

The Role of the Libyan Audit Bureau in Developing Risk Management Systems in Government Agencies

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Summary

The study aims to explore the role of the Libyan Audit Bureau in developing risk management systems in government agencies. To achieve this goal, the study relied on the descriptive and analytical approach, where the questionnaire was used as the main tool to collect data from the study population, which consists of members and technical staff in the General Administration of the Libyan Audit Bureau in Tripoli. The study sample was selected by a simple random sample method, where the sample included 34 items, and to analyze the collected data, the study used the statistical package for the social sciences (SPSS) for the purpose of conducting some statistical tests. The results showed that the Libyan Audit Bureau has no role in developing risk management systems in government agencies, by accepting sub-hypotheses that indicate that there is no role for the Libyan Audit Bureau in developing the efficiency and effectiveness of risk management systems in government agencies.

Based on these results, the study recommends the need to activate the role of the Libyan Audit Bureau in this field. The Audit Bureau should issue a separate report on risk management in government entities or include recommendations related to the evaluation and development of risk management systems in its annual report, as these reports and proposed recommendations contribute to identifying weaknesses and opportunities to improve risk management systems in government entities. The study also recommends the importance of developing the capabilities of workers in this field by intensifying training programs, workshops and seminars, as experience and sectoral specialization are crucial factors in the development of risk management systems, and therefore investment must be made in developing the skills of workers and enhancing their technical and professional knowledge.

In addition, the study suggests that the Libyan Audit Bureau's annual plans at the institutional level and oversight functions include items related to the development of risk management systems in government agencies. In addition to updating or developing standards and work guides that explain how to evaluate and develop these systems systematically and effectively, in a way that contributes to improving the

overall performance of government agencies. In conclusion, the study highlights the importance of developing and activating risk management in the organizational structure of the Bureau, in addition to the role that Supreme Audit Institutions can play in improving risk management, and calls for taking actual steps to enhance this role by being guided by the proposed recommendations.

Gifting

To all my colleagues at the Libyan Audit Bureau, I dedicate this research.

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Researcher

Amal Abdul Rahman Lasifar

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Chapter One

General framework of the study

1- Introduction:

Government institutions live in an era characterized by complexity and rapid transformations, and the development of risk management systems is one of the most prominent challenges facing government agencies in the modern era. This process requires the provision of effective mechanisms to identify and assess potential risks and the application of appropriate procedures to deal with them, as government entities face continuous and complex challenges to ensure the sustainability of work and achieve future goals. Effective control of financial, administrative, and strategic matters requires the employment of standards-based systems (Al-Enezi, 2015).

In this context, SAIs play a pivotal role in enhancing the efficiency and effectiveness of risk management systems in government institutions. This role requires the development of advanced policies and procedures for comprehensive risk assessment and management, including identifying potential risk sources, analyzing their impact, and developing mitigation and mitigation strategies. SAIs have a great responsibility to ensure compliance with international and local standards, and to submit periodic reports on financial and administrative performance, which contributes to enhancing transparency and accountability and ensuring the optimal use of available resources to achieve sustainable development.

Effective risk management in government institutions requires close collaboration between various stakeholders, continuous training of human resources, and the use of modern technology to analyze data and make evidence-based decisions. Adopting a comprehensive and integrated approach to risk management contributes to improving the efficiency of government performance, reducing corruption, and enhancing citizens' confidence in government institutions.

Study problem:

Supreme Audit Institutions (SAIs) play a key role in improving governance systems and activating internal control systems in government entities subject to their audit,

as they have the necessary professional insight to bring about change in the public sector for the benefit of improving public financial management, rationalizing expenditures and improving the performance of entities in using their resources efficiently, effectively and economically.

From this standpoint, the problem of the study revolves around knowing the role of the Libyan Audit Bureau in developing risk management systems in government agencies, by asking the following question:

What is the role of the Libyan Audit Bureau in developing risk management systems in government agencies?

To determine the problem of the study precisely, the main question was divided into the following sub-questions:

What is the role of the Libyan Audit Bureau in developing the efficiency of risk management systems in government agencies?

What is the role of the Libyan State Audit Bureau in developing the effectiveness of risk management systems in government agencies?

2- Objectives of the study:

1- Knowing the role of the Libyan Audit Bureau in developing the efficiency of risk management systems in government agencies.

2- Exploring the role of the Libyan Audit Bureau in developing the effectiveness of risk management systems in government agencies.

3- The importance of the study:

- Clarify the importance of the role of the Libyan Audit Bureau in developing the efficiency and effectiveness of risk management systems in government agencies.
- Activate the advisory role of the Libyan Audit Bureau as it has the necessary expertise regarding government entities.
- Provide the necessary recommendations to the Libyan Audit Bureau in developing its audit outputs and recommendations emanating from it in developing risk

management systems in government agencies, which will reflect positively in developing their performance in the use of their resources and improving the services provided to the citizen.

4- Hypotheses of the study:

In line with the problem of the study and its questions, the hypotheses of the study are as follows:

- **Main hypothesis** - There is no role for the Libyan Audit Bureau in developing risk management systems in government agencies.
- **The first sub-hypothesis** - There is no role for the Libyan Audit Bureau in developing the efficiency of risk management systems in government agencies.
- **Second sub-hypothesis** - There is no role for the Libyan Audit Bureau in developing the effectiveness of risk management systems in government agencies.

5- Limitations of the study:

The study was limited to exploring the role of the Libyan Audit Bureau in developing risk management in government agencies through the study variables efficiency and effectiveness without extending to the study of the economic variable.

6- Previous studies:

- Study (Bin Al-Arabi and um Al-Khair, 2023) "The Extent to which Internal Control Systems Respond to Risk Management Outputs under the Behavior of Senior Management: A Field Study of the Algerian Insurance Company CAAT" The study aimed to analyze the impact of risk management outputs on the effectiveness of control controls, and in order to serve the purpose of the study, 50 questionnaires were distributed and published to professionals related to the studied phenomenon of the Algerian Insurance Company CAAT for the purpose of collecting and analyzing primary data according to the structural equations model, and the study concluded that risk management provides a simple way It is effective for analyzing areas of risk that must be reduced to the acceptable level by strengthening them with appropriate controls in the circumstances. Which appears more clearly through the basic roles and duties imposed by the company's senior management style, where the researchers recommend confirming the quality of procedures and administrative controls, and

activating risk management through the use of governance and audit mechanisms of both kinds.

- **Study (Miloud and Othman, 2016)** "The Role of Internal Audit in Business Risk Management: An Applied Study on Public Telecommunications Companies in Libya" The study aimed to clarify the role of internal audit in business risk management in general and in public telecommunications companies in Libya in particular, and 74 questionnaires were distributed to the target of the study in Libyan public telecommunications companies and the descriptive analytical approach was followed in the study and the questionnaire includes four main groups of questions, which represent the axes of the study and the results of the study showed that The current internal auditors have the scientific and practical elements that qualify them to carry out business risk review and management tasks in Libyan public telecommunications companies.

- **Study (Al-Enezi and Al-Dulaimi, 2015)** "The Impact of Risk Management and its Benefits in Organizations: A Theoretical and Analytical Approach" Risk management is of particular importance nowadays and constitutes a new trend in contemporary organizations, as all industries have witnessed acceleration and significant changes in recent years, and in order to benefit from risk management to provide protection for organizations and continue to perform their activity, their decisive success factors should be provided, and the study explained the importance of introducing risk management in organizations to raise the level of performance efficiency and work procedures and improve the method of risk management performance in The organization, and how to deal with risks in terms of their occurrence, severity and strategies to confront them, by avoiding risks, transferring them to another party, reducing or retaining them and accepting their results, and the study recommends the need to use a risk department that undertakes the completion of its management tasks within the organizational structure as an independent department.

- **Study (Al-Wakeel, 2010)** "The Role of Internal Audit in Enterprise Risk Management" The study aimed to clarify the role of internal audit in evaluating and improving the effectiveness of the risk management process within the organization and to achieve the purpose of the study used the inductive analytical approach through extrapolation

and analysis of what was mentioned in the accounting thought of studies related to the subject of the study, the study recommended the importance of building and designing an effective internal control system and effective risk management programs in business establishments to respond to environmental changes and challenges, in addition to the need for adequate qualification of individuals Internal auditing through courses and continuing education programs to develop their scientific and scientific competencies and capabilities.

Through reviewing previous studies, the researcher found the scarcity of studies on the subject of risk management in SAIs, in addition to the existence of a research gap that the current study tries to contribute to filling by exploring the role of Supreme Audit Institutions in developing risk management systems in government agencies.

8- Structure of the study:

For the purpose of answering the questions of the study and achieving the objectives for which it was prepared, the study was divided into four chapters, so that the first chapter dealt with the general framework of the study, the second chapter highlighted the theoretical framework of the study, the third chapter reviewed the practical side of the study and the fourth chapter was devoted to reviewing the results and recommendations of the study.

Chapter II.
The first topic
Development of risk management systems

2.1.1 Definition of competence:

Efficiency is meant as the ability to achieve the desired goals and results with the least possible amount of resources and effort and to exploit the available resources to the maximum extent possible, and it is concerned with the relationship between the resources used and the resulting outputs in terms of quantity, quality and time (ISSAI300).

2.1.2 The role of efficiency on risk management systems in government agencies

Efficiency contributes to the development of risk management systems in government agencies through (Abdullah, 2019):

1. Reduce corruption and waste: When government institutions are efficient, they reduce the chances of corruption and waste through strict procedures and effective control, reducing financial and administrative risks.
2. Improving crisis response: Efficiency means the ability to respond quickly and effectively to crises and disasters, thereby reducing their negative effects on society and the economy.
3. Increase public trust: Efficiency in service delivery enhances trust between citizens and the government, reducing the risks associated with mistrust and social tensions.
4. Enhance transparency and accountability: Efficient government institutions are more transparent and accountable in their operations, reducing legal and administrative risks.
5. Improved resource management: Efficiency means using public resources in an optimal manner, reducing financial risks and contributing to sustainable development.

