



## **The Role of Internal Auditing in Strengthening Internal Control and Effective Risk Management in Algerian Public Economic Institutions: A Field Study**

**Mohamed El Eid Amamra**

University of El Oued, Algeria  
amamra-mohammedelid@univ-eloued.dz

**Ibrahim Lakmouta**

University of El Oued, Algeria  
lakmouta-brahim@univ-eloued.dz

**Slimane Atir**

University of El Oued, Algeria  
atir.slimane@gmail.com

**Mohamed El Hadi Deif Allah**

University of El Oued, Algeria  
DIFMH2008@hotmail.fr

**Tedjania Hamza**

University of El Oued, Algeria  
[tedjania-hamza@univ-eloued.dz](mailto:tedjania-hamza@univ-eloued.dz)

**Lebza Hicham**

University of El Oued, Algeria

[Lebza-hicham@univ-eloued.dz](mailto:Lebza-hicham@univ-eloued.dz)

### **Abstract:**

This study aims to highlight the role of internal auditing in strengthening internal control and achieving effective risk management in Algerian public economic institutions, through a field study conducted at INFRAFER, a company responsible for carrying out railway infrastructure works. The study adopted a descriptive-analytical approach, and data were collected through a questionnaire distributed to a sample of 80 employees. The data were then analyzed using the SPSS program to test the hypotheses.

The study concluded that INFRAFER gives high priority to internal auditing and relies significantly on the final reports of internal auditors, especially in detecting errors and embezzlement. The applied results also confirmed the existence of a strong, statistically significant

positive relationship between internal auditing and strengthening internal control, as well as between internal auditing and effective risk management.

**Keywords:** internal auditing, internal control, risk management, public economic institution.

*Received:* 02-02-2025

*Accepted:* 02-11-2025

*Published:* 12-12-2025

---

## 1. Introduction

The introduction of the article should include a preliminary overview of the topic, followed by the research problem and the formulation of appropriate hypotheses, in addition to defining the importance and objectives of the research and the study methodology.

The internal audit function plays a pivotal role in improving the performance of economic institutions, especially in light of the increasing challenges facing the business environment in Algeria. The importance of internal auditing emerges as an effective tool for strengthening internal control and ensuring strong risk management in economic institutions. Internal auditing is considered a means of improving governance and increasing transparency, which helps detect weaknesses and provide recommendations to strengthen internal systems.

Adopting an effective internal control system helps economic institutions achieve their objectives with the lowest possible risks and ensures their continuity amid fluctuations in the economic market. On this basis, this research addresses the role of internal auditing as one of the fundamental pillars in supporting internal control mechanisms and effective risk management, in addition to shedding light on current practices in Algerian economic institutions and providing recommendations for improvement.

### Research Problem

The research problem revolves around the role played by internal auditing in strengthening internal control and achieving effective risk management in Algerian economic institutions. Despite the increasing importance of internal auditing in improving governance and reducing risks, questions remain regarding the effectiveness of this function in practical application within Algerian economic institutions. Accordingly, the problem can be formulated as follows:

**To what extent does internal auditing contribute to strengthening internal control and effective risk management in Algerian economic institutions?**

### Sub-questions

- Is there a statistically significant relationship between internal auditing and strengthening internal control in Algerian public economic institutions?
- Is there a statistically significant relationship between internal auditing and effective risk management in Algerian public economic institutions?

### Study Hypotheses

### **First hypothesis:**

- **H0:** There is no statistically significant relationship between internal auditing and strengthening internal control in Algerian public economic institutions.
- **H1:** There is a statistically significant relationship between internal auditing and strengthening internal control in Algerian public economic institutions.

### **Second hypothesis:**

- **H0:** There is no statistically significant relationship between internal auditing and effective risk management in Algerian public economic institutions.
- **H1:** There is a statistically significant relationship between internal auditing and effective risk management in Algerian public economic institutions.

### **Study Objectives**

The objectives of the study focus on understanding the role of internal auditing in strengthening internal control and improving risk management in Algerian public economic institutions. They can be summarized as follows:

- Identifying the role of internal auditing in strengthening internal control;
- Analyzing the role of internal auditing in risk management;
- Assessing the effectiveness of internal auditing in Algerian institutions;
- Providing recommendations to improve internal audit performance.

### **Importance of the Study**

The importance of this research lies in highlighting how internal auditing contributes to improving the effectiveness of internal control and risk management in Algerian public economic institutions, which are considered a fundamental pillar for achieving efficiency, transparency, and reducing potential risks.

### **Study Methodology**

This study relies on the descriptive-analytical approach. Data will be collected from branches of the public economic enterprise responsible for railway infrastructure works EPE-INFRAFER, through the distribution of an electronic questionnaire. The data will be analyzed using analytical tools represented by the SPSS program.

## **2. The Conceptual Framework of Auditing and Internal Control**

### **2.1. The Nature of Auditing**

Auditing has come to occupy an important position in economic institutions due to the latter's need to manage their activities efficiently and effectively in a way that ensures continuity and the achievement of objectives. Relying on internal control is of great importance because it provides

confidence in the information presented by the institution's management. Both auditing and internal control attract the attention of many internal and external parties related to the institution. Therefore, the most important elements will be addressed as follows:

### **2.1.1. Definition of Auditing**

In its literal meaning, AUDIT is derived from the Latin word AUDIT, which means "listening" or "to listen."

Auditing has been defined in several ways, including:

- The **American Accounting Association (AAA)** defined auditing as a systematic and methodological process of collecting and objectively evaluating evidence and supporting information related to the results of economic activities and events, in order to determine the extent of conformity and consistency between these results and established standards, and to communicate the audit results to the concerned parties.
- **Germond and Banmoult** defined auditing as a strict and constructive technical examination, carried out in a professional manner by a qualified and independent expert, with the aim of providing an analyzed opinion on the quality and credibility of the financial information presented by the institution, the extent of compliance with obligations in preparing such information under all circumstances, and the extent of adherence to applicable laws and accounting principles in presenting a true and fair view of assets, financial position, and results of the institution.
- **Khaled Amin** describes auditing as an organized critical examination of internal control systems, data, documents, accounts, and records of the institution, with the purpose of issuing an impartial technical opinion regarding the extent to which financial statements reflect the financial position of the institution at the end of a specific period, and the extent to which they represent the results of its operations in terms of profit or loss during that period.

