations. To ensure the effectiveness of the procedure's manual, it must be characterized by the following:

- A. Clarity and comprehensiveness in its content.
- B. It must be available to all concerned.
- C. Accuracy in its implementation.
- D. Periodic review of the content of the manual (Google search for the source).

**3- Separation of Functions:** One of the characteristics of internal control is to ensure the separation of heterogeneous functions, i.e. in other words, the separation between each of:

- A. The tasks of authentication and authorization, which are often undertaken by certain persons from the general administration.
- B. Tasks specific to the implementation of banking operations, including accounting, treasury, etc.
- C. The tasks of monitoring and auditing all operations and procedures, and since the latter are multiple, it is not possible

This feature disappears in banks that rely on an automated system to implement their operations,

although it has a high degree of efficiency in processing data and prevents the separation of the functions of authentication, accounting registration and control.

**4- Objectivity in Accounts:** The account is a necessary tool for banking transactions through which all accounting and financial operations are implemented. Accordingly, there must be a system that explains the nature of the accounts to avoid the risks to which the bank is exposed, which contains unjustified accounts, which require, over time, to transfer them to the bank as profit or loss. According to the internal control procedures, the responsibility for each category of accounts in the bank is separated, and each department bears the responsibility of justifying the assets and movements classified in its account category.

**5- Effective Internal Audit:** Internal control ensures that operations are implemented in a manner consistent with the bank's internal procedures, as it ensures its implementation (self-control), or through management (internal control procedures), and also ensures the application of rules and procedures in an effective and efficient manner that ensures an effective internal audit, otherwise it causes a defect in the bank's accounting system.

Accordingly, the internal auditor is distinguished by several matters to implement an effective internal audit, which are as follows:

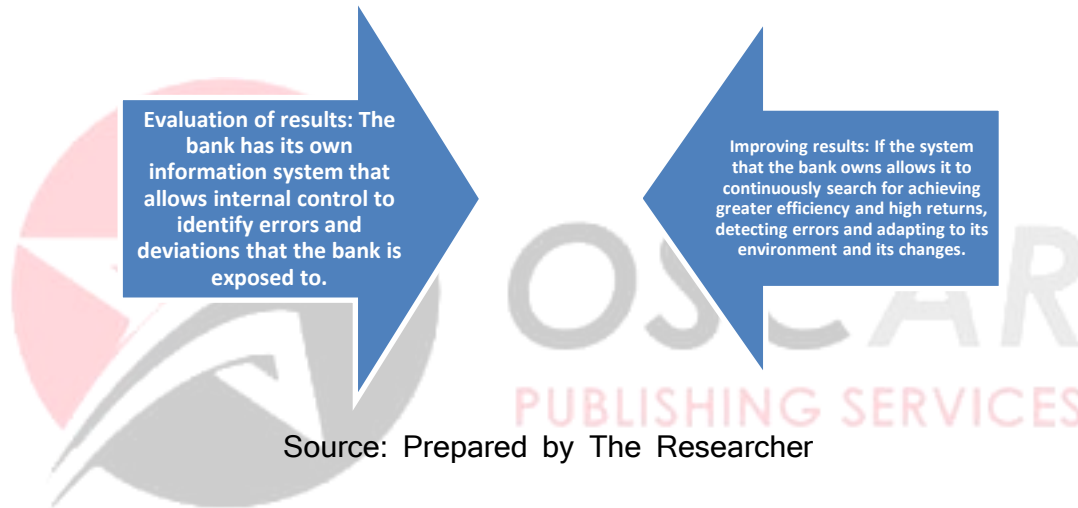
- A. Independence of the audit function within the bank or bank.

- B. Comprehensiveness of the audit.
- C. Taking into account the internal organization for the benefit of the audit.
- D. Selecting auditors with competencies and experience in applying audit standards in an efficient and effective manner.

Accordingly, internal audit helps to identify the risks surrounding it in the bank or bank.