6. Achieving Strategic Objectives: Efficiency helps in achieving the strategic objectives of the government efficiently, reducing the risks associated with the failure of government policies and projects.

2.1.3 Definition of effectiveness:

Effectiveness is defined as achieving specific objectives and desired results (ISSAI300) and focuses on achieving the right and impactful results.

2.1.4 The role of effectiveness on risk management systems in government agencies:

The effectiveness plays in improving the risk management systems of government agencies through the following (Zubaidi, 2021):

1. Achieving Strategic Objectives: Effectiveness means that a government organization is able to effectively achieve its strategic objectives, reducing the risks associated with the failure of policies or projects.
2. Increase trust and credibility: When government institutions are effective in providing services and implementing policies, it enhances trust between the government and citizens, reducing social and political risks.
3. Improving the quality of services: Effectiveness in service delivery means achieving high quality performance, which reduces the risks associated with dissatisfaction and exacerbating societal problems.
4. Foster innovation and responsiveness: Effective government institutions are better able to innovate and respond to new changes and challenges, reducing risks arising from unforeseen developments.
5. Efficient resource management: Effectiveness requires the use of available resources in the best possible way, reducing financial risks and waste and contributing to sustainable development.
6. Strengthen oversight and accountability: Effective institutions have strong oversight and accountability systems, which reduce legal and administrative risks and enhance integrity and transparency.

2.1.5 Definition of risk in the governmental context:

Risks are defined in the governmental context as the possibility of undesirable negative events or effects that may affect the government's ability to achieve its goals and carry out its duties, these risks can be related to policy, safety, economy, or technology, as well as include changes in the internal and external environment.

Risk management is one of the tools that governments seek to use to identify and assess these risks, and then adopt strategies to deal with them effectively and prevent their negative impacts.

2.1.6 The importance of risk management to ensure stability and success:

Risk management plays a vital role in ensuring stability and success in a government context for several reasons, some of which are:

- **Protection of government objectives:** Risk management helps identify and evaluate factors that may affect the achievement of government goals, thus enhancing the ability to achieve stability and success.
- **Improving decision-making processes:** Risk management provides basic information that helps in making informed strategic decisions, which increases the effectiveness of policies and procedures.
- **Reduce costs and losses:** By identifying potential risks and taking appropriate measures to address them, their negative impacts and the costs of dealing with them can be reduced.
- **Enhance trust and transparency:** Risk management promotes transparency and builds trust between the government and the public, as the public understands that there are effective procedures to deal with risks.
- **Enhanced adaptability:** Risk management enables the government to better adapt to changing challenges, reducing the negative impacts of unforeseen variables.
- **Improving the image of government:** When the government manages risks effectively, it reflects a willingness to face challenges, enhancing its image in front of citizens and actors.

Risk management contributes fundamentally to building a strong foundation for the government, ensuring stability and success in performing its duties and achieving its goals.

2.1.7 Risk management systems and their elements:

Risk management systems are part of the management strategies of government institutions, and these systems consist of multiple and integrated elements to ensure the effectiveness of the risk management system and enable the government to deal effectively with the challenges of the regulatory environment, including the following:

1. Risk Assessment:

Risk analysis involves identifying and assessing the types of risks a government may face, whether financial, regulatory, or strategic. Risks are analyzed to understand their potential impact and likelihood of occurrence.

2. Risk Management: (Risk Management)

Risk management processes include the development of strategies and procedures for controlling specific risks. The goal is to minimize the impact of downside risks and effectively exploit opportunities.

3. Monitoring and Reporting:

This aspect includes monitoring the implementation of risk management procedures and continuous assessment of environmental changes that may affect risks, and monitoring and reporting is an essential part of providing periodic reports and ensuring the effectiveness of procedures.

4. Business Continuity Planning

Continuity planning includes the development of procedures to ensure business continuity in the event of emergency risks, such as natural disasters or cyberattacks.

5. Awareness and Training

These elements are concerned with promoting risk awareness and providing the necessary training to employees so that they are able to deal with risks effectively.

6. Organizational Commitment

This aspect is related to the need to activate the commitment of organizational leadership to risk management, as leaders play a vital role in promoting a culture of risk control within government organizations.

The second topic

Supreme Audit

2.2.1 The concept of supreme audit:

In the context of the management of government institutions and organizations, supreme audit is a vital term that refers to mechanisms and practices aimed at ensuring transparency, efficiency and effective accountability in the management of public resources and decision-making, and supreme audit is the process of evaluating and monitoring the performance of institutions, government agencies or companies by independent bodies or body, with the aim of ensuring compliance with laws and regulations, achieving transparency and accountability and achieving the effective use of public resources, and the tasks of supreme audit include providing independent and objective reports on performance and potential risks. The types of supreme audit include internal audit, financial audit, legal audit, and others, which play a vital role in enhancing trust between the public and institutions, and supreme audit is a key point in achieving government accountability, combating corruption and ensuring the responsible use of power.

Supreme audit tasks include, for example, checking accounts and financial audits, verifying that government policies are properly implemented, ensuring that public spending is directed according to established priorities, and verifying that there is no corruption or abuse of power.

2.2.2 Objectives of the audit:

- **Ensure transparency and integrity:** Supreme Audit aims to ensure that effective mechanisms are in place to monitor and verify that all government activities are

conducted transparently and fairly, thereby enhancing citizens' confidence in the government system.

- **Achieving efficiency and effectiveness** The supreme control system seeks to achieve the highest degree of efficiency and effectiveness in the use of public resources, by monitoring processes and making recommendations to improve performance.
- **Combating corruption and administrative malpractice** Supreme control is an effective mechanism for detecting and addressing corruption and administrative malpractice, by examining accounts, investigating irregularities and taking the necessary measures to correct the situation.
- **Encourage employees to apply cognitive principles and controls in the actual work environment, and guide them to make the right decisions and necessary actions** (Bloom (2010))
- **Enhance the skills of employees in evaluating performance, risks and outputs on an ongoing basis, and provide recommendations and improvements necessary to improve institutional performance.**

2.2.3 Roles and responsibilities of senior audit

- **Audit and Review:** Supreme audit relies heavily on auditing and reviewing to examine accounts and ensure their correctness and integrity, including verifying that policies and regulations are properly implemented.
- **Issuing recommendations and reports:** Supreme audit institutions issue periodic reports containing the results of examinations and reviews, in addition to providing the necessary recommendations to improve performance and avoid abuses.
- **Monitoring compliance and implementation:** The role of the Supreme Audit is also to follow up on the implementation of recommendations and ensure full compliance by stakeholders, which enhances the effectiveness of corrective actions.

2.2.4 Interaction between Audit and Risk management systems:

The interaction between audit and risk management systems refers to the interaction and integration between internal audit efforts and risk management processes to achieve the objectives of the government and ensure the

implementation of its tasks effectively, and audit and risk management interact closely in the government context to ensure a balance between accountability, efficiency and effectiveness in managing resources and achieving the general objectives of the government, and this interaction includes many important aspects that we list in the following:

1- Risk Analysis and Assessment: The Risk Management Team identifies and evaluates potential risks that the government may face during the implementation of its tasks, and this analysis includes identifying potential risk scenarios and estimating their impact on government goals and activities.

2- Directing Control Efforts: Risk analysis and assessment helps direct internal control efforts towards priority areas and key risks faced by the government, and the control team works to develop appropriate control strategies to effectively address these risks.

3- Strengthening internal controls: The audit team interacts with risk management systems by providing recommendations and guidance to enhance internal controls and improve risk management processes, with the aim of reducing the impact of negative risks and enhancing effectiveness and efficiency in government performance.

4 Improving reporting and transparency: The interaction between oversight and risk management helps to improve reporting and transparency processes within the government, and the inclusion of information about risks and their assessment in periodic audit reports is an important part of the disclosure and accountability process.

5 - Performance assessment and periodic review: The interaction between audit and risk management includes periodic assessment of the performance of systems and processes and reviewing them regularly to ensure the effectiveness of implementing audit and risk management strategies.

6 Continuous improvement: The audit team and the risk management team seek to cooperate in the context of the continuous improvement process, where recommendations and observations are provided and applied to enhance performance and achieve goals more effectively.

The third topic

The role of SAIs in developing risk systems

2.3.1 Risk Analysis:

Risk analysis is a vital process through which potential risks that may affect the achievement of the objectives and tasks entrusted to the auditing entity are identified and evaluated, and in this context, SAIs play pivotal roles including:

1- Risk Identification: Supreme audit institutions identify potential risks that an organization or government may face in achieving its objectives, including a comprehensive analysis of the external environment and internal factors that may affect performance and efficiency.

2- Risk assessment: After identifying the risks, SAIs assess these risks thoroughly to understand the potential effects of each risk on the objectives and criteria set, and this assessment is based on specific criteria and accurate data to ensure accuracy and comprehensiveness.

3- Developing Audit and Control Strategies: Based on the results of analysis and assessment, SAIs work to develop appropriate audit and control strategies to effectively address identified risks, including identifying internal controls and developing the necessary preventive measures.

4 Monitoring and Assessment of Performance: After implementing the strategies, SAIs closely monitor the performance of the institution or government and the effectiveness of the measures taken to manage risks, and this performance is regularly assessed to ensure continuous improvement and adaptation to changes.

SAIs play a critical role in risk analysis to maintain the sustainability of operations and achieve set objectives by identifying and assessing risks, developing appropriate strategies, and regularly monitoring performance.

