The Role of Internal Audit Functions in Improving Organizational Resilience to Financial Risks-A case study National Company for Public Works (GITRAMA)

ALLOUNE Mohamed lamine[1,*], MEGHDOURI Chahrazed[2], BOURAS Fatima[3]
[1] Blida 2-Lounici Ali- University (Algeria),
[2] Blida 2- Lounici Ali- University (Algeria),
[3] Blida 2- Lounici Ali- University (Algeria),

Received: 31/05/2025; **Revised:** 15/07/2025; **Accepted:** 21/10/2025

Summary:

This study investigates the pivotal role of internal audit functions in bolstering organizational resilience against financial risks, specifically examining the National Company for Public Works (GITRAMA). It aims to explore how internal audit practices contribute to identifying, assessing, and mitigating financial risks, thereby strengthening the company's capacity to navigate economic volatility and maintain stability. Adopting a mixed-methods approach, the research integrates qualitative interviews with internal auditors and financial managers, alongside quantitative surveys designed to measure audit practice effectiveness.

Findings reveal that GITRAMA's internal audit function is crucial for early financial risk detection, enhancing risk management strategies, and promoting robust governance. However, the study identifies significant challenges, including resource insufficiency, limited access to critical financial data, and organizational resistance to change, which impede the function's full potential.

The study recommends increasing resources for internal audit teams, reinforcing their independence, and promoting continuous professional development to fortify financial risk management practices. It concludes that a robust internal audit system is indispensable for ensuring GITRAMA's sustained resilience amidst financial uncertainties.

Keywords: Internal Audit, Financial Risk Management, Organizational Resilience, Governance, Public Works (GITRAMA).
Jel Classification Codes : G32, M42, G01, M48.

I- Introduction :

In today’s rapidly evolving global business environment, organizations across the world, including those in Algeria, face an increasing array of financial risks that can significantly threaten their stability and long-term success. Algeria, as a country heavily reliant on public sector projects, particularly in infrastructure and public works, is not immune to these risks. The financial landscape in Algeria is marked by economic volatility, fluctuating oil prices, public budget constraints, and evolving regulatory frameworks. These factors create a complex environment for organizations operating in the public sector, where the ability to manage and mitigate financial risks is essential to ensuring sustained growth and operational success.

* Corresponding author, e-mail: medlamine.alloune@yahoo.com

This is an open access article under the CC BY-NC license: https://creativecommons.org/licenses/by-nc/4.0/deed.en

In this context, the role of internal audit functions becomes even more critical. Internal audits help organizations identify vulnerabilities, assess risk exposure, and implement effective control measures to safeguard financial integrity. In Algeria, where public sector organizations are often large and face complex financial management challenges, the internal audit function plays an indispensable role in improving resilience against financial risks. As Algeria's public works sector continues to grow, driven by government-led infrastructure development initiatives, the risks associated with financial mismanagement, fraud, and operational inefficiency intensify, making strong internal auditing practices essential for maintaining transparency and accountability.

One notable example is the National Company for Public Works (GITRAMA), a key player in Algeria's public works and infrastructure development sector. With large-scale projects that involve significant public funding, the company faces unique financial risks, from budget fluctuations and procurement challenges to managing complex contracts and project timelines. In such a high-risk environment, the internal audit function not only serves as a safeguard against financial mismanagement but also as a strategic partner in improving the company's overall resilience to economic and financial challenges.

This study explores the crucial role of internal audit functions in enhancing organizational resilience to financial risks, with a focus on the National Company for Public Works in Algeria. Through a detailed case study approach, this research examines how internal audit practices contribute to identifying, assessing, and mitigating financial risks, and how they strengthen the company's ability to navigate Algeria's economic uncertainties. By utilizing both qualitative and quantitative research methods, the study provides insights into how internal auditing practices can effectively improve financial risk management and promote long-term sustainability, especially in a country like Algeria where the public sector's role is so significant.

The findings of this research not only underscore the importance of a robust internal audit system in mitigating financial risks but also offer valuable recommendations for other Algerian organizations, particularly those in the public sector. By focusing on Algeria's specific economic context and public works sector, this study highlights the need for enhanced internal audit practices that can bolster resilience, transparency, and governance. These insights can serve as a roadmap for Algerian organizations aiming to strengthen their financial risk management capabilities and ensure they are better prepared to face the challenges of the evolving financial landscape.

1.1 Main Research Question:

" How do the effectiveness of the internal audit function and the level of audit transparency and accountability influence financial risk management and enhance organizational resilience within GITRAMA, considering the challenges posed by limited resources, restricted access to key financial data, and resistance to organizational change?"

Sub-Research Questions:

1. What are the primary financial risks faced by GITRAMA, and how do they impact its operational efficiency and financial stability?
2. How does the internal audit function at GITRAMA contribute to identifying, assessing, and mitigating financial risks?
3. What challenges impede the effectiveness of GITRAMA's internal audit function in managing financial risks and enhancing organizational resilience?
4. In what ways can strengthening the internal audit function—through increased resources, independence, and professional development—improve financial risk management and organizational resilience at GITRAMA?
5. Is there a significant correlation between Internal Audit Effectiveness (IAE) and Financial Risk Management (FRM) at GITRAMA?
6. Does Audit Transparency and Accountability (ATA) mediate the relationship between Internal Audit Effectiveness (IAE) and Organizational Resilience (OR) at GITRAMA?
7. What is the impact of enhanced Audit Transparency and Accountability (ATA) on Organizational Resilience (OR) at GITRAMA?

8. How does the effectiveness of Financial Risk Management (FRM) relate to Organizational Resilience (OR) within GITRAMA?
9. Is there a significant relationship between Internal Audit Effectiveness (IAE) and Financial Risk Management (FRM) at GITRAMA?
10. Does Audit Transparency and Accountability (ATA) mediate the relationship between Internal Audit Effectiveness (IAE) and Organizational Resilience (OR) at GITRAMA?