Based on the above definitions, auditing can be defined as a scientific and practical tool that aims to monitor all accounting information of the institution in order to identify areas of fraud and error, through collecting various evidence and indicators to provide an independent and impartial technical opinion in the form of a report that clarifies the accuracy of economic information for stakeholders.

### **2.1.2. Importance of Auditing**

The importance of auditing in an institution stems from the fact that it is one of the most important means of evaluation, control, and examination of each of its functions according to the adopted objectives and policies and the available resources, in order to diagnose deficiencies and shortcomings faced by the institution. Therefore, the auditing process requires a comprehensive study of all aspects of the institution. Auditing serves many stakeholders inside and outside the institution and is not an end in itself. Rather, conducting an audit should serve various groups that have an interest in knowing the fairness of the institution's financial position.

### 2.1.3. Services Provided by Auditing

Auditing provides many services, including:

- **Assurance services:** Independent professional services that improve the quality of information for decision-making, requiring independence and reasonable professional care. These include expressing opinions and certification, such as auditing financial statements and other related services.
- **Other assurance services:** These services focus on the credibility and relevance of specific information.
- **Tax services:** Institutions have recognized the importance of tax return preparation services due to the enormous volume of tax regulations and laws issued by the state. This service is a natural extension of the auditor's services in helping clients plan their tax burden and address various tax-related issues.
- **Consulting services:** Examples include studying and evaluating computerized accounting systems, auditing administrative accounting systems, and marketing studies, etc.
- **Accounting services:** Some auditors provide various accounting services to their clients.

## 2.2. The Nature of Internal Auditing

The need for internal auditing emerged and interest in it increased due to the urgent need of the institution's management staff—especially in large institutions with multiple departments and branches inside and outside the country—for information that reflects the real situation, enabling decision-making and ensuring proper implementation. Therefore, the most important elements in this area will be addressed as follows:

### 2.2.1. Definition of Internal Auditing

The French Institute of Internal Auditors and Controllers (IFACI) defined internal auditing as the activity carried out by an independent department within management on a periodic basis to monitor and follow up on the management of the institution. In the context of this periodic activity, auditors aim to verify whether the procedures in place include sufficient safeguards, meaning that: the information is reliable, operations are legitimate, regulations are effective, and structures are clear and appropriate.

The Institute of Internal Auditors (IIA) provided another definition, stating that internal auditing is “an independent and objective activity that provides assurance to the institution's management regarding the degree of control over its operations, offers advice for improvement, and helps create added value. It also assists the institution in achieving its objectives by following a systematic and disciplined approach to evaluating and improving the effectiveness of risk management, control, and governance processes, and by providing proposals to enhance their effectiveness.”

The development witnessed in internal auditing has been reflected in changes in the perspectives through which this activity is viewed. As a result, a new definition emerged, stating that internal auditing is an independent and objective assurance and consulting service designed to add value

and improve the institution's operations. It helps the institution achieve its objectives by adopting an organized and rigorous approach to evaluating and improving the effectiveness of governance, risk management, and control processes.

## **2.2.2. Types of Internal Auditing**

### **A. Financial Audit**

A financial audit is a comprehensive and systematic process aimed at examining financial statements, accounting records, and the related transactions. This audit seeks to determine the extent to which these elements comply with recognized accounting principles, as well as administrative policies and other relevant requirements. Such examination is essential to ensure the accuracy and reliability of financial information, which helps strengthen stakeholders' confidence and enhances the effectiveness of the institution's management.

### **B. Operational Audit**

Also referred to as administrative audit, performance audit, or functional audit, this type of audit refers to the audit process aimed at evaluating the operational activities of a specific function or activity. It involves a comprehensive examination and evaluation of project operations in order to inform management whether planned operations have been implemented in accordance with the policies and plans related to the objectives. It also includes assessing the efficiency of utilizing available resources.

### **C. Compliance Audit (Special Assignments Audit)**

This type of audit relates to tasks carried out by the internal auditor based on newly emerging matters assigned by senior management. In terms of method and scope, it is similar to the previous two types; however, it differs in timing, as it is often sudden and not included in the internal audit plan. Compliance auditing results in the following:

- Collecting information on laws, regulations, and other compliance requirements.
- Understanding the limitations of auditing in detecting illegal acts and misconduct.
- Assessing the risks that may arise from illegal acts.
- The auditor must design and perform procedures to assess risks that could reveal illegal acts.

### **D. Information Systems Audit**

An information systems audit is a vital process aimed at ensuring that the institution's information systems provide adequate protection for its assets and maintain the security of data and systems. This type of audit includes several key aspects that contribute to achieving security and efficiency, including:

- Examining existing or newly developed systems before and after implementation to ensure their security and that they meet users' needs.

- Examining the type and quality of technology to ensure the effectiveness of the internal controls that have been established.

### **2.2.3. Importance of Internal Auditing**

The internal auditing process is of great importance and benefits institutions in several ways, including:

#### **A. Ensuring the Accuracy of Financial Information**

Internal auditing ensures the integrity and correctness of financial data, thereby enhancing the reliability of financial reports.

#### **B. Reducing Risks**

It contributes to reducing risks related to losses and asset fraud, thereby protecting the institution's property.

#### **C. Improving Operational Efficiency**

It enhances the efficiency of operational processes, facilitating the achievement of the institution's strategic objectives.

#### **D. Evaluating Internal Control**

It helps assess the effectiveness of internal control systems, allowing improvements when necessary.

#### **E. Providing Managerial Consulting**

It provides guidance and advice to management to improve business performance and increase the effectiveness of planning and implementation. Thus, internal auditing plays a vital role in strengthening sustainability and managerial success within institutions.

### **2.2.4. Objectives of Internal Auditing**

The scientific view of auditing changed starting in 1897, when the English judiciary decided that detecting errors and fraud is not the only objective of auditing, as the auditor is not considered a spy or a secret police officer. Accordingly, the objectives of auditing include:

- Verifying the correctness and accuracy of accounting data recorded in the institution's books and records, and reporting the extent to which it can be relied upon.
- Detecting accounting errors or fraud in the records.
- Reducing the opportunities for errors and fraud through the auditor's surprise visits to the institution and by strengthening the internal control system.