2.3.2 Establishing policies and guidelines, stabilizing government operations, and ensuring their success in a sustainable and transparent manner:

The importance of SAIs as the main controller of these processes is evident in several aspects:

- Protect the public interest, and the responsibility to maintain the transparency of government operations and ensure the achievement of public service objectives.
- The role of oversight contributes to enhancing the level of transparency in government decisions and performance, which enhances accountability and builds trust between the government and citizens.
- Monitor performance and compliance to evaluate the performance of government agencies and ensure their compliance with the approved policies and regulations.
- Protect public resources and finances to prevent corruption and misuse of public resources by examining financial operations and ensuring that funds are used effectively.
- Provide strategic guidance to improve risk management and enhance effectiveness and efficiency in government performance.
- Ensure that the government complies with applicable legislation and regulations.
- Strengthening international confidence, where adherence to effective oversight practices demonstrates the government's will to abide by international standards.

2.3.3 Developing the management of risk systems in government agencies:

Supreme Audit Institutions play a vital role in developing the management of risk systems in government agencies through several ways, the most important of which are:

- Develop regulatory policies and regulations that determine how to manage and monitor risks at the government level.
- Evaluate the efficiency of the implementation of risk systems and study the extent of compliance of government agencies with the approved policies.

- Provide guidance to sub-government entities on how to improve risk management and better achieve their objectives.
- Enhance transparency and accountability by examining risk management processes and submitting periodic reports to the public and stakeholders.
- To adopt best practices in the field of risk management and exchange knowledge between government agencies to improve their performance.
- Urge government agencies to provide training and guidance to employees on how to deal with challenges and risks effectively.
- Review and evaluate control and security systems to ensure the effectiveness and responsiveness of institutions to security challenges.
- Monitor and analyze economic and social developments to provide guidance on potential changes and their impact on risks.

2.3.4 Cooperation and coordination with government agencies:

How to achieve cooperation between supreme organs to achieve government security:

The role of SAIs in defining policies and regulations for risk management extends to several aspects, which can be detailed as follows:

- SAIs are involved in defining key policies related to risk management at the government level, conducting analyses and reports to understand challenges and opportunities, and building evidence- and data-driven policies.
- A statement of the regulatory framework that defines how to implement and monitor risk management at the government level and identify the methods and tools that must be used to achieve the objectives of effective risk management.
- Assist in the development of regulations and laws related to risk management and compliance at the government level to ensure that regulations are effective and consistent with government objectives and international standards.

- Evaluate the performance of government entities in implementing risk management policies and regulations.
- Provide guidance to government entities on how to improve risk management, compliance with policies and regulations, and guidance towards continuous improvement.
- Promote a culture of risk within the government, through awareness, training and awareness of the importance of risk management.
- Collaborate with other stakeholders to share knowledge and ensure unified efforts in the field of risk management.
- Provide periodic reports on the performance of risk systems, evaluate their effectiveness and identify areas for improvement.

Fourth Topic

The Impact of SAIs on Risk Management Systems

2.4.1 Impact on enhancing transparency and accountability

The impact of SAIs on enhancing transparency and accountability lies in several aspects that contribute to achieving these two vital objectives of the government, represented in transparency and accountability, and these are some of the constants that determine their impact:

1- Monitoring and evaluating performance: Supreme audit institutions monitor and evaluate the performance of government institutions and agencies, including their compliance with laws and policies and their efficiency in achieving the set goals, and this encourages increased transparency and improved performance standards.

2- Making recommendations and reforms: Based on the results of performance evaluation, SAIs make recommendations and reforms aimed at improving work and increasing the effectiveness of performance, and once these recommendations are implemented, the level of accountability and transparency improves.

3- Reporting and public communication: Supreme audit institutions play an important role in disseminating reports and information on the results of their work and their evaluations of government performance, and this contributes to enhancing transparency and enabling the public to follow up on government performance and provide accountability when necessary.

4- Enhancing the control culture: Supreme SAIs are encouraged to develop a culture of oversight and accountability within the government, by providing guidance, awareness and promoting the values of transparency, integrity and accountability at all levels of government work.

5- Monitoring the implementation of policies and procedures: SAIs monitor the implementation of specific policies and procedures to ensure compliance and integrity in government work, which contributes to enhancing public confidence and increasing the level of accountability.

In general, the role of SAIs significantly affects enhancing transparency and accountability in government by monitoring performance, making recommendations, and enhancing the culture of control, which contributes to enhancing public confidence and achieving higher levels of transparency and accountability.

2.4.2 Impact through Communication with Sub-Government Entities:

Communication between SAIs and sub-government entities helps to understand the impact of cooperation on improving risk systems, and in this context the following steps can be followed:

- Promote a culture of transparency and openness among SAIs and sub-government entities to exchange information effectively.
- Hold periodic meetings and joint workshops to exchange ideas and discuss risk management issues and challenges.
- Define responsibilities and roles between SAIs and subsidiary entities to achieve effective communication.
- Organize joint training sessions on risk management to improve the subsidiary entities' understanding of modern concepts and practices.
- Take advantage of modern means of communication such as e-mail to improve communication at the government level.
- Establish joint task forces to solve specific problems or implement risk development projects.
- Participation of subsidiaries in the development of policies and regulations related to risk management.
- Promoting a culture of cooperation and teamwork between SAIs and sub-government entities.

- Provide technical support and advice to subsidiaries to improve their risk management capabilities.
- Conduct periodic assessments of the effectiveness of communication and the impact of collaboration on improving risk systems.

By implementing these steps, interaction between SAIs and sub-government entities can be improved, contributing to the improvement and strengthening of government-wide risk management systems.

3.4.2 Impact through Integration with Government Management Systems:

Integration between SAIs and government management systems plays a crucial role in improving the quality of risk management in government entities, and these are some of the ways in which integration affects the improvement of the quality of risk management:

1. Supreme Audit Institutions can guide the overall risk management strategy in government entities, ensuring that objectives and priorities are aligned with those of the general administration.
2. With the integration of audit and government management, levels of transparency and accountability in risk management processes can be enhanced, as efforts are more effectively directed towards achieving the set objectives.
3. Through communication and cooperation between SAIs and government management systems, common risks can be identified and assessed and unified strategies can be developed to deal with them effectively.
4. The integration between government audit and management can facilitate the exchange of knowledge and experience in the field of risk management, contributing to the development of skills and capabilities necessary to implement risk management procedures effectively.
5. When SAIs work in collaboration with government management systems, the use of available resources can be improved more effectively and effectively in implementing risk management procedures.

6. Through integration, organizational culture can be strengthened to be more risk-oriented, helping to cultivate an environment that encourages strategic thinking and informed decision-making.

2.4.4 Impact on greater transparency and higher levels of accountability:

Achieving greater transparency and higher levels of accountability is important in the development of risk management systems, and this can be achieved through the role of SAIs by taking the following steps:

1. Risk management objectives and policies must be clearly and transparently defined, and provided to all concerned parties inside and outside the government entity.
2. SAIs should regularly disseminate information and reports related to risk management, in order to increase transparency and enhance awareness among the public and stakeholders.
3. SAIs should be encouraged to communicate continuously with stakeholders and civil society, and to listen to their views and observations on risk management processes.
4. Effective risk reporting mechanisms must be developed within the government entity and a prompt and appropriate response to such reports should be ensured.
5. SAIs should conduct periodic assessments and reviews of risk management systems to ensure that objectives are achieved and policies are adhered to.
6. SAIs should establish mechanisms to determine responsibilities and provide penalties in case of non-compliance with risk management requirements.
7. Training and guidance should be provided to employees of government entities on risk management and its importance, and how to adhere to approved policies and procedures.
8. Audits carried out by higher institutions shall be open to the public and open to external scrutiny and audit.

By following these steps, SAIs can achieve greater transparency and higher levels of accountability in the development of risk management systems in government entities, enhancing public confidence and improving overall performance.

2.4.5 Analysis of Future Challenges and Exploration of Opportunities Can Help Guide the Development of Risk Management Systems:

This is an analysis of some of the future challenges and expected opportunities:

Subject	Challenge	Opportunity
Evolution of technology	Increasing cyber threats and the need to keep pace with technology.	Using technology to improve verification systems and provide effective protection solutions.
Economic changes	Economic fluctuations and financial pressures on the government.	Improve understanding of the impact of economic changes on financial risk and enhance preparedness
Environmental and climate challenges	Increase in natural disasters and climate impacts.	Develop strategies to adapt to environmental challenges and promote sustainability
Public health challenges	Facing epidemics and public health challenges.	Improving emergency health response and strengthening health-care systems
Innovation in Risk Management		Promoting a culture of innovation in risk management and using technology to develop methods

Chapter III.
The First Topic
Method and Procedure

1.1.3- Introduction:

This section deals with a description of the study methodology, the study population and its main sample, as well as the study tool used and methods of preparation, and its validity and stability. This section also includes a description of the procedures carried out by the researcher in codifying and applying the study tools, in addition to analyzing the identifying characteristics of the members of the study sample, and the statistical treatments that the researcher relied on in analyzing the study.

2.1.3 Research Methodology:

The research methodology can be considered as the path that the researcher follows in his footsteps, to finally reach results related to the subject under study, which is the organized method used to solve the problem posed in the study, in addition to that it is the science that is concerned with how to conduct studies or scientific research, and since the researcher has a prior background in the aspects and dimensions of the phenomenon under study by reviewing a set of previous studies related to its main problem, which corresponds to the descriptive analytical approach that aims to provide data And the facts about the problem subject of research to explain it and stand on its implications, and since the descriptive analytical approach is through reference to various documents such as books, magazines, newspapers, reports and other materials that prove their truthfulness in order to analyze them to reach the objectives of the study, the researcher relied on this approach to reach accurate and detailed knowledge about the problem of the study, and to achieve a better and more accurate perception of the phenomenon under study.