1.2 Research Hypothesis:

1. **H_1:** The National Company for Public Works(GITRAMA) encounters significant financial risks—including fluctuations in public funding, procurement challenges, and cost overruns—that negatively impact its operational efficiency and financial stability.
2. **H_2:** The internal audit function at GITRAMA plays a pivotal role in identifying, assessing, and mitigating financial risks through proactive monitoring, regular evaluations, and comprehensive audits of financial processes and controls.
3. **H_3:** The internal audit function at GITRAMA faces challenges such as limited resources, insufficient access to key financial data, and resistance to organizational change, which hinder its effectiveness in fully mitigating financial risks and enhancing organizational resilience.
4. **H_4:** Strengthening the internal audit function through increased resource allocation, greater independence, and continuous professional development will significantly enhance its ability to manage financial risks and improve organizational resilience at GITRAMA.

Secondary Hypotheses

5. **H_5:** There is a positive correlation between Internal Audit Effectiveness (IAE) and Financial Risk Management (FRM) at GITRAMA.
6. **H_6:** Audit Transparency & Accountability (ATA) mediates the relationship between Internal Audit Effectiveness (IAE) and Organizational Resilience (OR) at GITRAMA.
7. **H_7:** Enhanced Audit Transparency & Accountability (ATA) positively influences Organizational Resilience (OR) at GITRAMA.
8. **H_8:** The effectiveness of Financial Risk Management (FRM) is positively associated with Organizational Resilience (OR) at GITRAMA.

Null Hypotheses

9. **$H0_1$:** There is no significant relationship between Internal Audit Effectiveness (IAE) and Financial Risk Management (FRM) at GITRAMA.
10. **$H0_2$:** Audit Transparency & Accountability (ATA) does not mediate the relationship between Internal Audit Effectiveness (IAE) and Organizational Resilience (OR) at GITRAMA.

1.3 Importance of the Study:

This study is of significant importance due to the critical role that internal audit functions play in safeguarding organizations against financial risks, particularly in the context of public sector organizations in Algeria. The National Company for Public Works operates in a sector where large-scale infrastructure projects, public funding, and complex financial management require effective risk mitigation strategies. Given the economic volatility in Algeria, driven by fluctuations in oil prices, budget constraints, and evolving regulatory landscapes, understanding how internal audit functions contribute to organizational resilience is essential for ensuring financial stability and long-term sustainability. This study not only provides valuable insights into the effectiveness of internal audits within this specific company but also contributes to the broader discourse on improving financial risk management practices in public sector organizations in Algeria.

This is an open access article under the CC BY-NC license: https://creativecommons.org/licenses/by-nc/4.0/deed.en

1.3 Objectives of the Study:

1. **Examine the main financial risks faced by the National Company for Public Works** and understand how these risks impact its operational efficiency and financial stability.
2. **Assess the role of the internal audit function** in identifying, evaluating, and mitigating financial risks within the company.
3. **Identify the challenges faced by the internal audit function** in improving organizational resilience and how these challenges affect the effectiveness of its operations.
4. **Propose recommendations for enhancing the internal audit function** at the National Company for Public Works Equipment, aiming to strengthen financial risk management practices and improve overall organizational resilience.

1.4 Research Methodology:

This study employs a **quantitative approach** using a structured **survey questionnaire** to assess the role of internal audit functions in improving organizational resilience to financial risks at the National Company for Public Works Equipment.

1. **Survey Design:** A comprehensive questionnaire will be developed to gather data on the internal audit processes, financial risk management practices, and the challenges faced by the internal audit function at the National Company for Public Works Equipment. The survey will include both closed-ended and Likert scale questions to measure perceptions and experiences related to the effectiveness of internal audits in identifying and mitigating financial risks.
2. **Sample Selection:** The survey will be distributed to a representative sample of employees involved in financial management and auditing within the company, including members of the internal audit department, financial managers, and key decision-makers. A purposive sampling method will be used to ensure that the respondents have relevant knowledge and experience with the company's audit and risk management processes.
3. **Data Collection:** The survey will be distributed both in paper and digital formats to accommodate the preferences of the participants. To ensure a high response rate, follow-up reminders will be sent to encourage participation. Data collection will be conducted over a predefined period to allow for sufficient time to gather meaningful responses.
4. **Data Analysis:** Once the survey data is collected, the responses will be analyzed using **descriptive statistics** to provide an overview of the internal audit function's effectiveness in managing financial risks. **Correlation analysis** will be conducted to identify relationships between the perceived effectiveness of internal audits and the company's resilience to financial risks. The results will help to identify key areas where internal audit functions can be strengthened to improve overall organizational stability.

By utilizing this survey-based methodology, the study aims to provide empirical insights into how internal audit practices contribute to financial risk management and organizational resilience at the National Company for Public Works Equipment. The findings will offer actionable recommendations for enhancing audit functions within similar public sector organizations in Algeria.

1.5 Previous Studies:

1. **Author:** Sohail, M., & Akhtar, M. "*The Role of Internal Auditing in Managing Financial Risks in Public Sector Organizations*, **Year:** 2019, **Summary:** This study explores the role of internal auditing in mitigating financial risks within public sector organizations in Pakistan. It identifies key risk areas such as budget mismanagement, fraud, and financial misreporting and emphasizes the importance of internal audit functions in improving financial control systems.
   Value Added to Current Study: While this study focuses on the Pakistani public sector, it provides valuable insights into how internal auditing can enhance financial management. The current study builds upon this by specifically focusing on the Algerian context, providing a more localized analysis of internal audit functions in managing financial risks in public sector organizations like the National Company for Public Works Equipment.
2. **Author:** Kainth, G. S., "*Internal Auditing: A Key Component of Risk Management in the Public Sector*", **Year:** 2018, **Summary:** Kainth's research delves into how internal auditing

functions in the public sector help manage both operational and financial risks. It highlights the relationship between effective auditing and improved governance, transparency, and accountability in public organizations.
Value Added to Current Study: This research underscores the importance of auditing in governance and transparency, which is critical for public organizations. The current study extends this by focusing specifically on how internal audits improve resilience to financial risks within Algeria's public sector, considering the unique economic and regulatory challenges faced by organizations in the country.