Others believe that the development of internal auditing led to a change in its objectives, which became:

- Improving organizational operations by providing senior management with information that helps in formulating strategy, as well as evaluating the implementation of that strategy and the resulting outcomes.
- Evaluating risk management systems and processes and proposing solutions that allow their improvement.
- Evaluating internal control systems and ways to enhance them.
- Contributing to corporate governance processes.

### 3.2. The Nature of Internal Control

#### 2.3.2. Definition of Internal Control

The report of the Committee on Auditing Procedures of the American Institute of Certified Public Accountants (AICPA) defined internal control in 1949 as including “the organizational plan and all related methods and measures used within an entity for the purpose of safeguarding assets, ensuring the accuracy of accounting data, increasing and encouraging productive efficiency, and promoting adherence to established management policies.”

The French Organization of Accounting Experts and Chartered Accountants (1977) defined the internal control system as “a set of safeguards that help control the institution in order to ensure protection, preserve assets, ensure the quality of information, apply management instructions, and improve efficiency.”

The COSO Committee defined internal control as “a process affected by the entity, board of directors, management, and other parties, designed to provide reasonable assurance regarding the achievement of objectives in the following categories: effectiveness and efficiency of operations, reliability of reporting, and compliance with applicable laws and regulations.”

#### 2.3.3. Objectives of Internal Control

In most institutions, internal control relies on monitoring accounting records of transactions and supervising employees’ work to achieve internal control objectives, which COSO limited to:

- **Control over the institution:** Control is achieved through strict and accurate implementation of various instructions.
- **Protection of the institution’s assets:** This is done by protecting assets and accounting records through both physical and accounting safeguards.
- **Ensuring accuracy and quality of information:** Internal control provides the institution and others with correct and accurate information about financial data, supporting sound and appropriate decision-making.
- **Improving and enhancing performance:** The effectiveness of internal control is linked to the institution’s productive efficiency, which reflects its ability to achieve predetermined objectives at the lowest costs while maintaining quality, thereby improving internal performance.

- **Demonstrating the institution’s ability to survive and continue:** Internal control allows continuous evaluation to determine the institution’s capacity to develop and continue, through comparisons and appropriate financial and accounting analyses.
- **Defining managerial responsibility:** It aims to determine responsibilities for activities and tasks required to achieve planned objectives, and to clarify relationships between different activities, especially when achieving objectives requires the integration of multiple interconnected functions and activities.

### 2.3.4. Types of Internal Control

Internal control types can be classified into three categories, each complementing the other. They can be summarized in the following table:

**Table 1: Categories of Internal Control According to Their Role**

Category	Detectability and Corrective Actions Taken
Preventive control	Prevents or detects errors and the impact of an event
Detective control	Can be classified into three sub-components: 1) Detects the error and reacts to resolve it within a very short time. 2) Detects the error and reacts immediately to solve it within a very short time. 3) Detects the error but takes a long time to respond and solve the problem.
Corrective control	Corrective control also consists of three sub-components: 1) The error cannot be detected and responded to quickly. 2) Unable to detect the error, but there is continuity in planning to solve the problem. 3) Unable to detect the error, and the institution has no continuity in planning actions.

**Source:** Abbas Qaisar and Javid Iqbal, *Internal Control System: Analyzing Theoretical Perspective and Practices*, Middle East Journal of Scientific Research, Idosi Publications, 2012, p. 531.

### 2.3.5. Components of the Internal Control System

International Auditing Standards divide the components (pillars) of internal control into five main components. Below is an outline of these components according to International Standard **ISA 315**:

- **A. Control Environment:** Refers to the general attitude of managers and administration and their actions related to the internal control system and its importance within the institution. The control environment affects the effectiveness of some control procedures. In a strong control environment—such as one that uses budgets and maintains an effective internal audit function—this significantly complements other control procedures.
- **B. Control Activities:** A set of procedures that help achieve the effectiveness of other components of the internal control system, including: performance review and evaluation, data processing, physical controls, segregation of conflicting duties, authorization, and defining tasks and responsibilities.

- **C. Risk Assessment:** Risks are factors and conditions that threaten the institution's achievement of its objectives related to operational effectiveness and efficiency, reliability of financial reporting, and compliance with laws and procedures. Risk assessment refers to identifying and analyzing risks related to the preparation of financial statements in accordance with accounting standards, after which management determines how to respond to these risks to reduce their effects on financial statements.
- **D. Information and Communication System:** The methods adopted to identify, collect, classify, analyze, and report financial transactions and to determine responsibility for related assets.
- **E. Monitoring:** Includes procedures necessary to monitor the application of various control aspects to ensure they operate as planned. This task is carried out by the internal audit department.

### 3. The Nature of Risk Management

#### 3.1. Definition of Risk

The Institute of Internal Auditors (IIA) defined risk as: "the possibility that conditions or events may occur that could affect the achievement of the organization's objectives. Risks are measured by the degree of impact on the organization's objectives and the likelihood of occurrence."

According to Watsham, risk refers to: "quantitatively measured uncertainty, and money is linked to the undesirable change in the value of a financial variable."

Risk is also defined as: "a situation in which there is a possibility of an adverse deviation from the desired, expected, or hoped-for outcome."

It is also defined as: "the deviation in results that may occur during a limited period at a specific time. The deviation refers to the undesirable deviation or negative deviation from expected results, whereas a desirable deviation is not considered a risk."

According to the updated version of the standard ISO 31000:2018, risk is the effect of uncertainty on the achievement of objectives. The effect is a positive or negative deviation from expectations. Uncertainty refers to a lack of information related to understanding or knowing an event, its likelihood of occurrence, and its consequences. Risks are often described through an event, a change in circumstances, or an outcome. Risks are usually expressed in terms of sources of risk, potential events, consequences, and likelihood of occurrence.

The previous definition referred to several risk-related concepts, including:

- **Risk source:** An element that may, alone or together with other elements, lead to the emergence of risks.