3.1.3 Data collection methods:

The study relied on two types of data:

1- Primary data: by researching the field side by distributing questionnaires to study some of the vocabulary of the study and inventory and collect the necessary information in the subject of the study, and then unpack and analyze it using the Statistical Package for Social Science (SPSS) and the use of appropriate statistical tests in order to reach valuable indications and indicators that support the subject of the study.

2- Secondary data: The researcher reviewed books, periodicals, reports and publications related to the subject under study, and any references that may be seen as contributing to the enrichment of the study scientifically, and the researcher sought by resorting to secondary sources in the study to identify the foundations and sound scientific methods in writing the study, as well as taking a general perception of the latest developments that have occurred and occur in the field of study.

4.1.3 Study population and sample:

The study population consists of all technical staff and members working in the General Administration of the Libyan Audit Bureau in Tripoli, and the researcher used the random sample method as a practical alternative to the comprehensive survey method, and therefore the questionnaire was distributed to the members of the study sample, and the number of 34 questionnaires was retrieved and after examining the questionnaires, no questionnaire was excluded, which means that all questionnaires are valid for analysis.

5.1.3- Analysis of the questionnaire axes:

The questionnaire is divided into three axes:

- **The first axis:** represented by the personal data of the study sample: **(Type of academic qualification - specialization - job title - years of experience - capacity)**
- **The second axis and the third axis:** The response of the study sample included the questionnaire statements according to the hypotheses of the sub-study.

The second and third axes of the questionnaire were formulated based on the five-point Likert scale, and Table No.(1) shows the scale options, grades and weighted averages:

Table (1) Scale Options, Scores, Weighted Averages and Relative Weights

Scale options	Grade	Weighted average
Strongly disagree	1	(1.79 – 1)
Disagree	2	(2.59 – 1.8)
Neutral	3	(3.39 – 2.6)
Agree	4	(4.19 – 3.4)
Strongly agree	5	(5 – 4.20)

5.1.3- Statistical Analysis Methods:

To achieve the objectives of the study and answer its questions, the 26 SPSS IBM program was used to apply the following statistical methods:

- 1- Calculate the frequencies and percentages of the primary data of the study sample.
- 2- Graph to illustrate the percentages of the primary data of the study sample.
- 3- Calculating Cronbach's Alpha coefficient and Spearman-Brown coefficient to calculate the internal stability and validity coefficients of the questionnaire.
- 4- Calculate the weighted mean and standard deviation.
- 5- The choice of (T – Test) Test Independent Samples was applied to the questionnaire statements.

Analysis of the study sample:

Based on the objectives and questions of the study, the data were analyzed and the following was reached:

First: Validity and Reliability tests

The stability and truthfulness tests of the questionnaire data were conducted to ensure that the results of the field study can be relied upon in generalizing the results

in two ways: calculating the Cronbach alpha stability coefficient, the half-segmentation method (Spearman-Brown coefficient)

A truthfulness test was also performed to ensure that the study tool represented in the questionnaire measures what it was prepared for and was calculated by finding the square root of the stability coefficient. Table (2) shows the coefficient of stability and truthfulness of the questionnaire data.

Table (2) Stability and Truthfulness Coefficients of Questionnaire Data

Questionnaire	Internal stability coefficient Cronbach' s Alpha	Honesty coefficient	Internal stability parameters By the method of half fractionation (Spearman- Brown coefficient) Spearman- Brown	Honesty coefficient	Guttman Split-Half coefficient	Honesty coefficient
---------------	--	------------------------	--	------------------------	--------------------------------------	------------------------

(Second Axis) The role of the Libyan Audit Bureau in developing the efficiency of risk management systems in	0.908	0.952	0.869	0.932	0.869	0.932
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government agencies						
(Third Axis) The role of the Libyan Audit Bureau in developing the effectiveness of risk management systems in government agencies	0.938	0.968	0.852	0.923	0.839	0.915
All Axes	0.961	0.980	0.960	0.979	0.958	0.978

From Table (2), it is clear that the study tool represented by the questionnaire has the following:

1. As an internal constancy where:

- The stability coefficients of the second axis ranged by the method of Cronbach alpha coefficient (0.908) and by the half-fractionation method: (Spearman-Brown coefficient) (0.869) Getman coefficient (0.869)
- The stability coefficients of the third axis ranged by Cronbach alpha coefficient (0.938) and by half-fractionation method: (Spearman-Brown coefficient) (0.852) Gettmann coefficient (0.839).
- The stability coefficients of the questionnaire as a whole ranged by Cronbach alpha coefficient (0.961) and by half-segmentation method: (Spearman-Brown coefficient) (0.960) Getman coefficient (0.958).

These are high stability values and are acceptable in scientific research, which means that the results of the questionnaire are constant if they are reused again and under the same conditions.

2. As internal honesty where:

– The truthfulness coefficients of the second axis ranged by the method of Cronbach alpha coefficient (0.952) and by the method of half fractionation: (Spearman-Brown coefficient) (0.932) Gettmann coefficient (0.932)

– The truthfulness coefficients of the third axis ranged by the Cronbach alpha coefficient method (0.968) and by the half-segmentation method: (Spearman-Brown coefficient) (0.923), Gettmann coefficient (0.915)

– The truthfulness coefficients of the questionnaire as a whole ranged by the Cronbach alpha coefficient method (0.980) and the half-segmentation method: (Spearman-Brown coefficient) (0.979) and Gettmann coefficient (0.978). These are high and acceptable values of validity in scientific research, which means that the questionnaire is honest in measuring what it was prepared to measure. After confirming the stability and truthfulness of the questionnaire, it was found that it is valid for distribution to the study sample.

6.1.3- Analysis of personal data of the study sample:

To identify the characteristics of the personal data of the study sample, frequencies and percentages were calculated, which can be summarized as follows:

1. Qualification:

From Table (3) and Figure (1), it is clear that bachelor's holders represent the majority of the study sample, reaching 52.9%, followed by master's degree holders at 41.2%, followed by licentiate's degree holders at 2.9% and doctorate at 2.9%.

Table (3) Numbers and Percentages of Academic Qualification for the Study Sample.

Fully qualified	Numbers	Percentage
Licentiate	1	2.9
Bachelor	18	52.9

Master	14	41.2
PhD	1	2.9
Total	34	100

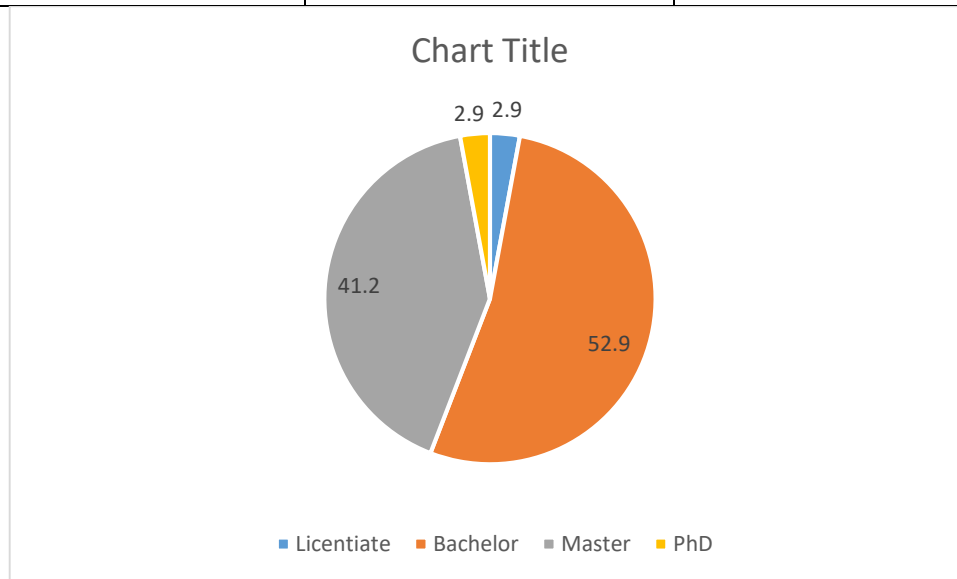


Figure (1) Percentages of Academic Qualification for Study Sample

2. Specialization

From Table (4) and Figure (2), it is clear that the majority of the study sample are specialists in accounting, with a percentage of 52.9%, followed by specialists in economics, with a percentage of 17.6%, followed by specialists in law and specialists in engineering, with a percentage of each separately 14.7%, meaning that the study sample is from different disciplines and those concerned with the subject of the study, and this qualifies them to answer the questions of the study, depending on their scientific specializations.