3. **Author:** Mihaila, S., & Popescu, M., *"The Impact of Internal Audit on Financial Risk Management in Public Sector Enterprises"*, **Year:** 2020, **Summary:** This paper explores the role of internal audit in mitigating financial risks in public sector enterprises in Eastern Europe. The study emphasizes the impact of auditing on enhancing decision-making and risk mitigation strategies.

   Value Added to Current Study: While this research focuses on Eastern European countries, it offers insights into the relationship between internal audits and financial risk mitigation in the public sector. The current study differentiates itself by concentrating on Algeria and the specific challenges faced by the National Company for Public Worksin the face of financial risks in a developing economy.
4. **Author:** Mello, J. S., & Anderson, D., *"Internal Audit and Risk Management: A Global Perspective"*, **Year:** 2017, **Summary:** This study provides a global perspective on the role of internal auditing in managing organizational risks, including financial, operational, and compliance risks. It offers a comparative analysis of internal audit practices in both public and private sectors across various countries.
   Value Added to Current Study: While this study provides a broad global overview, the current research focuses specifically on Algeria, examining how internal audit functions contribute to improving resilience to financial risks in a local public sector context. This geographical and contextual focus makes the current study more relevant to the unique conditions faced by Algerian organizations.

5. **Author:** Gohar, A., & Hanif, M., *"The Role of Internal Audit in Strengthening Financial Resilience in Government Organizations"*, **Year:** 2021, **Summary:** This paper investigates the role of internal auditing in strengthening financial resilience in government organizations in the Middle East, particularly focusing on financial risk management, compliance, and fraud prevention.

   Value Added to Current Study: The study offers insights into the financial resilience aspect of internal auditing in government organizations. The current study builds on this by addressing the specific risks and challenges faced by the National Company for Public Worksin Algeria, providing an in-depth look at how internal audits can directly enhance financial stability and resilience in the context of Algeria's unique economic and regulatory environment.

These previous studies collectively emphasize the significant role of internal auditing in managing financial risks and improving organizational resilience, particularly within the public sector. However, the current study adds value by focusing specifically on the National Company for Public Worksin Algeria, providing a localized and contextual understanding of how internal audit functions contribute to financial risk management. This study also takes into account the unique challenges faced by organizations in Algeria, such as economic volatility and regulatory changes, making its findings particularly relevant for similar organizations operating in the region.

1.6 Positioning the Current Study within Existing Literature:

The current study investigates the role of internal audit functions in improving organizational resilience to financial risks, specifically within the context of the National Company for Public Worksin Algeria. While existing literature has extensively explored the broader relationship between internal auditing and financial risk management in both private and public

This is an open access article under the CC BY-NC license: https://creativecommons.org/licenses/by-nc/4.0/deed.en

sector organizations, there remains a gap in research focusing specifically on Algeria and its unique economic, regulatory, and public sector challenges.

Several studies, such as those by Sohail and Akhtar (2019) and Kainth (2018), provide valuable insights into the role of internal audit in mitigating financial risks in public sector organizations, with a particular focus on improving governance and financial stability. These studies emphasize the importance of internal audits in enhancing transparency, accountability, and risk management strategies. However, these works primarily focus on the public sectors in Pakistan and India, where economic conditions and regulatory frameworks differ significantly from those in Algeria.

Additionally, studies such as those by Mihaila and Popescu (2020) and Gohar and Hanif (2021) discuss the impact of internal audits in public sector enterprises in Eastern Europe and the Middle East, respectively. These studies highlight the role of internal audits in managing financial risks, strengthening financial resilience, and improving organizational performance. However, while these studies are comprehensive in their analysis of internal audit practices, they do not address the specific challenges faced by public organizations in Algeria, such as reliance on public funding, fluctuating oil revenues, and governmental regulatory changes.

By focusing on the National Company for Public Worksin Algeria, this study fills a critical gap in the existing literature. The research provides a detailed case study that takes into account the unique economic and regulatory environment of Algeria. It specifically addresses how internal audit functions contribute to organizational resilience in the face of financial risks, considering the country's reliance on public works, budget constraints, and the impact of global economic fluctuations on the public sector.

Furthermore, the current study incorporates both qualitative and quantitative methods to explore the dynamics between internal audits and financial resilience in the Algerian context, offering empirical data that can guide public sector organizations in Algeria to enhance their financial risk management and audit functions. This localized focus distinguishes the current research from previous global and regional studies, providing a nuanced understanding of internal audits' effectiveness in Algeria's public sector.

1.7 Variables of the Study:

Variable	Role in Model	Conceptual Definition	Operational Definition (Sample Items)	Sub-Dimensions	SPSS Code
Internal Audit Effectiveness (IAE)	Primary Independent	The ability of the internal audit function to identify financial risks and assess the adequacy of controls (IIA, 2019).	- "Internal audit helps identify potential financial risks." - "Internal audit assesses the effectiveness of financial controls."	Early Risk Detection • Control Assessment • Recommendations	IAE
Audit Transparency & Accountability (ATA)	Mediator	The clarity and availability of audit reports to decision-makers, fostering openness and accountability.	- "Internal audit enhances transparency of financial reporting." - "Clear accountability structures are established."	Reporting Transparency • Disclosure • Compliance	ATA
Financial Risk Management (FRM)	Mediator	The effectiveness of systems and procedures for	- "Audit findings help mitigate financial risks." - "Risk	Identification • Evaluation • Mitigation	FRM

		identifying, evaluating, and mitigating financial risks.	management practices are regularly evaluated."		
Organizational Resilience (OR)	Primary Dependent	The firm's capacity to absorb financial shocks and recover rapidly from crises.	- "Audit recommendations improve crisis recovery." - "Business continuity plans are regularly tested."	Preparedness • Adaptation • Recovery	OR
Organizational Performance (OP)	Secondary Dependent / Outcome	The extent to which operational and financial objectives are achieved and decision-making efficiency is enhanced.	- "Internal audit identifies areas for performance improvement." - "Audit supports better management decisions."	Operational Efficiency • Reporting Quality • Competitive Advantage	OP

Source: Prepared by the researcher

Analytical Model Linkages

1. **IAE → FRM**: A strong positive correlation ($r = 0.68$) indicates that higher internal audit effectiveness is associated with more effective financial risk management.
2. **IAE → OR**: Regression analysis shows that IAE significantly explains variation in organizational resilience (β significant at $p < 0.05$).
3. **Mediating Role of ATA**: Audit transparency amplifies the effect of IAE on FRM ($r = 0.72$), which in turn boosts OR.
4. **Path to OP**: The structural model posits that effective risk management and resilience translate into superior organizational performance ($r = 0.75$).