- **Event:** The occurrence or change of a particular set of circumstances, which may have several causes and consequences and may be a source of risk.
- **Outcome:** The result of an event affecting objectives. Outcomes may be certain or uncertain and may have direct or indirect positive or negative effects on objectives. They may be expressed qualitatively or quantitatively, and any outcome may escalate through successive and cumulative impacts.
- **Probability:** The chance that something will occur, whether determined or measured objectively or subjectively, quantitatively or qualitatively. It is described using general terms or mathematically, such as probability or frequency over a specific time period.

From the above, it can be concluded that risk represents a state of uncertainty: it is the possibility that expected or unexpected events may occur in a way that produces adverse effects on institutions.

### 2.3. Importance of Risk Management

Risk management plays a pivotal role from both a financial and an auditing perspective. Financially, risk management helps identify and assess potential risks and plan how to address them, enabling the institution to preserve the allocation of its financial resources and maintain financial stability. From an auditing perspective, risk management contributes to identifying critical areas that require greater examination and control, which enhances the integrity of operations and the reliability of financial reporting. This, in turn, supports more accurate and effective decision-making that helps protect the institution's property and assets. The importance of risk management is highlighted through the following points:

- It helps identify potential risks by using the correct method for risk identification within the entity, relying on accurate records and data covering all aspects of the entity/institution, and determining all specific risk pathways. For example, if the institution uses risk studies and potential risk assessments, these must be addressed accurately and seriously. The same applies to fault trees, checklists, organizational charts, and other methods adopted to identify errors.
- It assists in evaluating potential risks and developing plans to deal with them, which helps preserve the institution's assets and protect its financial stability. This is achieved by assessing audited areas from a risk perspective, whereby the internal audit department evaluates different audit areas and determines the risk level for each. This helps focus on high-risk areas. The auditor must base inherent risk assessment on an understanding of the audited entity or on inquiries made to management.
- It enables the institution to make more accurate and effective financial decisions based on the assessment of potential risks.
- It helps identify critical areas that require additional examination and monitoring, enhancing the soundness and validity of operations and the reliability of financial reports,

which leads to improved transparency, accountability, and governance in public institutions.

- It enables the institution to simplify risk management processes and focus on necessary resources.
- Ensuring compliance with laws, such as adherence to the International Public Sector Accounting Standards (IPSAS), which aim to improve the quality of financial reporting and enhance transparency and accountability in government institutions.
- Achieving sustainability by preserving the institution's entity and maintaining the confidence of auditors and beneficiaries of financial data and reports through continuous auditing of risk management and the reduction of risks.

---

### 3.3. Types of Risks in Public Institutions

Public institutions are exposed to a wide range of risks that must be identified and managed effectively to ensure continuity of operations and achievement of objectives.

#### 3.3.1. Audit Risks

These include:

- |   |                  |              |
|---|------------------|--------------|
| <b>A.</b>   | <b>Inherent</b>  | <b>Risk:</b> |
| Linked to the nature of the institution's activities and environment, and to the weakness or absence of internal control. It leads to material misstatements in financial data, such as errors in recording transactions and in valuing assets and inventory. |                  |              |
| <b>B.</b>   | <b>Control</b>   | <b>Risk:</b> |
| Arises from the ineffectiveness of the internal control system in preventing or detecting errors in a timely manner, and reflects the efficiency of the design and implementation of internal controls.   |                  |              |
| <b>C.</b>   | <b>Detection</b> | <b>Risk:</b> |
| Relates to the audit procedures themselves and the possibility that the auditor may fail to detect material errors despite conducting the audit. It can be reduced through proper planning, expanding testing, and complying with auditing standards.         |                  |              |

#### 3.3.2. Other Risks

These include:

- |  |                       |               |
|--|-----------------------|---------------|
| <b>A.</b>  | <b>Legal</b>          | <b>Risks:</b> |
| Resulting from non-compliance with contracts or laws, or from market fluctuations that lead to the suspension or failure of transactions.  |                       |               |
| <b>B.</b>  | <b>Non-Compliance</b> | <b>Risks:</b> |
| Related to failure to comply with International Public Sector Accounting Standards (IPSAS), which affects transparency and accountability. |                       |               |

**C. Information Security Risks:**  
Including cyberattacks and weaknesses in technical protection systems.

**D. Social and Human Resources Risks:**  
Such as poor recruitment, absence of clear policies, professional conflicts, and negligence.

**E. Health and Environmental Risks:**  
Especially in healthcare institutions, such as disease outbreaks, work injuries, and occupational hazards.

**F. Security and Safety Risks:**  
Resulting from an unsafe work environment or the absence of preventive procedures.

**G. Operational Risks:**  
Related to daily errors in financial or professional performance, such as medical or administrative mistakes.

## 4. Results Analysis

### 4.1. Study Population

Through this study, we seek to highlight the role of internal auditing and its impact on strengthening internal control and effective risk management in Algerian economic institutions. Therefore, the study population was limited to employees of the public economic enterprise for railway infrastructure works (INFRAFER), whose number reached approximately 1,674 **employees** across different levels and positions.

### 4.2. Study Sample

A total of 80 electronic questionnaire forms were distributed to the employees of the institution under study. This enabled us to collect 63 completed questionnaire forms, as shown in the following table:

**Table 2: Statistical Results of the Distributed Questionnaire Forms**

<b>Statement</b>	<b>Frequency</b>	<b>Percentage</b>
Forms distributed	80	100%
Forms not returned	17	21%
Invalid forms	3	04%
Valid forms for analysis	60	75%

**Source:** Prepared by the researchers based on the distributed questionnaire forms.

From the table, we note that 80 forms were distributed, 63 were retrieved, and 3 were excluded due to incomplete answers. Therefore, the forms valid for analysis are only **60**.

### 4.3. Reliability of the Questionnaire: Cronbach's Alpha Test

Reliability of the study instrument means that the questionnaire yields the same result if it is redistributed more than once under the same conditions and circumstances. In other words, reliability indicates stability in questionnaire results and that they do not change significantly if distributed to the sample several times over specific periods. We relied on **Cronbach's Alpha** coefficient to calculate questionnaire reliability:

**Table 3: Cronbach's Alpha Reliability Coefficient Results**

Cronbach's Alpha	Number of Items	Dimension
0.753	08	Internal auditing
0.784	07	Strengthening internal control
0.805	07	Risk management
0.893	22	Overall reliability coefficient

**Source:** Prepared by the researchers based on SPSS output (SPSS v25).

From the table above, we observe that Cronbach's Alpha is greater than 0.6 for all three dimensions, and for the questionnaire as a whole it reached 0.893. Therefore, the study instrument generally demonstrates a high reliability coefficient, enabling it to achieve the study objectives and ensuring the stability of the resulting findings.