Table No. (4) Numbers and percentages of scientific specialization for the study sample

Specialization	Number	Percentage
Law	5	14.7
Accounting	18	52.8
Economy	6	17.6
Engineering	5	14.7
Total	34	100

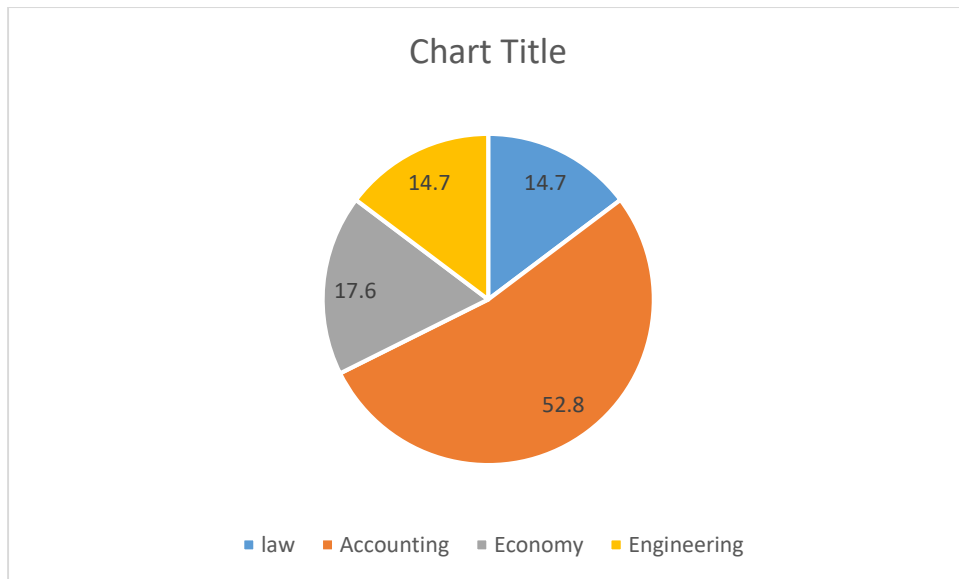


Figure (2) Percentages of the study sample specialization

3. Job Title:

From Table (4) and Figure (3), it is clear that the largest percentage of the members of the study sample was financial auditors with a value of 58.8%, while the lowest percentage came as a general manager with a value of 2.9% of the study sample, and the following table shows that:

Table (5) Frequencies and percentages of the job title of the study sample

Job Title	Numbers	Percentage
Financial Auditor	20	58.8
Legal Researcher	3	8.8
Sub-Department Manager	4	11.7
Adviser	4	11.8
Office Manager	2	5.9
General Manager	1	2.9
Total	34	100

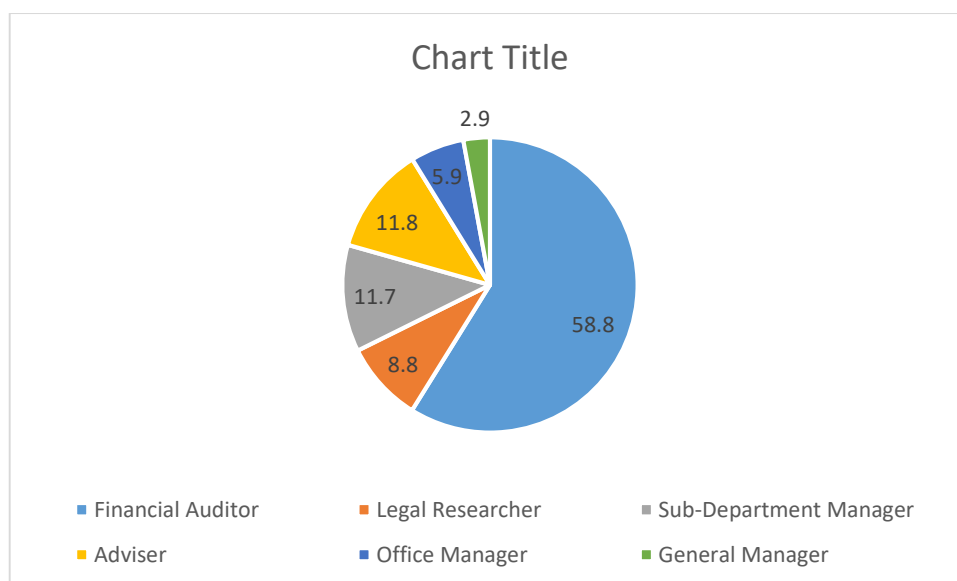


Figure (3) Percentages of Job Title for Study Sample

4. Years of Experience:

From Table (5) and Figure (4), it is clear that the majority of the study sample are experienced from 15 years or more, with 47.1%, followed by those with experience (from 5 to less than 10 years), (from 10 to less than 15 years), with a percentage of 23.5%, each separately, followed by those with experience (less than 5 years), i.e. 94.1% of the study sample are experienced from 5 years or more, and this qualifies them to answer the questionnaire statements, Drawing on their field experience.

Table (5) Numbers and percentages of years of experience for the study sample

Years of Experience	Numbers	Percentage
Less than 5	2	5.9
5 to less than 10	8	23.5
10 to less than 15	8	23.5
15 and above	16	47.1
Total	34	100

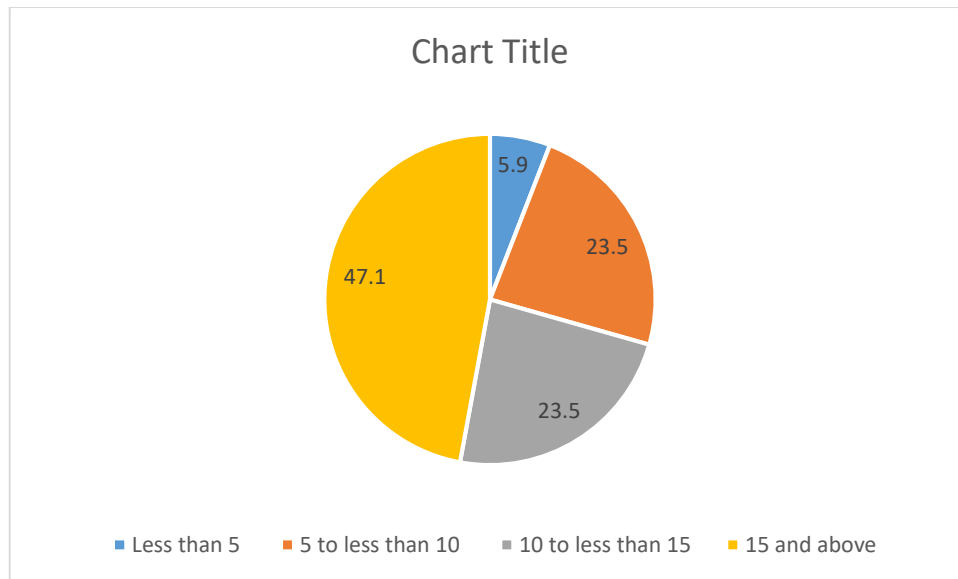


Figure (3) Percentages of Years of Experience for the Study Sample

5. Job Capacity:

From Table (5) and Figure (4), it is clear that those with the status of a member represent the majority of the study sample, reaching 88.2%, followed by those with the status of technical employee, with a percentage of 11.8%, and this qualifies them to answer the questions of the study, depending on their job capacity.

Table (5) Numbers and percentages of the study sample characteristic

Adjective	Numbers	Percentage
Technical Officer	4	11.8
Member	30	88.2
Total	34	100

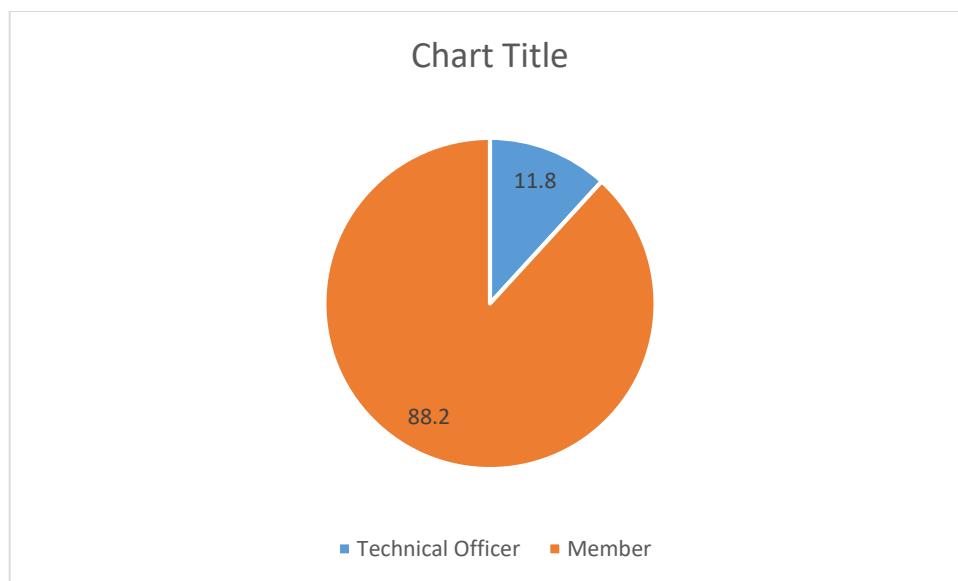


Figure (4) Percentages of the functional capacity of the study sample

The Second Topic

Hypothesis testing, extraction and interpretation of findings

1.2.3- Introduction:

This section includes a presentation of data analysis and testing the hypotheses of the study, by answering the questions of the study and reviewing the most prominent findings of the questionnaire reached through the analysis of its paragraphs, so statistical treatments were made for the data collected from the study questionnaire, as the statistical packages for social sciences 26SPSS were used to obtain the findings that were analyzed and presented in this chapter.

2.2.3 Analysis and testing of sub-hypotheses and the main hypothesis of the study:

This section presents the descriptive findings of the data collected by the questionnaire and the findings of the hypothesis test:

Testing the first sub-hypothesis - There is no role for the Libyan Audit Bureau in developing the efficiency of risk management systems in government agencies. By studying the hypothesis paragraphs through the data contained in the following table, which shows the frequency distribution of the study sample around the paragraphs related to the axis, and the statistical analysis of the answers of the study sample about whether the average response score has reached the average value of (3) or not, and by looking at the table, it is clear that the highest arithmetic mean was obtained in the following paragraphs:

- Paragraph (16) came in first place, with an arithmetic mean of (4), which is greater than the average value (3), with a standard deviation of (0.92) and a significance level equal to (0.000), which is less than (0.05), which indicates the rejection of the statement that "the Audit Bureau should not issue separate reports on the efficiency of risk management systems in government agencies".

- Paragraph (1) came in second place, with an arithmetic mean of (3.94), which is greater than the average value (3), with a standard deviation of (1.07) and a significance level equal to (0.005), which is less than (0.05), which indicates the rejection of the statement that "the Libyan Audit Bureau does not contribute to

developing the efficiency of risk management systems based on the laws and legislation regulating its work."