**6- Efficiency of the Information System and**

**Performance monitoring:** Performance monitoring is defined as a set of techniques and systems that aim to estimate and improve the results achieved continuously, and this provides dual internal monitoring through the following:



Source: Prepared by The Researcher

**7- Qualifications and Efficiency of Individuals:** Despite the presence of automated devices, the banking activity depends on human resources in the daily registration process, providing services, and meeting customer and market requests, especially when competition increases between banks, all of which are factors that affect the effectiveness of internal control, as the best control achieved by the bank is when there is a human resource that possesses high efficiency, experience, and credibility when performing its work at the bank.

**4- The concept of banking risk management**

There are several definitions of banking risk management, including: It is the process of systematically thinking about all potential risks before they occur and setting specific procedures to limit these risks or limit their effects and how to deal with them, as this process enables identifying risks and preparing a strategy to control them (Ghania, 2015: 30). It is also known as an integrated system that aims to confront risks with the best means and at the lowest costs by discovering, analyzing, measuring and

determining the means of confronting the risk, while choosing the most appropriate means to achieve the desired goal (Valley, 2019: 22).

The Banking Regulation and Risk Management Committee, which is affiliated with the Financial Service Roundtable in the United States of America, defined risks as: the possibility of a loss occurring either directly through losses in business results or indirectly through the existence of restrictions that limit the bank's ability to achieve its goals and objectives, as these restrictions prevent the bank from practicing its activities and business on the one hand, and from exploiting the opportunities available in the banking work environment on the other hand (Hamid, 2014: 26).

## 5- Stages of Banking Risk Management

The risk management process must go through a logical series of steps that tend to merge with each other in practical reality, as follows (Khair, 2016: 15 and 16):

1- Objectives Report: The first step in the risk management process is a report that explains the banking risk management program and is accurate to obtain the maximum benefit from the expenses related to risk management, so an accurate plan must be developed to maintain the bank's survival and reduce the costs associated with pure risks such as worker injuries, and sometimes this step is ignored, so risk management efforts are disjointed and inconsistent.

On the other hand, the objectives and risk management are issued by the Board of Directors, so preserving the company's assets is their responsibility.

2- Identifying Risks: Before taking any action, the risks facing the bank must first be identified, as the bank manager must be fully aware of the risks facing him, as there are many tools to identify risks, the most important of which are: the organization's internal records, insurance policy checklists, risk analysis surveys, financial statement analysis, and other tools. The best approved approach to identifying risks is the integration method, by applying various risk identification tools, and from here the importance of an effective information system in the bank emerges. The process of identifying the risk is important for the bank to be able to measure, follow up and monitor the risk, because in some cases the distinction between risks is unclear, making it difficult to identify and measure them.

3- Risk Assessment: After identifying the risks, the risk manager must evaluate them by measuring the size of potential losses by arranging work priorities, and risks are classified into three groups: -

A- Critical risks: These are risks in which losses are likely and catastrophic and result in bankruptcy.

B- Significant risks: These are risks that do not result in bankruptcy, but rather expose the bank to borrowing to continue its activity.

C- Less significant risks: Exposure to these risks can be compensated for by relying on the



organization's current assets or income without causing financial distress.

Distributing the risk faced by the bank to one of these groups requires determining the amount of the financial loss and assessing the bank's ability to absorb such losses. This includes measuring the level of uninsured loss that can be borne without resorting to borrowing and determining the bank's maximum credit capacity.

4- Studying Alternatives and Choosing a Method for Dealing with Risks: This step is represented in how to use techniques to deal with risks. These techniques are represented by the following (Houriya, 2014: 46 and 47):

A- Avoiding or evading risks: This means abandoning any work that causes risks and limiting only to projects that involve the least risks to avoid them easily, and this technique has a negative nature for dealing with risks due to depriving the bank of many opportunities and its inability to achieve them.

B- Risk Reduction: Risks can be reduced either by preventing and controlling risks by relying on safety programs, or by using the law of large numbers by reaching more accurate estimates of future losses to which the bank is exposed by merging a large number of exposure units. This feature is used to deal with risks that involve relatively small losses.