### 4.4. General Characteristics of the Study Sample

This section of the questionnaire concerns the respondent's personal information. These questions were dedicated to gender, professional experience, and job position. The results were as follows:

#### 4.4.1. Gender

The distribution of the sample according to gender was as follows:

**Table 4: Sample Distribution by Gender**

Gender	Frequency	Percentage
Male	39	65%
Female	21	35%
Total	91	100%

**Source:** Prepared by the researchers based on SPSS v25 output.

From the table above, we observe that the proportion of males is about **65%**, while females represent **35%**. Therefore, the male proportion is significantly higher than the female proportion.

**Note:** The totals in the provided table ( $39 + 21 = 60$ ) do not match the stated total (91). I translated the figures exactly as provided.

#### 4.4.2. Experience

The sample was divided into three categories representing the level of experience, in a way that fits the study sample. The results are shown in the following table:

**Table 5: Sample Distribution by Experience**

Experience	Frequency	Percentage
Less than 5 years	19	31.7%
From 5 to 10 years	23	38.3%
11 years or more	18	30%
Total	60	100%

**Source:** Prepared by the researchers based on SPSS v25 output.

From the table above, we note that most participants have **5 to 10 years** of experience (23 individuals, **38.3%**). The second group includes 19 individuals (**31.7%**), while the third group includes 18 individuals (**30%**).

#### 4.4.3. Job Position

The sample was divided into four categories according to job position. The following results were obtained:

**Table 6: Sample Distribution by Job Position**

Job position	Frequency	Percentage
Manager	1	1.7%
Executive/Officer (Cadre)	34	56.7%
Auditor	3	5%
Employee	22	36.7%
Total	60	100%

**Source:** Prepared by the researchers based on SPSS v25 output.

From the table, we observe that **56.7%** of the sample are executives/officers (cadres), while employees represent **36.7%** (22 employees). This is followed by auditors at **5%**, then managers at **1.7%**.

### 4.5. Analysis of Questionnaire Data

The statistical methods previously mentioned were used in order to obtain results and complete this study.

#### 4.5.1. Presenting the Results of the Questionnaire Axes

To convert respondents' answers into quantitative data, we used the **five-point Likert scale**, as it provides broader response ranges, as shown in the following table:

**Table 7: Data Collection Tool According to the Five-Point Likert Scale**

<b>Evaluation</b>	<b>Strongly disagree</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
Score	1	1	2	3	4	5

**Source:** Prepared by the researchers.

After that, the **weighted arithmetic mean (Weighted Mean)** is calculated by following these steps:

- Calculate the range, which equals the highest value on the scale minus the lowest value, i.e.,  $5 - 1 = 4$ .
- Calculate the class length by dividing the range by the number of categories, i.e.,  $4 \div 5 = 0.80$ . Thus, the first category is from **1 to 1.80**, and so on.

#### 4.5.2. Presentation of the Results of the Questionnaire Dimensions

To convert respondents' answers into quantitative data, we used the **five-point Likert scale**, as it provides wider ranges of responses, as shown in the following table:

**Table 8: Scoring Criteria According to the Five-Point Likert Scale**

<b>Agreement options</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
Mean category	1–1.80	1.81–2.60	2.61–3.40	3.41–4.20	4.21–5
Level of agreement	Very low	Low	Moderate	High	Very high

**Source:** Prepared by the researchers.

Accordingly, the mean and standard deviation for each dimension of this study will be presented, and then the overall trend of the study sample will be determined, as shown in the following tables:

#### First Dimension: Internal Auditing

**Table 9: Data Related to Internal Auditing**

<b>Statements</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Overall Trend</b>	<b>Rank</b>
Internal auditing contributes to improving transparency and accountability within the institution.	4.03	0.7800	Strongly agree	3
Internal auditing identifies weaknesses in the	3.90	0.7750	Agree	2

company's financial system.				
Internal auditing provides specific recommendations to improve the efficiency of administrative operations.	3.85	0.8600	Agree	5
Internal auditing helps detect corruption and financial violations within the institution.	4.07	0.7560	Agree	1
Internal auditing contributes to improving compliance with the company's internal policies and procedures.	3.63	0.8230	Agree	4
Internal auditing helps provide accurate and comprehensive reports on the company's financial performance.	4.00	0.9390	Agree	7
Internal auditing provides independent and objective assessments of the effectiveness of the institution's operations.	3.60	1.028	Agree	8
Internal auditing contributes to improving the risk management system within the institution.	3.65	0.971	Agree	6

**Source:** Prepared by the researchers based on SPSS v25 output.

The results in the table show a generally high level of agreement among respondents regarding the positive role of internal auditing within the institution. The means ranged between 3.60 and 4.07, all falling within the “agree” or “strongly agree” direction, indicating strong recognition of the importance of internal auditing. The statement “internal auditing helps detect corruption and financial violations” ranked first with the highest mean (4.07) and the lowest standard deviation (0.756), reflecting high homogeneity and strong conviction regarding its control role. This was followed by the statements related to improving transparency and accountability and identifying weaknesses in the financial system, which confirms the contribution of internal auditing to strengthening governance and financial oversight. Conversely, the statement on providing independent and objective assessments of operational effectiveness recorded the lowest mean (3.60) and the highest standard deviation (1.028), indicating relatively greater variation in respondents’ views on this role compared with other items. Overall, the moderate levels of standard deviation reflect an acceptable degree of consistency in the sample’s responses. These results align with the internal auditing literature that considers internal auditing a core tool for enhancing transparency, detecting deviations, and improving control systems and risk management within institutions, as reflected in the publications of the Institute of Internal Auditors (IIA) and the COSO internal control framework.