- Paragraph (18) came in third place, with an arithmetic mean of (3.76), which is greater than the average value (3) with a standard deviation of (0.98) and the level of significance is equal to (0.034), which is less than (0.05), which indicates the rejection of the statement that "the experience and specialization of members and technical staff does not affect the evaluation of the efficiency of risk management systems in government agencies."

The three lowest statements according to the arithmetic mean are:

- Paragraph (11), where its arithmetic mean is (2.76), which is less than the average value (3), with a standard deviation of (1.30) and a level of significance equal to (0.009), which is less than the level of significance (0.05).

- Paragraph (9), where its arithmetic mean was (2.97), which is less than the average value (3), with a standard deviation of (1.26) and a significance level equal to (0.062), which is greater than the significance level (0.05).

- Paragraph (8), where its arithmetic mean is (3.08), which is greater than the average value (3), with a standard deviation of (1.23) and a significance level equal to (0.165), which is greater than the significance level (0.05).

Table (6) Descriptive statistics of the opinions of the study sample on the role of Supreme Audit Institutions in developing risk management systems in government agencies

	There is no role for the Libyan Audit Bureau in developing the efficiency of risk management systems in government agencies	Scale	Strongly agree	I agree	neutral	Disagree	Strongly disagree	Average	Standard deviation	sig	Order paragraphs by degree of importance
1	The Libyan Audit Bureau does not contribute to developing the efficiency of risk management systems based on the laws and legislations regulating its work	Iteration	13	11	5	5	--	3.94	1.07	0.005	2
		Rate %	38.2	32.4	14.7	14.7	--				
2	The Libyan Audit Bureau does not aim within its plans to develop the efficiency of risk management systems in government agencies	Iteration	10	11	7	4	2	3.67	1.19	0.173	5
		Rate %	29.4	32.4	20.6	11.8	5.9				
3	The plans of the audit tasks do not include an integrated program to assess the efficiency of risk management systems in government agencies	Iteration	9	6	11	2	3	3.38	1.27	0.972	15
		Rate %	26.5	17.6	32.4	14.7	8.8				
4	There are no professional standards and guides that explain how to evaluate and develop the efficiency of risk management systems in	Iteration	8	12	6	6	2	3.52	1.21	0.507	11

	government agencies										
		Rate %	23.5	35.3	17.6	17.6	5.9				
5	The Libyan Audit Bureau does not set clear and specific procedures in the process of developing the efficiency of risk management systems in government agencies when carrying out the audit tasks	Iteration	1	10	17	6	-	3.17	0.75	0.110	18
		Rate %	2.9	29.4	50	17.6	-				
6	The Libyan Audit Bureau does not have the scientifically and practically qualified human resources capable of developing the effectiveness of risk management systems in government agencies.	Iteration	10	14	6	3	1	3.85	1.048	0.015	5
		Rate %	29.4	41.2	17.6	8.8	2.9				
7	The Libyan Audit Bureau does not conduct training courses and workshops for auditors on risk management effectiveness assessment processes in government agencies.	Iteration	11	10	9	4	-	3.82	1.028	0.019	6
		Rate %	32.4	29.4	26.5	11.8	-				
	Government agencies do not										

8	deal with international standards for risk management systems.	Iteration	9	5	11	8	1	3.38	1.206	0.971	21
		Rate %	26.5	14.7	32.4	23.5	2.9				
9	Government agencies do not have a comprehensive methodology that takes into account the development of the effectiveness of risk management systems.	Iteration	5	7	13	7	2	3.17	1.113	0.272	2323
		Rate %	14.7	20.6	38.2	20.6	5.9				
10	The inefficiency of risk management systems in government agencies does not affect the audit tasks implemented.	Iteration	4	17	6	3	4	3.41	1.18	0.915	14
		Rate %	11.8	50	17.6	8.8	11.8				
11	Legislation and laws are not an obstacle to the Bureau in evaluating the efficiency of risk management systems in government agencies.	Iteration	2	11	6	7	8	2.76	1.30	0.009	23

		Rate %	5.9	32.4	17.6	20.6	23.5				
12	The Libyan Audit Bureau does not verify the extent to which government agencies comply with international standards in the risk management system when evaluating efficiency.	Iteration	8	8	7	8	3	3.29	1.31	0.673	16
		Rate %	23.5	23.5	20.6	23.5	8.8				
13	The Libyan Audit Bureau does not seek to enhance confidence in the risk management systems of government agencies through its evaluation of efficiency.	Iteration	7	16	5	3	3	3.61	1.18	0.269	8
		Rate %	20.6	47.1	14.7	8.8	8.8				
14	The quality of risk management systems efficiency assessment reports is not affected by the high level of communication between the Audit Bureau and	Iteration	2	10	14	7	1	3.14	0.92	0.135	20

	government agencies.										
		Rate %	5.9	29.4	41.2	20.6	2.9				
15	The Libyan Audit Bureau does not communicate with government agencies upon completion of risk management systems efficiency assessments (correspondences - discussions)	Iteration	8	9	13	4	-	3.61	0.98	0.187	9
		Rate %	23.5	26.5	38.2	11.8	-				
16	The Bureau should not issue separate reports on evaluating the efficiency of risk management systems in government agencies.	Iteration	11	15	5	3	-	4	0.92	0.000	1
		Rate %	32.4	44.1	14.7	8.8	-				
17	The Libyan Audit Bureau does not provide advisory services to government agencies that would positively impact the efficiency of risk management systems.	Iteration	8	9	15	2	-	3.67	0.91	0.076	6
		Rate %	23.5	26.5	44.1	5.9	-				

18	The experience and specialization of members and technical staff do not affect the evaluation of the efficiency of risk management systems in government agencies.	Iteration	9	12	9	4	-	3.76	0.98	0.034	3
		Rate %	26.5	35.3	26.5	11.8	-				
19	Government agencies do not adhere to recommendations related to assessing the efficiency of risk management systems.	Iteration	7	5	19	3	-	3.47	0.92	0.616	12
		Rate %	26.6	14.7	55.9	8.8	-				
20	The recommendations of the Libyan Audit Bureau do not contribute to developing the efficiency of risk management systems in government agencies.	Iteration	7	12	12	2	1	3.64	0.98	0.136	7
		Rate %	20.6	35.3	35.3	5.9	2.9				
	There is no impact on risk management in government agencies after implementing the	Iteration	8	10	15	1	-				

21	Audit Bureau's recommendations.							3.73	0.86	0.026	4
		Rate %	23.5	29.4	44.1	2.9	-				
22	Government agencies do not respond to recommendations regarding the efficiency of risk management systems.	Iteration	5	8	19	2	-	3.47	0.82	0.573	13
		Rate %	14.7	23.5	55.9	5.9	-				
23	The Libyan Audit Bureau does not publish separate reports on the efficiency of risk management systems on a regular basis.	Iteration	8	7	9	4	6	3.20	1.40	0.452	17
		Rate %	23.5	20.6	26.5	11.8	17.6				
The Libyan Audit Bureau has no role in developing risk management systems in government agencies.									3.45	0.625	0.579

Testing the first sub-hypothesis: The Libyan Audit Bureau has no role in developing the efficiency of risk management systems in government agencies.

To test the first sub-hypothesis, a one-sample test was applied, and Tables (7-8) show the results:

(7) One-Sample Statistics				
The Libyan Audit Bureau has no role in developing the efficiency of risk management systems in government agencies.	N	Mean	Std. Deviation	Std. Error Mean
	34	3.4501	.62540	.10725

(8) One-Sample Test						
The Libyan Audit Bureau has no role in developing the efficiency of risk management systems in government agencies.	Test Value = 3.39					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					lower	upper

	.561	33	.579	.06013	-.1581-	.2783
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From Tables (7-8) it is clear that the arithmetic mean of the study sample responses was (3.45) with a standard deviation of (0.625) and that the value of the significance level (Sig) is (0.579) which is greater than (0.05), so the null hypothesis is accepted which states the following:

(The Libyan Audit Bureau has no role in developing the efficiency of risk management systems in government agencies.)

Testing the second sub-hypothesis: The Libyan Audit Bureau has no role in developing the effectiveness of risk management systems in government agencies.

By studying the paragraphs of the hypothesis through the data contained in the following table, which shows the frequency distribution of the study sample regarding the paragraphs of the axis, and the statistical analysis of the answers of the study sample regarding whether the average response score reached the average value, which is (3), or not, and by examining the table, it becomes clear that the highest arithmetic mean was obtained in the following paragraphs:

- Paragraph (18) came in first place, as its arithmetic mean was (3.97), which is greater than the average value (3), with a standard deviation of (0.904), and a significance level of (0.001), which is less than (0.05), which indicates the rejection of the statement that says, "The experience and specialization of members and technical employees do not affect the evaluation of the effectiveness of risk management systems in government agencies."
- Paragraph (15) came in second place, as its arithmetic mean was (3.88), which is greater than the average value (3), with a standard deviation of (0.807), and a significance level of (0.001), which is less than (0.05), which indicates the rejection of the statement that says, "The Libyan Audit Bureau does not communicate with

government agencies upon completion of the evaluation of the effectiveness of risk management systems (correspondences - discussions)."

- Paragraph (20) came in third place, as its arithmetic mean was (3.88), which is greater than the average value (3), with a standard deviation of (0.913), and a significance level of (0.004), which is less than (0.05), which indicates the rejection of the statement that says, "The recommendations of the Libyan Audit Bureau do not contribute to developing the effectiveness of risk management systems in government agencies."

It is also clear that the three least statements according to the arithmetic mean are:

- Paragraph (9) had an arithmetic mean of (3.17), which is greater than the mean value (3), with a standard deviation of (1.13), and a significance level of (0.272), which is greater than the significance level of (0.05).