C- Risk Retention: This is the most common method of risk conservation and dealing with it.

D- Risk Transfer: It means transferring the risk from one person to another who is more willing to bear the risk. During the transfer, the person takes the insurance premium and the insurance company bears the loss. This responsibility falls on the risk manager who studies the size of the potential risk and the extent of its likelihood of occurrence. Based on the available information and following the company's policies, the decision is made.

5- Implementing the Decision: The retention decision involves relatively certain losses that can be avoided with or without a reserve. However, if the decision is to prevent losses to deal with a specific risk, a program must be designed for that purpose, and the decision to transfer the risk must be followed by choosing the insurance company and holding negotiations to deal with it.

6- Evaluation and Review: The evaluation and review process are considered a necessary step in the banking risk management procedures for two reasons:

- First: (Risks change, so the methods used last year are different from this year).
- Second: (Conducting periodic evaluation and review allows the risk manager to review decisions and discover errors before they become costly).

The figure below briefly explains the stages of banking risk management, which are as follows:



Source: Prepared by the Researcher

**THE IMPACT OF INTERNAL AUDITING ON THE EFFECTIVENESS OF BANKING RISK MANAGEMENT (APPLIED STUDY ON A SAMPLE OF IRAQI BANKS)**

Research Community and Sample

**Rafidain Bank (Introduction)**

Rafidain Bank was established under Law No. (33) of 1941 and began its work on 5/19/1941 with a paid-up capital of (50) fifty thousand dinars. The bank went

through several stages during its historical journey, represented first by its presence as the first national bank to practice commercial banking among many foreign banks, and began to gradually expand within the country, then went through several stages of integration that began in 1964, including the commercial banks that were operating in Iraq, where in 1974 they were unified with Rafidain Bank, which

became the only commercial bank in Iraq, where it continued to work alone in the field of banking until 1988, which witnessed the establishment of another government bank, Rashid Bank, which began its work with the branches of Rafidain Bank, whose business was transferred to it.

Among its most important contributions:

- 1- Opening savings and current accounts in dinars and dollars.
- 2- Accepting fixed deposits of all kinds in dinars and dollars.
- 3- Financing loans for investment projects in various sectors and granting banking facilities.
- 4- Granting personal loans to employees and retirees.
- 5- Opening documentary credits and other contributions.

### **Rashid Bank (Introduction)**

Rasheed Bank was established under Special Law No. (52) in 1988 as an Iraqi commercial bank, to spread its branches throughout the governorates of Iraq, which are about (121) branches, and is subject to the Public Companies Law No. (22) of 1997.

Rasheed Bank is one of the leading government banks that provides its services in the field of commercial banking and investment of funds by providing financing to various sectors according to development plans and planning decisions. Credit activity represents the most important investment operations that it carries out and is one of the basic tasks for its growth,

and is subject to the controls of the Central Bank of Iraq and the supervision of the Financial Supervision Bureau and under the administrative supervision of the Ministry of Finance.

The most important needs that enhance mutual trust are:

- 1- Achieving the principle of financial inclusion by expanding the base with which the bank deals.
- 2- The human element is one of the important resources that the bank cares about and seeks to develop by involving it in training courses to develop its skills for the purpose of relying on it to develop banking work in order to keep pace with developments according to the best modern standards, which leads to making the bank one of the leading and distinguished banks.
- 3- Building relationships based on trust between customers and other banking institutions. Opening accounts and deposits of various types (current and savings, deposits, etc.) in Iraqi dinars and US dollars.
- 4- Contributing to financing strategic economic projects for various sectors and segments of society according to economic plans and state directions.
- 5- Buying and selling foreign currencies.
- 6- Stimulating economic growth by granting credits to categories that were not previously granted.
- 7- Spreading ATMs in our various branches in addition to malls and new targeted places.