II. Literature review:

Internal audit functions have evolved significantly over time from a basic compliance-oriented activity to a comprehensive tool for risk management and organizational governance. In contemporary organizational settings, particularly in the public and private sectors, internal audits are integral to identifying financial risks, ensuring accountability, and enhancing resilience against economic disruptions. The focus of this study is on the role of internal audit functions in managing **financial risks** and improving **organizational resilience**, a crucial consideration for maintaining long-term stability in dynamic environments.

Internal audits provide a comprehensive assessment of an organization's operations, risk management systems, and financial integrity. By evaluating the effectiveness of internal controls, auditors offer management essential feedback to help mitigate risks and enhance decision-making. Financial risks, ranging from market fluctuations to operational inefficiencies, pose significant threats to organizational stability, especially in turbulent economic times. Organizational resilience, defined as the ability to adapt to and recover from these risks, is an increasingly important goal for businesses and public institutions alike.

2.1 Internal Audit Functions and Their Role in Risk Management

Internal audit functions have undergone significant transformation over the past few decades, evolving from traditional compliance-based roles to more dynamic and strategic components of corporate governance and risk management. The growing complexity of business environments and the increasing prevalence of financial risks have underscored the importance of a robust internal audit function capable of identifying, assessing, and mitigating these risks. (Mukul Bhatnagar, 2025)

This is an open access article under the CC BY-NC license: https://creativecommons.org/licenses/by-nc/4.0/deed.en

2.1.1 Definition and Purpose of Internal Audit

The Institute of Internal Auditors (Pengmian Wang, 2025) defines **internal auditing** as an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. Its primary purpose is to evaluate the effectiveness of internal controls, risk management processes, and governance systems within an organization. By providing management with insights into organizational operations, internal audit helps prevent fraud, inefficiencies, and mismanagement, while simultaneously enhancing the organization's financial health and resilience.

One of the primary roles of internal audit is to assess an organization's risk management framework. Internal audits are charged with examining the adequacy of risk management processes, helping organizations recognize potential risks, and evaluating how these risks can be mitigated. (José Cascais Brás, June 2024) emphasize that internal auditing is integral to risk management because it provides management with a systematic evaluation of the risks an organization faces, especially in terms of financial instability, fraud, and operational inefficiencies.

2.1.2 Internal Audit in Risk Management

The role of internal audit in **risk management** has grown increasingly important as organizations face a wider array of financial and operational risks. According to (Lilong Huang, 2025), internal audit functions are pivotal in identifying, assessing, and mitigating risks by providing independent evaluations and actionable recommendations. They argue that the internal audit function contributes to risk management by ensuring that risk mitigation strategies are not only in place but are also operating effectively.

Moreover, (Chuyun Wang, 2025) highlights that internal auditors are uniquely positioned to provide insights on risk exposure across various functions of the organization. Internal audit functions evaluate the internal controls that help mitigate financial risks and prevent fraud. Through **control testing**, auditors can detect weaknesses in processes that might expose the organization to unnecessary risks, offering suggestions for improvement. This proactive involvement in risk management allows internal auditors to help prevent future crises before they occur.

(Manal Yunis, 2024) further elaborate that internal auditors assist in improving governance structures by identifying key risks and providing recommendations for management. This not only helps organizations address their current risks but also prepares them for unforeseen challenges in the future. According to (Tamimi, 2021), effective internal auditing is essential for public sector organizations, as it helps mitigate financial risks stemming from budget cuts, inefficient spending, or other economic pressures. In particular, the role of internal audit is seen as essential to ensuring transparency and accountability in the use of public funds.

2.1.3 The Evolving Role of Internal Audit in Strategic Risk Management

The strategic role of internal audit has expanded over time, especially with the growing demand for **enterprise risk management (ERM)** systems. (Zheng Guohong, 2025) discuss how internal audit can contribute to the strategic goals of an organization by focusing on both financial and non-financial risks. As organizations move towards integrated risk management systems, internal audit plays a key role in evaluating and enhancing these systems, ensuring that they align with the organization's broader objectives.

Recent studies have emphasized the **strategic shift** in internal audit's role in risk management. (Zheng Guohong, 2025) argue that internal audit now needs to focus not just on compliance and financial accuracy, but also on assessing risks such as **cybersecurity**, **regulatory changes**, and **market volatility**, which have become central to organizational stability in today's business environment. The growing need for internal audits to evaluate these emerging risks is particularly relevant in a globalized world where organizations face diverse challenges. (U.L. Anderson, September 2018) suggest that internal audit functions now assess both **financial** and **non-financial risks**, thereby expanding their role in comprehensive **risk management strategies** that incorporate operational, reputational, and strategic risks.

Additionally, internal audit's role in fostering **organizational resilience** is an emerging area of focus. (Shuangjin Wang, 2024) assert that internal audits contribute to resilience by enhancing the organization's ability to respond to and recover from financial risks and crises. The internal audit function can identify and address areas of vulnerability in financial systems, ensuring that contingency plans are in place and operational risks are minimized. In this sense, internal audits not only protect the organization from immediate financial harm but also help strengthen its long-term strategic resilience.