- Paragraph (23) had an arithmetic mean of (3.32), which is greater than the mean value (3), with a standard deviation of (1.364), and a significance level of (0.778), which is greater than the significance level of (0.05).

- Paragraph (8) had an arithmetic mean of (3.38), which is greater than the mean value (3), with a standard deviation of (1.206), and a significance level of (0.971), which is greater than the significance level of (0.05).

Table No. (9) Descriptive statistics of the opinions of the study sample regarding the role of the supreme audit institutions in developing the effectiveness of risk management systems in government agencies.

	The Libyan Audit Bureau has no role in developing the effectiveness of risk management systems in government agencies.	Scale	Strongly agree	I agree	neutral	Disagree	Strongly disagree	Average	Standard deviation	sig	Order paragraphs by degree of importance
1	The Libyan Audit Bureau does not contribute to developing the effectiveness of risk management systems based on the laws and legislation regulating its work.	Iteration	7	17	4	6	-	3.73	0.994	0.051	7
		Rate %	20.6	50	11.8	17.6	-				
2	The Libyan Audit Bureau does not aim, as part of its plans, to develop the effectiveness of risk management systems in government agencies.	Iteration	9	14	8	3	-	3.85	0.925	0.006	4
		Rate %	26.5	41.2	23.5	8.8	-				
3	The audit task plans do not include an integrated program to evaluate the effectiveness of risk management systems in government agencies.	Iteration	8	5	15	4	2	3.38	3.155	0.969	20
		Rate %	23.5	14.7	44.1	11.8	5.9				
4	There are no professional standards and work guides that explain how to evaluate and develop the		10	6	10	6	2				

	effectiveness of risk management systems in government agencies.	Iteration						3.47	1.260	0.712	17
		Rate %	29.4	17.6	29.4	17.6	5.9				
5	The Libyan Audit Bureau does not establish clear and specific procedures for developing the effectiveness of risk management systems in government agencies when carrying out audit tasks.	Iteration	9	10	8	5	2	3.55	1.210	0.422	14
		Rate %	26.5	29.4	23.5	14.7	5.9				
6	The Libyan Audit Bureau does not have the scientifically and practically qualified human resources capable of developing the effectiveness of risk management systems in government agencies.	Iteration	10	14	6	3	1	3.85	1.048	0.015	5
		Rate %	29.4	41.2	17.6	8.8	2.9				
7	The Libyan Audit Bureau does not conduct training courses and workshops for auditors on risk management	Iteration	11	10	9	4	-				

	effectiveness assessment processes in government agencies.										
		Rate %	32.4	29.4	26.5	11.8	-	3.82	1.028	0.019	6
8	Government agencies do not deal with international standards for risk management systems.	Iteration	9	5	11	8	1	3.38	1.206	0.971	21
		Rate %	26.5	14.7	32.4	23.5	2.9				
9	Government agencies do not have a comprehensive methodology that takes into account the development of the effectiveness of risk management systems.	Iteration									
		Rate %									
10	The ineffectiveness of risk management systems in government agencies does not affect the oversight tasks implemented.	Iteration	6	10	12	5	1	3.44	1.050	0.778	19
		Rate %	17.6	29.4	35.3	14.7	2.9				
11	Legislation and laws are not an obstacle to the Bureau in evaluating the effectiveness of risk management	Iteration	9	8	8	9	-				

	systems in government agencies.							3.50	1.161	0.584	16
		Rate %	26.5	23.5	23.5	26.5	-				
12	The Libyan Audit Bureau does not verify the extent to which government agencies comply with international standards in the risk management system when evaluating effectiveness.	Iteration	8	11	9	6	-	3.61	1.044	0.213	13
		Rate %	23.5	32.5	26.5	17.6	-				
13	The Libyan Audit Bureau does not seek to enhance confidence in the risk management systems of government agencies through its assessment of effectiveness.	Iteration	6	13	11	1	3	3.52	1.107	0.486	15
		Rate %	17.6	38.2	32.4	2.9	8.8				
14	The quality of risk management systems effectiveness assessment reports is not affected by the high level of communication between the Audit Bureau and government agencies.	Iteration	5	12	11	6	-	3.47	0.960	0.628	18
		Rate %	14.7	35.3	32.4	17.6	-				
	The Libyan Audit Bureau does not										

15	communicate with government agencies upon completion of risk management systems effectiveness assessments (correspondences - discussions)	Iteration	8	15	10	1	-	3.88	0.807	0.001	2
		Rate %	23.5	44.1	29.4	2.9	-				
16	The Bureau should not issue separate reports on assessing the effectiveness of risk management systems in government agencies.	Iteration	9	12	8	5	-	3.73	1.024	0.058	8
		Rate %	26.5	35.3	23.6	14.7	-				
17	The Libyan Audit Bureau does not provide advisory services to government agencies that would impact the effectiveness of risk management systems.	Iteration	9	9	14	2	-	3.73	0.931	0.038	9
		Rate %	26.5	26.5	41.2	5.9	-				
18	The experience and specialization of members and technical staff do not affect the evaluation of the effectiveness of risk management systems in government agencies.	Iteration	10	15	5	-	1	3.97	0.904	0.001	1
		Rate %	29.4	44.1	23.5	-	2.9				

19	Government agencies do not adhere to recommendations related to evaluating the effectiveness of risk management systems.	Iteration	7	12	12	3	-	3.67	0.911	0.076	10
		Rate %	20.6	25.3	25.3	8.8	-				
20	The recommendations of the Libyan Audit Bureau do not contribute to developing the effectiveness of risk management systems in government agencies.	Iteration	8	17	7	1	1	3.83	0.913	0.004	3
		Rate %	23.5	50	20.6	2.9	2.9				
21	There is no impact on risk management in government agencies after implementing the Audit Bureau's recommendations.	Iteration	6	14	11	3	-	3.67	0.878	0.066	11
		Rate %	17.6	41.2	32.4	8.8	-				
22	Government agencies do not respond to recommendations regarding the effectiveness of risk management systems.	Iteration	9	9	11	5	-	3.64	1.041	0.159	12
		Rate %	26.5	26.5	32.4	14.7	-				
23	The Libyan Audit Bureau does not publish separate reports on the effectiveness of	Iteration	9	7	8	6	4				

	risk management systems on a regular basis.										
		Rate %	26.5	20.6	23.5	17.6	11.8	3.32	1.364	0.778	22
		The Libyan Audit Bureau has no role in developing the effectiveness of risk management systems in government agencies.							3.62	0.686	0.056

Testing the second sub-hypothesis: The Libyan Audit Bureau has no role in developing the effectiveness of risk management systems in government agencies.

To test the second sub-hypothesis, a one-sample test was applied, and Tables (10-11) show the results:

(10) One Sample Statistics				
The Libyan Audit Bureau has no role in developing the effectiveness of risk management systems in government agencies.	N	Mean	Std. Deviation	Std. Error Mean
	34	3.6228	.68651	.11774

(11) One-Sample Test						
The Libyan Audit Bureau has no role in developing the effectiveness of risk management systems in government agencies.	Test Value = 3.39					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
	1.977	33	.056	.23276	-.0068	.4723

From Tables (10-11), it is clear that the arithmetic mean of the study sample's responses was (3.67), with a standard deviation of (0.911), and that the significance level (Sig) value was (0.056), which is greater than (0.05). Therefore, the null hypothesis, which states the following, is accepted:

(There is no role for the supreme financial and accounting oversight bodies in developing the effectiveness of risk management systems in government agencies).

Testing the main hypothesis:

(The Libyan Audit Bureau has no role in developing risk management systems in government agencies.)

To test the main hypothesis, a one-sample test was applied, and Table (12-13) shows the results.

(12) One-Sample Statistics				
There is no role for SAIs in the development of risk management systems of government agencies	N	Mean	Std. Deviation	Std. Error Mean
	34	3.6765	.91189	.15639

(13) One-Sample Test						
The Libyan Audit Bureau has no role in developing risk management systems in government agencies.	Test Value = 3.39					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
	1.832	33	.076	.28647	-.0317	.6046

From Tables (12-13), it is clear that the arithmetic mean of the study sample's responses was (3.67), with a standard deviation of (0.911), and that the significance

level (Sig) value was greater than (0.05). Therefore, the null hypothesis, which states the following, is accepted: **"There is no role for the Libyan Audit Bureau in developing risk management systems in government agencies."**

Chapter Four

Findings and Recommendations

1.4- Findings

By addressing the theoretical aspect, collecting data for the study tool, and testing and analyzing hypotheses, the findings indicated that the Libyan Audit Bureau has no role in developing risk management systems in government agencies, as highlighted in the following points:

- 1- The Libyan Audit Bureau has no role in developing the efficiency of risk management systems in government agencies.
- 2- The Libyan Audit Bureau has no role in developing the effectiveness of risk management systems in government agencies.

2.4- Recommendations

To activate the Libyan Audit Bureau's role in developing risk management systems in government agencies, it should address the following points:

- 1- Issuing separate reports on the recommendations necessary to evaluate and develop risk management systems in government agencies, or addressing those recommendations in the annual report.
- 2- Developing employee capabilities through intensified training programs, workshops, and seminars, especially since sector expertise and specialization are crucial factors in developing risk management systems in government agencies.
- 3- The Bureau's annual plans and audit task plans must include provisions for evaluating and developing risk management systems in government agencies.
- 4- Updating or developing standards and work guides that clarify how to evaluate and develop risk management systems in government agencies.
- 5- Establish and activate risk management within the organizational structure of the Libyan Audit Bureau.

6- Coordinate with the Bureau's Research and Studies Center to conduct further academic studies on how to develop the Bureau's capabilities in developing risk management systems in government agencies.