**Testing Validity and Reliability of the Questionnaire Form:**



In order for the paragraphs of the questionnaire form to be consistent, compatible and appropriate to the study environment and for those paragraphs to be within the scope of the goal for which they were designed, they were tested as follows:

- A. Testing validity and reliability: This means the ability of the questionnaire to express the goal for which it was designed.
- B. Testing the stability of the questionnaire: This means that it gives the same results for the dates of its

application to the same study community after a period of time.

There are several statistical methods to show the validity and reliability of the questionnaire, including the alpha coefficient. If the alpha coefficient is more than (5%), this confirms the validity and reliability of the questionnaire scale. As is clear from Table (1), the (Cronbach's Alpha) coefficient reached (85%), which is greater than (5%), meaning that the questionnaire scale is characterized by validity and reliability.

**Table 1: Reliability and validity coefficient for each axis and for all axes according to the questionnaire form**

Axes and dimensions	Reliability	Validity
Axis One: Internal audit tasks in the bank	0.86	0.82
Axis Two - Dimension One / Determining banking risks	0.76	0.76
Axis Two / Dimension Two: Measuring and evaluating banking risks	0.85	0.82
Axis Two / Dimension Three: Addressing banking risks	0.89	0.84
Axis Two / Dimension Four: Monitoring banking risks	0.79	0.75
Total	0.87	0.84

Source: Prepared by the researcher based on SAS program, 2018

The previous table (1) shows the validity and reliability of the questionnaire scale for each paragraph of the

questionnaire, as it was shown that all paragraphs are characterized by validity and reliability.



The validity and reliability coefficient (Cronbach's alpha coefficient) was estimated using the equation below:

**Apparent validity calculation = 100 x (the total percentages of the paragraphs that the arbitrators agreed upon) / (number of arbitrators)**

**Presentation and analysis of the questionnaire results according to the descriptive statistical analysis:**

3-3-1 General/Demographic Information

In order to extract and analyze the results, the arithmetic mean was used, which is considered one of the most important measures of central tendency, and the standard deviation, which is considered one of the best measures of dispersion due to its accuracy and ability to be manipulated by algebraic operations. The equation for the standard deviation is: (Abdul Majeed, 2009: 69-97).

$$S = \sqrt{\frac{\sum f_i(x_i - \bar{x})^2}{n}}$$

Where:

(S): represents the standard deviation

(xi): represents the number of values

(fi): represents the frequencies

(n): represents the sample size

( $\bar{x}$ ): the arithmetic mean, which is calculated according to the following equation:

$$\bar{x} = \frac{\sum f_i x_i}{\sum f_i}$$

The average, weight and rank were calculated for each paragraph according to the sum of the numbers for each answer multiplied by the answer score that was determined according to importance (strongly agree = 5, agree = 4, neutral = 3, disagree = 2, strongly

disagree = 1) and then divided by the total number of samples, which was 30, and thus they were arranged from highest to lowest, and the Chi-square law is as follows:





$$(O - E)^2$$

$$\chi^2 = \Sigma \text{-----}$$

$$E$$

Where:

$\chi^2$ : Chi-square

$\Sigma$ : Summation

O: Observed No.

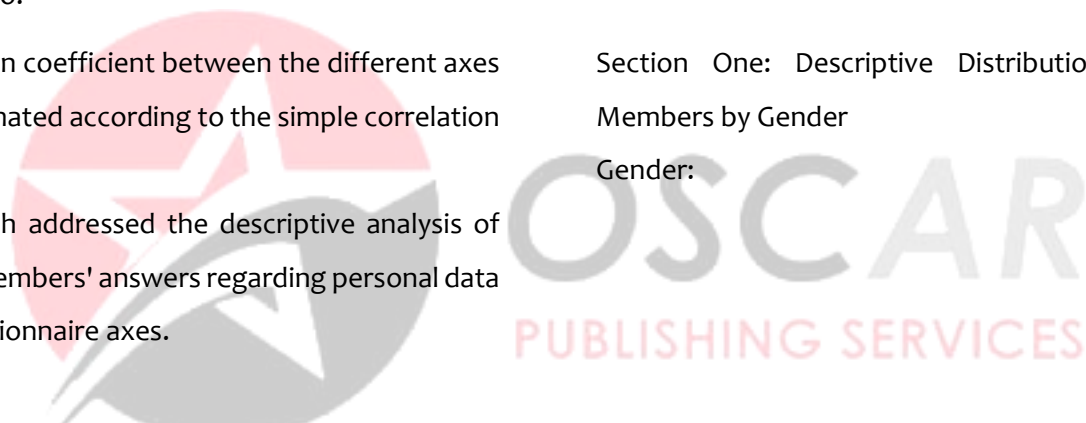
E: Expected No.