## Second Dimension: Internal Control

**Table 10: Data Related to Internal Control**

Statements	Mean	Standard Deviation	Overall Trend	Rank
Internal control helps ensure compliance with the company’s internal policies and procedures.	3.88	0.8460	Agree	2
Internal control contributes to reducing the chances of errors and manipulation in financial operations.	3.80	0.9350	Agree	5
Internal control strengthens the integrity of financial data and ensures its accuracy.	3.70	0.9790	Agree	6
Internal control helps improve the company’s operational efficiency by monitoring performance.	3.77	0.8710	Agree	3
Internal control supports continuous risk assessment and the identification of appropriate preventive measures.	3.90	0.8770	Agree	4
Internal control ensures the integrity of financial data and reduces the likelihood of financial errors.	3.85	0.7770	Agree	1
Internal control enhances transparency and accountability across all levels of the institution.	3.63	0.9910	Agree	7

**Source:** Prepared by the researchers based on SPSS v25 output.

The results of Table 10 indicate a clear overall agreement among respondents regarding the effectiveness of internal control in supporting institutional performance. The means ranged from **3.63 to 3.90**, all within the “agree” direction, reflecting a positive perception of its supervisory

role. The statement “internal control ensures the integrity of financial data and reduces the chances of financial errors” ranked first with a mean of **3.85** and a relatively low standard deviation (**0.777**), indicating consistency in views regarding the direct impact of internal control on protecting financial information. It was followed by the statement on ensuring compliance with internal policies and procedures (mean **3.88**), confirming the contribution of internal control to strengthening organizational compliance. In contrast, the statement about enhancing transparency and accountability across all levels ranked last with a mean (**3.63**) and a relatively higher standard deviation (**0.991**), indicating somewhat greater variation in respondents’ assessment of this aspect. In general, the moderate standard deviations reflect acceptable agreement among respondents, consistent with the COSO internal control framework, which emphasizes that internal control contributes to the reliability of financial reporting, compliance, and operational efficiency, in addition to the Institute of Internal Auditors’ literature on its role in reducing risks and improving corporate governance.

### Third Dimension: Effective Risk Management

**Table 11: Data Related to Effective Risk Management**

Statements	Mean	Standard Deviation	Overall Trend	Rank
Effective risk management contributes to protecting the institution’s assets from potential losses.	3.65	0.971	Agree	5
Risk management helps identify and assess potential risks.	3.87	0.853	Agree	3
Risk management contributes to improving strategic decision-making.	3.68	0.833	Agree	2
Risk management helps develop effective response plans for potential risks.	3.87	0.892	Agree	4
Risk management contributes to enhancing the institution’s sustainability and its ability to face crises.	3.70	0.979	Agree	6
Risk management helps reduce costs associated with unexpected events.	3.72	0.761	Agree	1
Risk management contributes to setting priorities and focusing resources on critical areas.	3.53	0.982	Agree	7

**Source:** Prepared by the researchers based on SPSS v25 output.

The results of this table show a general agreement among respondents on the importance of risk management within the institution, with means ranging between **3.53 and 3.87**, all within the “agree” direction. This reflects a positive perception of its role in supporting performance and institutional stability. The statement “risk management helps reduce costs associated with unexpected events” ranked first with a mean (**3.72**) and a relatively low standard deviation (**0.761**), indicating consistency in views regarding the direct economic impact of risk management. This was followed by the statements on identifying and assessing risks and developing effective response plans (mean **3.87**), confirming the analytical and proactive role of risk management. In contrast, the statement on setting priorities and focusing resources on critical areas recorded the

lowest mean (3.53) with a relatively high standard deviation (0.982), suggesting variation in respondents' views on this aspect compared with other items. Overall, moderate standard deviations reflect an acceptable level of agreement among respondents. These results are consistent with the ISO 31000 standard and the COSO Enterprise Risk Management framework, which emphasize that risk management improves decision-making, reduces costs, enhances sustainability, and protects assets under uncertainty.

#### 4.6. Hypotheses Testing

**Table 12: Summary of Hypotheses Testing Results**

Hypothesis	Independent variable	Dependent variable	Correlation coefficient	Sig.	R <sup>2</sup>	F	Sig. (F)	Statistical decision
First	Internal auditing	Strengthening internal control	0.654	0.000	0.756	43.239	0.000	Reject H0 and accept H1
Second	Internal auditing	Risk management	0.516	0.000	0.723	21.004	0.000	Reject H0 and accept H1

**Source:** Prepared by the researchers based on SPSS outputs.

The results in the table above show a statistically significant effect of internal auditing on both strengthening internal control and effective risk management in Algerian economic institutions. Pearson's correlation coefficient indicates a relatively strong positive relationship between internal auditing and strengthening internal control (0.654) at a significance level of 0.000, meaning that improving the effectiveness of the internal audit function directly increases the efficiency of the internal control system. The simple linear regression results reinforced this finding, with an F value of 43.239 at a significance level of 0.000, confirming the overall significance of the model. The regression coefficient reached 0.735, meaning that any one-unit increase in internal auditing corresponds to a notable increase in strengthening internal control. The coefficient of determination (R<sup>2</sup>) further showed that internal auditing explains 75.6% of the changes in internal control, which is a high explanatory power reflecting the central role of internal auditing in supporting internal control components according to the COSO internal control framework.

The results of the second hypothesis test also showed a statistically significant positive relationship between internal auditing and effective risk management, with a correlation coefficient of 0.516 at a significance level of 0.000. This indicates that the development of the internal audit function contributes to improving risk management practices within the institution. Simple linear regression results confirmed this relationship, with an F value of 21.004 at a significance level of 0.000, indicating that the statistical model is significant. The regression coefficient reached 0.597, meaning that increasing the level of internal auditing leads to a tangible improvement in the effectiveness of risk management. The coefficient of determination (R<sup>2</sup>) showed that internal

auditing explains **72.3%** of the variation in risk management, which is a substantial proportion reflecting the contribution of internal auditing to identifying, assessing, and monitoring responses to risks. This is consistent with the standards of the Institute of Internal Auditors and the COSO Enterprise Risk Management framework. Based on these results, both null hypotheses were rejected and both alternative hypotheses were accepted, confirming the strategic importance of internal auditing in strengthening internal control systems and improving the effectiveness of risk management in Algerian economic institutions.