Reference list

1. "Risk Management in Government Institutions: A Guide to Action" - Author: Dubai Center for Government Development.
2. "Risk and Quality in the Government Sector: An Applied Study" - Author: Dr. Hisham Awad.
3. "The Arab Standard for Risk Management: Principles and Applications" - Author: Arab Financial Rating Board.
4. "Developing Internal Control and Oversight Systems in the Public Sector: An Applied Study in Saudi Ministries," by Saad Al-Qahtani and Abdullah Al-Jahni.
5. "Internal Control Standards in the Public Sector: A Comparative Study between Arab Countries," by Samir Al-Bayati and Mohammed Al-Alawi.
6. ISO 31000:2018 Standard for Risk Management.
7. Bin Al-Arabi, Abbas and Umm Al-Khair, Faiza Hashi (2023). The extent of internal control systems' responsiveness to risk management outcomes in light of senior management behavior: A field study of the Algerian Insurance Company (CAAT). *Journal of Finance and Business Economics*, Vol. 8, No. 1, pp. 269-286.
8. Al-Anzi, Saad Ali Hamoud and Al-Dulaimi, Arak Abboud Amir. (2015). The impact and benefits of risk management on organizations: A theoretical and analytical approach. *Al-Anbar Journal of Economic and Administrative Sciences*, Vol. 7, No. 13, pp. 569-583.
9. Al-Wakil, Hossam Al-Saeed (2010) The Role of Internal Audit in Enterprise Risk Management, *Scientific Journal of Business Research and Studies*, Issue 4, pp. 197-237.
10. Miloud, Samir Al-Bahlol, and Othman, Muhammad Mansour (2016) The Role of Internal Audit in Business Risk Management: An Applied Study on Public Telecommunications Companies in Libya, Issue 24, pp. 182-211.

Annex No. (1)

Questionnaire

May Allah's peace, mercy, and blessings be upon you. The researcher is preparing a study for participation in the 14th Arab Organization of Supreme Audit Institutions (ARBOSAI) Scientific Research Competition, titled **"The Role of the Libyan Audit Bureau in Developing Risk Management Systems in Government Entities"** (A Field Study).

The researcher hopes you will kindly complete the questionnaire. In this context, we emphasize that your response and participation in the questionnaire will contribute to achieving the study's objectives. All information obtained will be treated confidentially and will be used only for academic research purposes.

We appreciate your cooperation in advance.

Researcher: Amal Abdel Rahman Lasifer

Email: amalyellow@gmail.com

Section One

Personal Information

Please put a tick (☐) in front of the appropriate answer:

1- Academic qualification:

(☐) Bachelor (☐) Master (☐) Doctorate (☐)

2- Specialization:

Accounting (☐) Law (☐) Economics (☐) Engineering (☐)

3- Job title

General Manager (<input type="checkbox"/>)	Office Manager (<input type="checkbox"/>)	Consultant (<input type="checkbox"/>)
Sub-Department Manager (<input type="checkbox"/>)	Branch Manager (<input type="checkbox"/>)	Legal Researcher (<input type="checkbox"/>)
Financial Auditor (<input type="checkbox"/>)	Other (<input type="checkbox"/>)	

4- Years of experience

Less than 5 years (☐) From 5 to 10 (☐)

From 10 to 15 (☐) 15 and above (☐)

5- The capacity

Technical employee (☐) member (☐)

Definition of the terms used in the questionnaire:

- **Efficiency:** Efficiency is defined as the ability to achieve desired goals and results with the minimum possible resources and effort. It utilizes available resources to the maximum extent possible. It concerns the relationship between the resources used and the resulting outputs in terms of quantity, quality, and time (ISSAI 300).

- **Effectiveness:** Achieving specific goals and desired results (ISSAI 300). It focuses on achieving accurate and effective results.

- **Risk management system:** It is a set of organized activities to guide the organization and control its risks (2018 - ISO31000). It is the procedures, policies, and programs implemented by organizations to deal with risks that threaten the achievement of their objectives. These systems aim to enhance the ability to deal with potential challenges and reduce the negative effects of risks on the organization.

Section Two

Axis Two - The Libyan Audit Bureau has no role in developing the efficiency of risk management systems in government agencies.

Please mark (v) the appropriate answer:

	Paragraph	Strongly agree	agree	neutral	Disagree	Strongly disagree
1	The Libyan Audit Bureau does not contribute to developing the efficiency of risk management systems based on the laws and legislation regulating its work.					
2	The Libyan Audit Bureau does not aim, as part of its plans, to develop the efficiency of risk management systems in government agencies.					
3	The audit task plans do not include an integrated program to evaluate the efficiency of risk management systems in government agencies.					
4	There are no professional standards and work guides that explain how to evaluate and develop the efficiency of risk management systems in government agencies.					
5	The Libyan Audit Bureau does not establish clear and specific procedures for developing the efficiency of risk management systems in government agencies when carrying out audit tasks.					

6	The Libyan Audit Bureau does not have the scientifically and practically qualified human resources capable of developing the efficiency of risk management systems management in government agencies.					
7	The Libyan Audit Bureau does not conduct training courses and workshops for auditors on risk management efficiency assessment processes in government agencies.					
8	Government agencies do not deal with international standards for risk management systems.					
9	The entities subject to the audit of the Libyan Audit Bureau do not have a comprehensive methodology that takes into account the development of the efficiency of risk management systems.					
10	The inefficiency of risk management systems in government agencies does not affect the audit tasks implemented.					
11	Legislation and laws are not an obstacle to the Bureau in evaluating the efficiency of risk management systems in government agencies.					
12	The Libyan Audit Bureau does not verify the extent to which government agencies					

	comply with international standards in the risk management system when evaluating efficiency.					
13	The Libyan Audit Bureau does not seek to enhance confidence in the risk management systems of government agencies through its evaluation of efficiency.					
14	The quality of risk management systems efficiency assessment reports is not affected by the high level of communication between the Audit Bureau and government agencies.					
15	The Libyan Audit Bureau does not communicate with government agencies upon completion of risk management systems efficiency assessments (correspondences - discussions)					
16	The Bureau should not issue separate reports on the evaluation of the efficiency of risk management systems in government agencies.					
17	The Libyan Audit Bureau does not provide advisory services to government agencies that would positively impact the efficiency of risk management systems.					
18	The experience and specialization of members and technical					

	staff does not positively affect his assessment of the efficiency of risk management systems in government agencies.					
19	Government agencies do not adhere to recommendations related to assessing the efficiency of risk management systems.					
20	The recommendations of the Libyan Audit Bureau do not contribute to developing the efficiency of risk management systems in government agencies.					
21	There is no impact on risk management in government agencies after implementing the Audit Bureau's recommendations.					
22	Government agencies do not respond to recommendations regarding the efficiency of risk management systems.					
23	The Libyan Audit Bureau does not publish separate reports on the efficiency of risk management systems on a regular basis.					

Axis 2: The Libyan Audit Bureau has no role in developing the effectiveness of risk management systems in government agencies.

Please mark (v) the appropriate answer:

N	Paragraph	Strongly agree	agree	neutral	Disagree	Strongly disagree
1	The Libyan Audit Bureau does not contribute to developing the effectiveness of risk management systems based on the laws and legislation regulating its work.					
2	The Libyan Audit Bureau does not aim, as part of its plans, to develop the effectiveness of risk management systems in government agencies.					
3	The audit task plans do not include an integrated program to evaluate the effectiveness of risk management systems in government agencies.					
4	There are no professional standards and work guides that explain how to evaluate and develop the effectiveness of risk management systems in government agencies.					
5	The Libyan Audit Bureau does not establish clear and specific procedures for developing the					

	effectiveness of risk management systems in government agencies when carrying out audit tasks.					
6	The Libyan Audit Bureau does not have the scientifically and practically qualified human resources capable of developing the effectiveness of risk management systems management in government agencies.					
7	The Libyan Audit Bureau does not conduct training courses and workshops for auditors on risk management effectiveness assessment processes in government agencies.					
8	Government agencies do not deal with international standards for risk management systems.					
9	The entities subject to the Libyan Audit Bureau's auditing do not have a comprehensive methodology that takes into account the development of the effectiveness of risk management systems.					
10	The ineffectiveness of risk management systems in government					

	agencies does not affect the audit tasks implemented.					
11	Legislation and laws are not an obstacle to the Bureau in evaluating the effectiveness of risk management systems in government agencies.					
12	The Libyan Audit Bureau does not verify the extent to which government agencies comply with international standards in the risk management system when evaluating effectiveness.					
13	The Libyan Audit Bureau does not seek to enhance confidence in the risk management systems of government agencies through its evaluation of effectiveness.					
14	The quality of risk management systems effectiveness assessment reports is not affected by the high level of communication between the Audit Bureau and government agencies.					
15	The Libyan Audit Bureau does not communicate with government agencies upon completion of risk management systems					

	effectiveness assessments (correspondences - discussions)					
16	The Bureau should not issue separate reports on the evaluation of the effectiveness of risk management systems in government agencies.					
17	The Libyan Audit Bureau does not provide advisory services to government agencies that would positively impact the effectiveness of risk management systems.					
18	The experience and specialization of members and technical staff does not positively affect his assessment of the effectiveness of risk management systems in government agencies.					
19	Government agencies do not adhere to recommendations related to assessing the effectiveness of risk management systems.					
20	The recommendations of the Libyan Audit Bureau do not contribute to developing the effectiveness of risk management systems in government agencies.					

21	There is no impact on risk management in government agencies after implementing the Audit Bureau's recommendations.					
22	Government agencies do not respond to recommendations regarding the effectiveness of risk management systems.					
23	The Libyan Audit Bureau does not publish separate reports on the effectiveness of risk management systems on a regular basis.					