The correlation coefficient between the different axes was also estimated according to the simple correlation law.

This paragraph addressed the descriptive analysis of the sample members' answers regarding personal data and the questionnaire axes.

Section One: Descriptive Distribution of Sample Members by Gender

Gender:



**Table 2: Number and Percentage of the Questionnaire Sample Studied According to Gender**

Gender	Number	Percentage %
Male	17	56.67
Female	13	43.33
Total	30	100%
Chi-Square $-(\chi^2)$	---	0.533 NS
<b>NS :Not-Significant</b>		

Source: Prepared by the researcher based on SAS program, 2018

We note from the table above that most of the target group are males at a rate of (56.67%), then females at a rate of (43.33%), which shows the dominance of males in various supervisory positions in the banking institutions.

**Section Two: Descriptive Distribution of Sample Members by Age**

The table below shows the distribution of sample members' answers by age

**Table 3: Number and percentage of the studied questionnaire sample according to age group**

Age Group (Year)	Number	Percentage %
18-20 yr.	0	0.00
21-30 yr.	7	23.33
31-40 yr.	13	43.33
41-50 yr.	6	20.00
51-60 yr.	4	13.33
≥ 61 yr.	0	0.00
المجموع	30	100%
Chi-Square $-\chi^2$ (	---	11.65 **
) **P<0.01) ,(High Significance.		

Source: Prepared by the researcher based on SAS program, 2018

The table above shows that the largest percentage among the sample members studied was taken by the category (31-40) with a percentage of (43.33%), followed by the categories (21-30) with a percentage of (23.33%), then the categories (41-50) with a percentage of (20%), and finally the categories (51-60) with a percentage of (13.33%), which shows that the youth

element dominates most of the administrative jobs in the banking institution.

**Section Three: Descriptive Distribution of Sample Members by Education Level**

The table below shows the descriptive distribution of sample members by education level

**Table 4: Number and percentage of the questionnaire sample studied according to educational level**

Educational level	Number	Percentage %
Elementary	0	0.00
Intermediate	0	0.00
Preparatory	0	0.00
Bachelor's	27	90.00
Master's	3	10.00
PhD	0	0.00
Total	30	100%
Chi-Square $-\chi^2$ (	---	19.20 **
) ** $P \leq 0.01$ (Highly Significant		

Source: Prepared by the researcher based on SAS program, 2018

The table above shows that the individuals of the studied sample have an educational level of (90%), followed by those with a bachelor's degree (10%). This increase in those with a bachelor's degree may be attributed to the fact that banking institutions show interest in the academic framework as a policy that

they seek to support their management with high-level efficiency in various specializations.

**Section Four: Descriptive Distribution of Sample Individuals by Job Level**

The table below shows the descriptive distribution of sample individuals by job level

**Table 5: Number and percentage of the studied questionnaire sample according to Job Position**

Job Position	Number	Percentage
Manager	4	13.33
Auditor	15	50.00
Accountant	11	36.67
Total	30	100%

Chi-Square $\chi^2$ (	---	* 6.265
) * $P \leq 0.05$ (Significant		

Source: Prepared by the researcher based on SAS program, 2018

It is clear from the table above that the largest percentage of the sample studied was taken by the individual who has a job title (auditor) at a rate of (50%), followed by the individual who has a job title (accountant) at a rate of (36.67%) and then the manager at a rate of (13.33%). It is clear from this that the work of the banking institution falls on the auditor in auditing the financial data that are credible.