#### 4.7. The Mathematical Model of the Study

The mathematical model of this study consists of two equations as follows:

**Equation** **(01):**  
 [not provided in the text]

**Equation** **(02):**  
 [not provided in the text]

Where:

- [ ]: internal control strengthening variable.
- [ ]: effective risk management variable.
- [ ]: internal auditing variable.
- [ ]: the random error term for the regression of internal auditing on the internal control strengthening variable.
- [ ]: the random error term for the regression of internal auditing on the effective risk management variable.

Equation (01) represents the relationship between internal auditing and strengthening internal control. In this equation, the constant (0.966) indicates the expected level of internal control strengthening in institutions even in the absence of internal auditing; that is, the baseline level of internal control. The regression coefficient (0.735) reflects the positive impact of internal auditing, such that every one-unit increase in internal auditing corresponds to an increase of 0.735 units in the level of internal control strengthening. This indicates that improvement in the effectiveness of internal auditing directly leads to stronger internal control systems, including enhanced transparency, accountability, and control over financial errors. The error term represents random changes in internal control that are not explained by internal auditing, such as other institutional or economic conditions. The positive coefficient and Sig. = 0.000 confirm the existence of a strong and statistically significant positive relationship between internal auditing and strengthening internal control.

Equation (02) represents the relationship between internal auditing and effective risk management. The constant (1.424) reflects the expected level of risk management in the absence of internal auditing, i.e., the minimum capacity to identify and confront risks. The regression coefficient (0.597) shows the positive effect of internal auditing, such that each one-unit increase in internal

auditing leads to an increase of 0.597 units in the effectiveness of risk management. This means that internal auditing contributes to improving institutions' ability to identify and evaluate risks and develop effective response plans, thereby strengthening institutional sustainability and crisis resilience and reducing potential losses. The error term represents random changes in risk management that cannot be explained by internal auditing alone, such as strategic management decisions or other external factors. The positive regression coefficient and Sig. = 0.000 confirm a statistically significant positive relationship between internal auditing and the effectiveness of risk management.

## 5. Conclusion

Based on the theoretical presentation and the field analysis of the role of internal auditing in strengthening internal control and improving risk management in Algerian economic institutions, it becomes clear that the internal audit function represents one of the pillars in supporting governance and consolidating the principles of transparency and accountability within economic institutions, especially in an environment characterized by increasing risks and more complex operational processes. This study showed that adopting an effective internal auditing system positively reflects on the efficiency of the internal control system and helps in the early detection of weaknesses, errors, and embezzlement, which reduces financial and operational risks and enhances the protection of the assets of economic institutions.

The field study conducted at the public economic institution INFRAFER also showed that management attaches great importance to internal auditing and relies heavily on the final reports of internal auditors when making decisions. This indicates a growing conviction in the strategic role of this function in improving the institution's overall performance. However, this importance still requires further activation through strengthening the independence of the internal audit function, developing auditors' competencies, and updating audit tools and methods in line with modern risk management requirements and internationally adopted internal control frameworks.

The study also reached several key findings, most notably:

- Internal auditing enhances the reliability and quality of the institution's financial information;
- Internal auditing directly contributes to guiding financial decisions and detecting and correcting errors and fraud;
- Internal control systems and effective risk management are essential to achieving the institution's objectives and sustainability;
- The effectiveness of internal auditing is linked to management's conviction of its importance as a strategic tool for management and decision-making;
- For every one-unit increase in internal auditing, the level of internal control strengthening increases by **0.735** units;
- For every one-unit increase in internal auditing, the effectiveness of risk management increases by **0.597** units;

- INFRAFER relies extensively on internal auditing, as the auditor's final report contributes to detecting errors and embezzlement, ensuring the credibility of accounting information, and supporting internal control systems and effective risk management.

## 6. References

- Mohammed Al-Touhami Tawaher; Massoud Sadiqi, *Review and Audit of Accounts: Theoretical Framework and Accounting Practices*, National Office of University Publications, Algeria, 2006, p. 09.
- Khaled Amin Abdullah, *Account Auditing: Theoretical Aspect*, Amman, Dar Wael for Publishing, 2004, p. 13.
- Abdel Alim Beshiri; Yazid Ben Sousha, *Auditing Techniques*, M'sila: Dar Al-Mutanabbi for Publishing, 2023, p. 25.
- Youssef Mohammed Jerboua, *Account Auditing Between Theory and Practice*, Amman, Al-Warraq Foundation for Publishing and Distribution, 2000, p. 08.
- Mohammed Lamine Alwan, *Accounting Information System and Internal Auditing*, Amman, Dar Osama for Publishing and Distribution, 2019, p. 28.
- Samia Bouhafis; Ben Harkou Ghaniya, "The Role of Internal Auditing in the Process of Applying Corporate Governance Principles from the Perspective of Students and Graduates of Accounting Specializations in the Algerian University," *Journal of Financial, Accounting and Administrative Studies*, Vol. 9, No. 1, June 2022, p. 1385.
- Aboubakr Al-Siddiq Qidawn; Gourine Haj Gouider, "The Role of the Internal Audit Function in Enhancing Risk Management Processes in Economic and Financial Institutions," *Advanced Accounting and Financial Studies*, Vol. 3, No. 2, October 2019, p. 126.
- Hamed Nour Eddine; Mariam Ammara, *Internal Auditing of Fixed Assets in Economic Institutions*, Amman, Dar Zahran for Publishing, 2016, p. 15.
- Omar Shreiki, "Internal Auditing as One of the Most Important Mechanisms in the Governance System and Its Role in Raising the Quality of Performance in the Institution: The Performance of Algerian Institutions," Vol. 4, No. 7, July 2015, p. 08.
- Hamed Nour Eddine; Mariam Ammara, *Internal Auditing of Fixed Assets in Economic Institutions*, Amman, Dar Zahran for Publishing, 2016, p. 34.
- Khalaf Abdullah Al-Wardat, *Internal Audit Guide According to International Standards Issued by the IIA*, Jordan, Al-Warraq for Publishing and Distribution, 2025, p. 23.
- Samia Bouhafis; Ben Harkou Ghaniya, "The Role of Internal Auditing in the Process of Applying Corporate Governance Principles from the Perspective of Students and Graduates of Accounting Specializations in the Algerian University," *Journal of Financial, Accounting and Administrative Studies*, Vol. 9, No. 1, June 2022, p. 1386.