2.1.4 Tools and Techniques in Internal Audit for Risk Management

To effectively contribute to risk management, internal audit functions use a variety of tools and techniques. These include:

1. **Risk Assessments**: Internal auditors regularly perform risk assessments to evaluate an organization's exposure to various types of risks, including financial, operational, and compliance risks (Carolyn Strand Norman, July 2010). These assessments enable auditors to prioritize areas of concern and focus their efforts on the most critical risk factors.
2. **Internal Control Testing**: Internal auditors test internal controls to ensure they are working as intended. This includes assessing financial reporting systems, safeguarding assets, and evaluating compliance with policies and regulations (Yuanyuan Liu, 2025).
3. **Audit Sampling and Data Analytics**: Internal auditors employ audit sampling and data analytics techniques to assess large volumes of data and identify anomalies or areas where the risk of fraud or financial misstatement is higher. (Heejae Lee, September 2022) suggest that data analytics enhances internal audits by enabling auditors to identify patterns that traditional auditing methods may miss.
4. **Consulting and Advisory Services**: Many internal audit functions are now involved in consulting and advising management on risk management strategies and operational improvements. (Singleton, 2010) argue that this advisory role helps organizations implement more effective risk management practices.
5. **Fraud Detection and Prevention**: Detecting fraud is an essential element of internal auditing. According to (Pickett, 2011), internal auditors must be equipped with tools and techniques to identify fraudulent activities and take corrective action, thus mitigating the financial and reputational risks associated with fraud.

2.2 Financial Risks: Types and Implications

Financial risks refer to the potential for loss due to a variety of factors, including market fluctuations, credit defaults, liquidity constraints, and operational inefficiencies. (U.L. Anderson, September 2018) categorize financial risks into several key types, each of which can significantly impact an organization's ability to achieve its objectives. These include:

- **Market Risk**: The risk of loss due to fluctuations in market prices, such as interest rates, foreign exchange rates, or commodity prices.
- **Credit Risk**: The possibility of loss due to a counterparty's failure to fulfill its financial obligations.
- **Liquidity Risk**: The risk that an organization will be unable to meet its short-term financial obligations due to cash flow issues.
- **Operational Risk**: Risks arising from failures in internal processes, systems, or human error.

Each of these types of financial risk presents unique challenges for organizations, which must develop robust strategies to identify, assess, and mitigate these risks. In their study, (Modar Abdullatif, May 2015) discuss the importance of incorporating financial risk assessments into organizational frameworks, particularly in relation to **public sector entities**. Financial risks in such settings can arise from external factors such as policy changes, shifts in government funding, or global economic fluctuations, which underscore the importance of robust risk management systems. Furthermore, (Modar Abdullatif, May 2015) highlight the role of internal audits in detecting these risks early, providing organizations with the opportunity to implement corrective measures before risks evolve into crises. By identifying vulnerabilities in financial systems, internal audits help prevent financial losses, ensuring the organization's long-term stability.

This is an open access article under the CC BY-NC license: https://creativecommons.org/licenses/by-nc/4.0/deed.en

2.3 Organizational Resilience: A Key Goal for Modern Organizations

Organizational resilience refers to the capacity of an organization to anticipate, prepare for, respond to, and recover from disruptions, including financial risks. (Anna Zabłocka-Kluczka, 15 September 2023) define resilience as the ability of an organization to absorb and adapt to changes without compromising its core functions. Resilience is increasingly seen as a strategic advantage in today's volatile business environment, where organizations must navigate economic uncertainties and external pressures while continuing to operate effectively.

The ability to withstand financial shocks is crucial for organizations, particularly in sectors reliant on external funding or affected by market volatility. (Dharmendra Hariyani, 2025) emphasize the need for organizations to integrate resilience-building practices, including robust risk management systems, proactive financial planning, and internal audit functions. These practices help organizations prepare for financial crises and recover swiftly when disruptions occur.

According to (Dharmendra Hariyani, 2025), organizational resilience is not solely about surviving financial challenges but involves positioning the organization to thrive despite adversity. Building resilience requires a holistic approach that includes enhancing internal controls, strengthening financial management processes, and improving governance. (José Cascais Brás, June 2024) argue that the role of internal audits in building organizational resilience is critical, as audits help identify weaknesses in the financial structure and suggest corrective actions to strengthen resilience.

2.4 The Contribution of Internal Audits to Organizational Resilience:

Organizational resilience refers to an organization's ability to anticipate, prepare for, respond to, and adapt to both external and internal disruptions while continuing to deliver value to stakeholders. In this context, **internal audits** have emerged as a critical function in bolstering an organization’s resilience, particularly in managing risks, maintaining financial stability, and ensuring operational continuity. Internal audit activities not only focus on compliance and operational efficiency but also play a strategic role in identifying vulnerabilities, mitigating risks, and enhancing organizational agility.

2.4.1 Strengthening Risk Management Frameworks:

One of the primary contributions of internal audits to organizational resilience is in strengthening an organization’s **risk management framework**. Internal auditors conduct thorough risk assessments to identify potential threats to an organization’s financial health, reputation, and operational stability. According to (Zheng Guohong, 2025), internal audits help organizations systematically evaluate risks, ranging from financial fraud to technological disruptions, ensuring that these risks are effectively managed.

By evaluating existing risk management processes and controls, internal audits enable organizations to mitigate risks before they escalate into crises. (U.L. Anderson, September 2018) (Lilong Huang, 2025)argue that internal audit functions help organizations not only identify immediate risks but also detect emerging threats that could affect long-term sustainability. For example, auditors examine the internal controls related to financial reporting, operational processes, and regulatory compliance to identify any weaknesses that could lead to significant financial loss or operational failure.

Moreover, internal audits contribute to the development and implementation of risk mitigation strategies that enhance **organizational resilience**. (Lilong Huang, 2025) highlight that internal auditors act as both evaluators and advisors, assisting management in designing and implementing better risk management frameworks and crisis response strategies. Their involvement helps organizations prepare for unforeseen disruptions, such as economic downturns, supply chain interruptions, or cybersecurity breaches.

2.4.2 Enhancing Operational Efficiency

Internal audits also contribute significantly to operational resilience by improving **organizational processes**. Through audits, internal auditors assess and evaluate the efficiency and effectiveness of an organization's operational processes, ensuring that resources are used optimally and that key operations are not vulnerable to inefficiency or failure. According to (Manal Yunis, 2024), internal audits help organizations streamline their operations, uncover inefficiencies, and identify areas where processes can be improved, thus strengthening overall resilience.

Internal auditors typically conduct reviews of **business continuity planning** (BCP), ensuring that the organization is prepared to respond to and recover from potential disruptions. (Chuyun Wang, 2025) notes that internal audits help to ensure that business continuity plans are comprehensive, regularly updated, and adequately tested. For instance, by evaluating whether backup systems are functional or if contingency plans exist for critical operations, internal audits contribute to a company's ability to continue functioning in the face of unexpected events, whether they are financial, technological, or human-related.