### 3-3-2 The role of internal audit and its impact on the effectiveness of banking risk management

#### Section One: Internal Audit Tasks in the Bank

The aim of this axis is to know the tasks of internal audit in banks and its role in the process of detecting banking risks before they occur.

Table 6: Part One: Internal Audit Tasks in the Bank

No.	Expressions	Strongly Agree	Agree	Neutral	Deny	Strongly Deny	Significance	Average $\pm$ SD	Rank
1	Internal audit in the bank ensures the extent to which the objectives set by the management for the	4	19	7	0	0	**	3.90 0.37 $\pm$	2

	various departments are consistent with the bank's objectives and strategic plans.								
2	Examining the validity of banking financial operations to ensure the integrity of recording and classification.	3	17	10	0	0	**	3.77 0.34±	3
3	Judging the validity of the final	4	25	1	0	0	**	4.10 0.46±	1



	banking financial statements.								
4	Identifying risks by providing a capable system capable of activating risk management.	0	4	12	14	0	**	2.67 0.19±	5
5	The employees of the internal audit department in the bank have sufficient information about the	0	11	16	3	0	**	3.27 0.28±	4



	professional standards required to activate the principles of risk management.								
	LSD value (T-test)	--	--	--	--	--	--	* 1.08	--
.Highly Significant $(P \leq 0.01)$ ** .Significant $(P \leq 0.05)$ *									

Source: Prepared by the researcher based on SAS program, 2018

By examining the results of the analysis of the first section, which is concerned with the tasks of internal auditing in the bank, it becomes clear to us that most of the paragraphs show an almost complete agreement on the tasks assigned to the auditing department in the banking institution in one way or another, and through judging the financial statements, this agreement increases at paragraph (3) with an arithmetic mean (4.10) and a standard deviation of (0.46) and decreases at paragraph (4) with an

arithmetic mean (2.67) and a standard deviation (0.19). Accordingly, the tasks of internal auditing focus on the validity of the final financial statements of the banking institution.

**Section Two: The Impact of Internal Auditing on Banking Risk Management**

**First Dimension: Defining Banking Risks**

The aim of this dimension is to identify the types of banking risks that may face the bank's departments and activities.

**Table 7: Section Two - First Dimension: Defining Banking Risks**

No	Expressions	Strongly Agree	Agree	Neutral	Deny	Strongly Deny	Significance	Average ± SD	Rank
1	Ensure the integrity of audit procedures when identifying banking risks.	0	12	14	4	0	**	3.27 0.29±	2
2	To identify the different risks, the scope of the internal audit process is accurately determined.	0	8	17	5	0	**	3.10 0.35±	3
3	The internal audit department in the bank helps in assessing the risks to which it is exposed.	0	20	7	3	0	**	3.57 0.38±	1
4	The internal audit department in the bank prepares a comprehensive audit plan and identifies the types of risks in the various activities of the bank.	2	8	9	11	0	**	3.03 0.24±	4

5	The internal audit department identifies all activities that may threaten the bank.	0	3	21	6	0	**	2.90 0.17±	5
	LSD value (T-test)	--	--	--	--	--	--	0.674 NS	--
.Not Significant :NS ‘High Significance ‘(P≤0.01) **									

Source: Prepared by the researcher based on SAS program, 2018

It is noted from Table (7) for the second axis, which includes the identification of banking risks, that the arithmetic averages of all its paragraphs exceeded the theoretical average, and this indicates the existence of agreement among the sample members. This agreement increases at paragraph (3) with an arithmetic average of (3.57) and a standard deviation of (0.38), and thus it occupied the first place among the

answers of the sample members studied. This means that the audit department helps the bank in identifying the risks to which it is exposed, followed by paragraphs (1, 2, 4 and 5).

**Axis II: Dimension II: Measuring and Evaluating Banking Risks**

The aim of this dimension is to measure and evaluate banking risks and work to reduce them.