- Ali Ben Yahya, *Financial and Accounting Audit: Theoretical and Scientific Framework*, Ghardaia, Algeria, Dar Nozhat Al-Albab for Publishing and Distribution, 2023, p. 16.
- Wagdy Hamed Hijazi, *Principles of Internal Auditing: A Scientific and Applied Approach*, Cairo, Dar Al-Ta'lim Al-Jami'i, 2010, p. 81.
- Jacques Renard, *Théorie et pratique de l'audit interne* (Vol. 7), Paris, France: Eyrolles, 2010, p. 134.
- Hassan Faleeh Muflih Al-Qutbesh; Fares Jamil Hussein Al-Soufi, "Methods of Using Creative Accounting in the Income Statement and Statement of Financial Position in Public Shareholding Industrial Companies Listed on the Amman Stock Exchange," *Journal of the College of Baghdad for Economic Sciences*, 2011, p. 115.
- Nour Al-Huda Behlouli, *Internal Control over the Accounting Information System (Between Theory and Practice)*, 1st ed., M'sila: Dar Al-Mutanabbi for Printing and Publishing, 2024, p. 24.
- Jalila Iman Hamdi, *Risk Management, Internal Control, and the Auditing Process*, M'sila, Algeria: Dar Al-Mutanabbi for Printing and Publishing, 2024, p. 76.
- Abdel Alim Beshiri; Yazid Ben Sousha, *Auditing Techniques*, M'sila, Algeria: Dar Al-Mutanabbi for Publishing, 2023, p. 185.
- Samraa Jadi, *Internal Control and Accounting Outputs*, M'sila, Algeria: Dar Al-Mutanabbi for Printing and Publishing, 2024, p. 63.
- Jalila Iman Hamdi, *Risk Management, Internal Control, and the Auditing Process*, M'sila, Algeria: Dar Al-Mutanabbi for Printing and Publishing, 2024, p. 82.
- Jalila Iman Hamdi, *Risk Management, Internal Control, and the Auditing Process*, M'sila, Algeria: Dar Al-Mutanabbi for Printing and Publishing, 2024, p. 144.
- Paul Hopkin, *Fundamentals of Risk Management*, 2nd ed., Kogan Page, Philadelphia, USA, 2012, p. 11.
- Fahmi Mustafa Al-Sheikh, *Financial Analysis*, 1st ed., Ramallah, Palestine, 2008, p. 125.
- Tareq Abdel Aal Hammad, *Risk Management (Individuals – Departments – Companies – Banks)*, University Press for Printing and Publishing, Egypt, 2007, p. 16.
- Eid Ahmed Aboubakr; Walid Ismail Al-Seifo, *Risk Management and Insurance*, Al-Yazouri Scientific House for Publishing and Distribution, Jordan, 2009, p. 26.
- Eric Lachapelle; Besnik Hundozi, "ISO 31000 Risk Management: Principles and Guidelines," PECB white paper, (accessed 05/01/2026).
- Boulfrac Sara, "The Role of Auditing in Risk Management in Algerian Institutions: A Field Study of a Group of Institutions," PhD thesis, Ferhat Abbas University Sétif 1, 2022–2023, pp. 60–61.

- Bilal Sheikhi; Samia Faqir, “Accounting Audit Risks,” *Al-Manhal Al-Iqtisadi Journal*, Vol. 3, No. 1, June 2020, p. 379.
- Alvin A. Arens et al., *Auditing and Assurance Services*, USA, Pearson Prentice Hall, 15th ed., 2014, p. 259.
- Saleh Miloud Khalat, “An Analytical Study of Audit Risks and the Auditor’s Strategy to Address Them,” *University Journal*, Issue 14, Libya, 2012, p. 242.
- Youssef Mahmoud Jerboua; Salem Ahmed Sabah, “The Extent of the Impact of Materiality and Audit Risk on Planning and the Quality of the Audit Process,” *Palestine University Journal for Research and Studies*, Issue 8, Part 1, 2015, p. 86.
- Majdoub Khayra, *Lectures in the Course of Financial Risk Management*, Ibn Khaldoun University of Tiaret, 2019–2020, p. 8.
- Taheri Tayba; Kahia Ahmed Chakib, “Risk Management in Health Institutions: A Case Study of the University Hospital Establishment 1 November 1954 in Oran,” *Industrial Economics Journal*, Vol. 09, No. 01, 2019, p. 310.
- Enterprise Risk Management, *Risk Management Platform: Enriching—Building—Awareness—Development*, an authority in the Kingdom of Saudi Arabia, 2021, p. 07.

## 7. Appendices

### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ذكر	39	65.0	65.0	65.0
	أنثى	21	35.0	35.0	100.0
	Total	60	100.0	100.0	

### experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	أقل من 05 سنة	19	31.7	31.7	31.7
	من 5 إلى 10 سنة	23	38.3	38.3	70.0

من 11 سنة فاكثر	18	30.0	30.0	100.0
Total	60	100.0	100.0	

#### job

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	مدير	1	1.7	1.7	1.7
	اطار	34	56.7	56.7	58.3
	مدقق	3	5.0	5.0	63.3
	موظف	22	36.7	36.7	100.0
	Total	60	100.0	100.0	

#### Reliability Statistics

Cronbach's Alpha	N of Items
.753	8

#### Reliability Statistics

Cronbach's Alpha	N of Items
.784	7

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.881	1	8.881	43.239	.000 <sup>b</sup>
	Residual	11.913	58	.205		
	Total	20.795	59			

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.966	.433		2.229	.030
	التدقيق الداخلي	.735	.112	.654	6.576	.000

#### Model Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.654 <sup>a</sup>	.756	.617		.45321

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.854	1	5.854	21.004	.000 <sup>b</sup>
	Residual	16.166	58	.279		
	Total	22.020	59			

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.424	.505		2.820	.007
	التدقيق الداخلي	.597	.130	.516	4.583	.000

#### Model Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.516 <sup>a</sup>	.723	.653		.52794

#### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
التدقيق الداخلي	60	2.50	5.00	3.8417	.52776
تعزيز الرقابة الداخلية	60	2.43	5.00	3.7905	.59368
إدارة المخاطر	60	2.14	5.00	3.7167	.61092
Valid N (listwise)	60				