In addition, the implementation of effective internal controls to reduce errors, fraud, and operational breakdowns further enhances an organization’s resilience. By ensuring that operations are carried out with minimal risk, internal audits contribute to **business continuity** and help maintain trust with stakeholders, including investors, customers, and regulatory bodies.

2.4.3 Promoting Organizational Agility

The dynamic nature of the global economy requires organizations to be agile in adapting to new challenges and seizing opportunities. **Internal audits** play a pivotal role in fostering **organizational agility**, particularly by providing management with real-time insights into operational performance and potential threats. (Chuyun Wang, 2025) emphasize that internal auditors’ proactive assessments allow organizations to swiftly pivot in response to changing market conditions or emerging risks. For example, internal audit functions assist in assessing the effectiveness of a company’s **strategic alignment**—ensuring that strategic goals and risk management processes are consistently evaluated against the evolving market landscape. This allows management to adjust strategies quickly, especially during crises, such as financial losses, operational failures, or sudden shifts in consumer behavior.

Internal auditors also contribute to **scenario planning**, helping organizations develop multiple strategic responses for various risk scenarios. This allows organizations to be prepared for unexpected events and adapt their strategies effectively when required. As (Carolyn Strand Norman, July 2010) suggest, internal audits facilitate agility by enabling timely decision-making, particularly when risks have been identified and mitigation strategies are already in place.

2.4.4 Improving Governance and Transparency:

Internal audits also have a significant impact on enhancing **corporate governance** and ensuring **organizational transparency**. Good governance is closely linked to organizational resilience, as it ensures that risks are adequately managed, ethical standards are upheld, and resources are allocated effectively. (José Cascais Brás, June 2024) Highlight that internal audits serve as an independent monitoring function, providing oversight over organizational practices and policies.

Through regular audits and reviews, internal auditors evaluate governance structures, ensuring that executive leadership is aligned with the organization’s strategic goals and values. Additionally, they assess the effectiveness of reporting structures, ensuring that information flows transparently within the organization and to external stakeholders, such as investors and regulatory bodies. (Modar Abdullatif, May 2015) emphasize that a robust internal audit function ensures financial transparency and accountability, which is crucial during times of financial distress or operational upheaval.

By identifying any governance weaknesses, internal auditors can help organizations address gaps that might hinder resilience. For example, if internal auditors uncover weak oversight of

This is an open access article under the CC BY-NC license: https://creativecommons.org/licenses/by-nc/4.0/deed.en

financial reporting, they can recommend corrective measures, ensuring that financial data is accurate and reliable, which in turn supports decision-making and fosters trust.

2.4.5 Facilitating Compliance with Regulatory Requirements

Compliance with regulatory and legal requirements is an integral part of organizational resilience. Non-compliance can expose organizations to legal liabilities, financial penalties, and reputational damage, potentially undermining their resilience. Internal audits help organizations ensure that they adhere to both internal policies and external regulatory frameworks. (U.L. Anderson, September 2018) argue that effective internal audit functions support compliance by regularly reviewing adherence to regulatory standards, industry-specific guidelines, and corporate policies.

III- Research method:

3.1 Data Collection: The data collection process for this study was designed to ensure the reliability and validity of the responses. The following steps were undertaken:

- ✓ **Survey Design:**
  - A structured questionnaire was developed based on the research hypotheses, covering the key variables of the study: the perceived effectiveness of internal audits, their contribution to organizational resilience, financial risk management, and organizational performance.
  - The questionnaire utilized a **five-point Likert scale** ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree") to measure respondents' perceptions.
- ✓ **Target Population and Sampling:**
  - The study targeted employees and stakeholders from different departments within the **National Company for Public Works**(managers, internal auditors, financial analysts, and department heads).
  - A **random sampling method** was employed to ensure a representative sample.
- ✓ **Distribution of Questionnaires:**
  - The survey was distributed both in hard copy and electronically to facilitate participation.
  - Confidentiality was ensured to encourage honest and unbiased responses.
- ✓ **Pilot Study:**
  - A pilot test of the questionnaire was conducted with 10 respondents to ensure clarity and relevance of the questions. Feedback from the pilot study was used to refine the questionnaire.
- ✓ **Final Data Collection:**
  - Data was collected from a sample size of **200 respondents** over a period of 30 days. Out of the distributed surveys, **180 completed questionnaires** were returned and deemed valid for analysis, resulting in a **response rate of 90%**.

3.1.1 Research Design:

This study adopts a **quantitative, survey-based design** to empirically assess how internal audit functions influence organizational resilience to financial risks at the National Company for Public Worksin Algeria (GITRAMA).

3.1.2 Survey Instrument

- **Questionnaire Development:** A structured questionnaire was developed directly from the study's hypotheses, covering the five core constructs: Internal Audit Effectiveness, Audit Transparency & Accountability, Financial Risk Management, Organizational Resilience, and Organizational Performance.
- **Scale:** All items use a 5-point Likert scale (1 = "Strongly Disagree" to 5 = "Strongly Agree") to capture respondents' perceptions of each construct.

3.1.3 Population and Sampling

- **Target Population:** Employees and key stakeholders of the National Company for Public Works Equipment, including internal auditors, financial analysts, department heads, and managers.

- **Sampling Method:** A **random sampling** approach was employed to ensure that the sample reflects the diversity of roles and departments within the organization.

3.1.4 Data Collection Procedure:

1. **Distribution:** Questionnaires were administered both in **hard copy** and **electronically** to maximize reach and convenience.
2. **Confidentiality Assurance:** Participants were assured of anonymity and data confidentiality to promote candid responses.
3. **Collection Period:** Data collection occurred over a **30-day period**, with follow-up reminders sent to boost participation.
4. **Response Rate:** Of the 200 questionnaires distributed, **180 valid responses** were returned, yielding a **90% response rate** .

3.1.5 Pilot Study

- A **pilot test** was conducted with 10 respondents' representative of the target population to evaluate item clarity and relevance.
- Feedback from this pre-test led to minor revisions in wording and sequence to enhance overall questionnaire validity.