Table 8: Axis II - Dimension II: Measuring and Evaluating Banking Risks

No	Expressions	Stro ngly Agre e	Agre e	Neut ral	Deny	Stron gly Deny	Signif icanc e	Averag e± SD	Rank
1	The Internal Audit Department ensures the	0	6	22	2	0	**	3.13 0.32±	4

	levels of risks that the bank can bear.								
2	The Internal Audit Department assesses the possibility of fraud or forgery and how to confront this type of fraud.	0	13	11	6	0	**	3.23 0.36±	2
3	The Internal Audit Department has the ability to measure and evaluate banking risks with flexibility.	0	3	15	12	0	**	2.70 0.28±	5
4	The Bank's Internal Audit Department ensures that documents are analyzed periodically to determine the results of risks related to the bank's activities.	2	8	13	7	0	**	3.17 0.34±	3
5	The Audit Department employees are committed to exercising due diligence when implementing risk management measurement	0	16	12	2	0	**	3.47 0.41±	1





	and evaluation processes and prioritizing important risks.								
	LSD Value (T-test)	--	--	--	--	--	--	* 0.733	--
.High Significance ,(P≤0.01) ** .Significant ,(P≤0.05) *									

Source: Prepared by the researcher based on SAS program, 2018

It is noted from Table (8) for the second axis, which includes measuring and evaluating banking risks, where it is noted from the studied sample that paragraph (5) occupies the first place with an arithmetic mean of (3.47) and a standard deviation of (0.41), as the audit department employees are committed to exercising the necessary care when implementing risk management measurement and

evaluation processes and giving priorities to important risks, followed by paragraphs (2, 4, 1 and 3).

**Second axis: Third dimension: Addressing banking risks**

The aim of this dimension is to follow methods that address the risks that affect the bank's departments and activities.

Table 9: Second axis - Third dimension: Addressing banking risks

No	Expressions	Stro ngly Agre e	Agre e	Neut ral	Deny	Stron gly Deny	Signifi cance	Average ± SD	Rank
1	The internal audit department in the bank coordinates with the risk management department to address risks.	3	16	9	2	0	**	3.67 0.35±	1

2	The activities of the internal audit department help reduce the severity of risks to which the bank is exposed.	2	14	12	2	0	**	3.53 0.29±	2
3	The internal audit department suggests appropriate means, methods and mechanisms to deal with the various aspects of risks in the bank.	0	7	18	5	0	**	3.07 0.24±	5
4	The internal audit department provides suggestions to mitigate risks in the bank.	0	12	13	5	0	**	3.23 0.31±	4
5	The internal audit department in the bank evaluates quarterly reports to senior management to address risks on an ongoing basis.	0	13	9	8	0	**	3.17 0.29±	3
	LSD value (T-test)	--	--	--	--	--	--	0.667 NS	--
.High Significance ,(P≤0.01) **									

Source: Prepared by the researcher based on SAS program, 2018

It is noted from Table (9) for the second axis, which includes the treatment of banking risks, where it is noted from the studied sample that paragraph (1)

occupies the first place with an arithmetic mean (3.67) and a standard deviation (0.35), as the internal audit department coordinates with the risk management

department in order to treat risks, followed by paragraphs (2, 5, 4 and 3).

The aim of this dimension is to keep pace with and follow up on activities that may cause banking risks.

**Second Axis: Fourth dimension: Monitoring banking risks**

**Table 10: Second axis: Fourth dimension: Monitoring banking risks**

No.	Expressions	Strongly Agree	Agree	Neutral	Deny	Strongly Deny	Significance	Average ± SD	Rank
1	The Internal Audit Department follows up on the management's handling of the risks to which the bank is exposed.	0	7	21	2	0	**	3.17 0.32±	4
2	The internal audit programs contain accounting and physical controls that are applied to reduce risks.	0	17	11	2	0	**	3.50 0.41±	3
3	The Internal Audit Department ensures that management conducts periodic examinations of banking risks.	5	16	9	0	0	**	3.87 0.45±	1
4	The Internal Audit Department ensures that continuous monitoring activities occur to assess banking risks in the bank.	0	6	23	1	0	**	3.17 0.32±	4