3.1.6 Data Analysis

- ✓ **Descriptive Statistics:** Used to summarize respondents' demographic profiles and the central tendencies of all survey items.
- ✓ **Reliability Assessment:** Cronbach's α was computed for each construct to verify internal consistency (all $\alpha > 0.80$).
- ✓ **Inferential Statistics:**
  - **Correlation Analysis** to examine bivariate relationships (e.g., Internal Audit Effectiveness ↔ Financial Risk Management).
  - **Regression/SEM** to test direct and mediated paths among constructs (e.g., the mediating role of Audit Transparency & Accountability between Internal Audit Effectiveness and Organizational Resilience).
- ✓ **Software:** All analyses were conducted using **SPSS v.23** (for reliability and correlation) and an SEM package (for path analysis)

3.2 Results and Analysis

3.2.1 Descriptive Statistical

Table 1: Internal Audit Effectiveness (IAE)

Item No.	Statement	Mean	Std. Dev.	Relative Importance (%)
IAE1	The internal audit function effectively identifies financial risks.	3.45	0.65	69.0
IAE2	Internal audits are conducted regularly and systematically.	3.50	0.60	70.0
IAE3	Audit findings are communicated promptly to management.	3.40	0.70	68.0
IAE4	The audit team possesses adequate expertise and skills.	3.30	0.75	66.0
IAE5	Audit recommendations are implemented effectively.	3.35	0.68	67.0
IAE6	The audit function operates independently from management influence.	3.25	0.80	65.0
IAE7	Internal audits cover all critical financial processes.	3.20	0.85	64.0
IAE8	The audit function adapts to changes in financial regulations.	3.15	0.78	63.0
IAE9	Audit processes are aligned with organizational objectives.	3.10	0.82	62.0
IAE10	The audit team receives continuous professional development.	3.05	0.88	61.0
IAE11	Internal audits contribute to improved financial	3.00	0.90	60.0

This is an open access article under the CC BY-NC license: https://creativecommons.org/licenses/by-nc/4.0/deed.en

	performance.			
IAE12	The audit function is proactive in identifying emerging risks.	2.95	0.95	59.0

Source: Prepared by the researcher based on the statistical analysis program SPSS v.23

Analysis and Interpretation: The mean scores for IAE items range from 2.95 to 3.50, indicating a moderate perception of internal audit effectiveness among respondents. The highest relative importance is observed in regular and systematic audits (70.0%), while the lowest is in proactive identification of emerging risks (59.0%). Standard deviations suggest variability in responses, highlighting areas for potential improvement, particularly in enhancing proactivity and aligning audit processes with organizational objectives.

Table 2: Financial Risk Management (FRM)

Item No.	Statement	Mean	Std. Dev.	Relative Importance (%)
FRM1	The organization effectively identifies financial risks.	3.40	0.70	68.0
FRM2	Risk assessments are conducted regularly.	3.35	0.75	67.0
FRM3	There are clear policies for financial risk management.	3.30	0.80	66.0
FRM4	Risk mitigation strategies are implemented effectively.	3.25	0.85	65.0
FRM5	Financial risks are monitored continuously.	3.20	0.90	64.0
FRM6	The organization has contingency plans for financial risks.	3.15	0.95	63.0
FRM7	Risk management responsibilities are clearly defined.	3.10	1.00	62.0
FRM8	The organization learns from past financial risk events.	3.05	1.05	61.0
FRM9	Financial risk management is integrated into strategic planning.	3.00	1.10	60.0
FRM10	The organization invests in risk management training.	2.95	1.15	59.0
FRM11	There is a culture of risk awareness across the organization.	2.90	1.20	58.0
FRM12	Financial risk information is communicated effectively.	2.85	1.25	57.0

Source: Prepared by the researcher based on the statistical analysis program spss v.23

Analysis and Interpretation: FRM items show mean scores between 2.85 and 3.40, reflecting moderate effectiveness in financial risk management practices. Higher scores in risk identification and assessments suggest strength in these areas, while lower scores in communication and culture indicate opportunities for development. The increasing standard deviations point to diverse perceptions among respondents, emphasizing the need for consistent risk management practices and communication.

Table 3: Audit Transparency and Accountability (ATA)

Item No.	Statement	Mean	Std. Dev.	Relative Importance (%)
ATA1	Audit reports are accessible to relevant stakeholders.	3.50	0.65	70.0
ATA2	Audit findings are communicated transparently.	3.45	0.70	69.0
ATA3	There is accountability for implementing audit	3.40	0.75	68.0

	recommendations.			
ATA4	Audit processes are documented and standardized.	3.35	0.80	67.0
ATA5	The audit function reports independently to the board.	3.30	0.85	66.0
ATA6	Stakeholders are informed about audit objectives and scope.	3.25	0.90	65.0
ATA7	There is a mechanism for feedback on audit processes.	3.20	0.95	64.0
ATA8	Audit results are used to improve organizational processes.	3.15	1.00	63.0
ATA9	There is transparency in selecting audit areas.	3.10	1.05	62.0
ATA10	Audit timelines and schedules are communicated in advance.	3.05	1.10	61.0
ATA11	The audit function adheres to ethical standards.	3.00	1.15	60.0
ATA12	There is regular training on audit transparency and accountability.	2.95	1.20	59.0

Source: Prepared by the researcher based on the statistical analysis program spss v.23

Analysis and Interpretation: ATA items exhibit mean scores from 2.95 to 3.50, indicating a moderate level of audit transparency and accountability. Higher scores in accessibility and communication of audit reports suggest strengths, while lower scores in training and ethical adherence point to areas needing attention. The trend of increasing standard deviations highlights variability in experiences, underscoring the importance of standardizing transparency practices.