5	The Internal Audit Department obliges all departments of the bank to work within the applicable controls and laws.	3	15	12	0	0	**	3.70 0.36±	2
	LSD Value (T-test)	--	--	--	--	--	--	0.692 *	--
.High Significance (P≤0.01) ** .Significant (P≤0.05) *									

Source: Prepared by the researcher based on SAS program, 2018

It is noted from Table (10) for the second axis, which includes monitoring banking risks, where it is noted from the studied sample that paragraph (3) occupies the first place with an arithmetic mean (3.87) and a

standard deviation (0.45), as the internal audit department ensures that the management conducts periodic examination of banking risks, followed by paragraphs (5, 2, 1 and 4).

Table 11: Correlation Coefficient between axes and dimensions according to the questionnaire form

Axis/ Dimensions		Correlation Coefficient -r	Significance
Axis One: Internal Audit Tasks in the Bank	Axis II-First Dimension/Identifying Banking Risks	0.79	**
	Axis II/Second Dimension: Measuring and Evaluating Banking Risks	0.73	**
	Axis II/Third Dimension: Addressing Banking Risks	0.38	*

	<b>Axis II/Fourth Dimension: Monitoring Banking Risks</b>	0.73	**
<b>Axis Two - First Dimension / Determining Banking Risks</b>	<b>Axis II/Second Dimension: Measuring and Evaluating Banking Risks</b>	0.59	**
	<b>Axis II/Third Dimension: Addressing Banking Risks</b>	0.84	**
	<b>Axis II/Fourth Dimension: Monitoring Banking Risks</b>	0.62	**
<b>Axis Two / Second Dimension: Measuring and Evaluating Banking Risks</b>	<b>Axis II/Third Dimension: Addressing Banking Risks</b>	0.34	*
	<b>Axis II/Fourth Dimension: Monitoring Banking Risks</b>	0.73	**
<b>Axis Two / Third Dimension: Addressing Banking Risks</b>	<b>Axis II-First Dimension/Identifying Banking Risks</b>	0.35	*
) *P≤0.05 ,(Significant) ** .P≤0.01 ,(High Significance.			

Source: Prepared by the researcher based on SAS program, 2018

We note from the table above that the correlation value between the internal audit tasks in the bank and the identification of banking risks, i.e. between the first axis and the first dimension, is (0.79), which is a positive, strong and statistically significant value at a significance level of 0.01, which means that there is a strong and direct correlation between the audit tasks and the identification of banking risks and vice versa. There is also a correlation between the second axis and

the third dimension, at a rate of (0.84), and there is a correlation between the second axis and the fourth dimension, at a rate of (0.73). With this result, we reject the null hypothesis and accept the alternative hypothesis that there is a statistically significant relationship between internal audit and the effectiveness of banking risk management in the banking institution.

### CONCLUSIONS

1- The internal audit function contributes significantly to activating credit risk management by adopting a set of procedures that ensure the extent to which the risk management department at the bank level identifies and measures risks as well as evaluates strategies to address potential risks.

2- The professional competence of the internal auditor is an important element as he is responsible for providing guarantees about the soundness of the banking risk management process.

3- There is a mechanism of cooperation between the internal auditor and the bank management through activating the internal control system.

### Recommendations

1- The need for the concerned parties to pay attention to the internal audit function and activate its role due to its effective impact in supporting banking risk management in various aspects of banking performance.

2- Continuing work to enhance and develop the skills and knowledge of internal auditors by holding training courses on how to deal with banking risk management to enable them to perform their work effectively.

3- That banking institutions support the components of the independence of the internal auditor to carry out his work efficiently.

4- The need for banking institutions to pay attention to the internal audit profession in terms of

the independence of audit departments and the qualifications of their employees.

5- Banking institutions must provide sufficient information to the internal auditor to confront the risks that confront him from all sides and address them.

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