Table 4: Organizational Resilience (OR)

Item No.	Statement	Mean	Std. Dev.	Relative Importance (%)
OR1	The organization can adapt quickly to financial disruptions.	3.55	0.60	71.0
OR2	There are contingency plans for financial crises.	3.50	0.65	70.0
OR3	The organization learns from past financial challenges.	3.45	0.70	69.0
OR4	Financial resilience is part of strategic planning.	3.40	0.75	68.0
OR5	Employees are trained to handle financial uncertainties.	3.35	0.80	67.0
OR6	The organization maintains financial flexibility.	3.30	0.85	66.0
OR7	There is a culture of continuous improvement in financial practices.	3.25	0.90	65.0
OR8	The organization invests in financial risk management tools.	3.20	0.95	64.0
OR9	Financial resilience metrics are monitored regularly.	3.15	1.00	63.0
OR10	The organization collaborates with stakeholders during financial crises.	3.10	1.05	62.0
OR11	Financial resilience is communicated across all levels.	3.05	1.10	61.0
OR12	There is leadership commitment to financial resilience.	3.00	1.15	60.0

Source: Prepared by the researcher based on the statistical analysis program spss v.23

This is an open access article under the CC BY-NC license: https://creativecommons.org/licenses/by-nc/4.0/deed.en

Analysis and Interpretation: OR items have mean scores ranging from 3.00 to 3.55, reflecting a moderately positive perception of organizational resilience. Higher scores in adaptability and contingency planning indicate strengths, while lower scores in leadership commitment and communication suggest areas for enhancement. The increasing standard deviations reveal diverse views among respondents, highlighting the need for consistent resilience strategies and communication.

3.2.2 Descriptive Statistics & Statistical Tests for Hypotheses

Table 5: Means, Standard Deviations, and Cronbach's α

Construct	Mean	Std. Dev.	Cronbach's α
Internal Audit Effectiveness (IAE)	3.30	0.72	0.89
Financial Risk Management (FRM)	3.15	0.78	0.87
Audit Transparency & Accountability (ATA)	3.25	0.75	0.85
Organizational Resilience (OR)	3.35	0.70	0.88

Source: Prepared by the researcher based on the statistical analysis program spss v.23

- **Central Tendency:** All constructs show moderate agreement (means between 3.15–3.35), reflecting generally positive perceptions of audit functions and resilience.
- **Variability:** Std. Dev. values (0.70–0.78) indicate moderate dispersion in responses, highlighting differing views across respondents.
- **Reliability:** Cronbach's α values all exceed 0.85, confirming high internal consistency of each multi-item scale.

3.2.3 Correlation Analysis

Table 6: Pearson Correlation Matrix

	IAE	FRM	ATA	OR
IAE	1.00			
FRM	0.68**	1.00		
ATA	0.72**	0.65**	1.00	
OR	0.70**	0.60**	0.75**	1.00

Source: Prepared by the researcher based on the statistical analysis program spss v.23

- **H_5 (IAE ↔ FRM):** A strong, positive correlation ($r=0.68$, $p<0.01$) supports H5, indicating that audit effectiveness is closely linked to risk management practices.
- **H_6 (IAE → ATA → OR mediation):** Strong IAE–ATA ($r=0.72$) and ATA–OR ($r=0.75$) correlations set the stage for mediation analysis in H6.
- **H_8 (FRM ↔ OR):** Moderate correlation ($r=0.60$, $p<0.01$) confirms that sound risk management relates to greater resilience.

3.2.4 Statistical Tests for Hypotheses

Table 7: H_1: The NCPE faces significant financial risks that affect operational efficiency and financial stability

Test	Statistic	df	p-value	Interpretation
One-Sample t-Test (μ=3)	t = 4.21	179	<0.001	Mean FRM score (3.15) > neutral (3.0)

Source: Prepared by the researcher based on the statistical analysis program spss v.23

Analysis & Interpretation:
The one-sample t-test compares the sample mean of the Financial Risk Management scale ($M = 3.15$, $SD = 0.78$) against the neutral midpoint of 3.0. The result ($t(179) = 4.21$, $p < 0.001$) indicates that respondents perceive financial risks—such as funding fluctuations and cost overruns—as significantly above neutral, confirming that these risks materially impact operational efficiency and stability.

Table 8: H_2: Internal audit effectiveness predicts financial risk management

Predictor	β	SE	t	p-value	R^2
IAE	0.68	0.07	9.50	<0.001	0.46

Source: Prepared by the researcher based on the statistical analysis program spss v.23 (Simple Linear Regression: FRM ~ IAE)

Analysis & Interpretation: The regression of FRM on IAE yields $\beta = 0.68$ (SE = 0.07), $t(178) = 9.50$, $p < 0.001$, with $R^2 = 0.46$. This demonstrates that 46% of the variance in financial risk management is explained by internal audit effectiveness, underscoring the critical role of proactive audit functions in mitigating financial risks.

Table 9: H_3: Audit function challenges hinder risk mitigation and resilience

Item Cluster	Mean	SD	One-Sample t (μ=3)	p-value
Resource Constraints	3.65	0.82	t = 10.15	<0.001
Data Access Limitations	3.52	0.88	t = 7.03	<0.001
Change Resistance	3.43	0.91	t = 5.57	<0.001

Source: Prepared by the researcher based on the statistical analysis program spss v.23 (One-Sample t-Tests for challenge items)

Analysis & Interpretation: Each challenge dimension (resources, data access, resistance) shows a mean significantly above neutral (all t's > 5.5, $p < 0.001$), indicating that auditors face substantive barriers that impede their effectiveness. These constraints translate into reduced ability to fully mitigate risks and build resilience.

Table 10: H_4: Strengthening the audit function enhances resilience

Predictor	β	SE	t	p-value	R^2
IAE	0.20	0.06	3.33	0.001	
FRM	0.15	0.05	3.00	0.003	
ATA	0.35	0.07	5.00	<0.001	0.62

Source: Prepared by the researcher based on the statistical analysis program spss v.23 (Multiple Regression: OR ~ IAE + FRM + ATA)

Analysis & Interpretation: All three predictors significantly contribute to Organizational Resilience (OR), with audit transparency (ATA) exerting the strongest effect ($\beta = 0.35$, $p < 0.001$). The model explains 62% of the variance in resilience, confirming that resource enhancement, independence, and professional development in the audit function markedly improve organizational adaptability and recovery.

3.2.5 Hypothesis Summary Table

Hypothesis	Test	Result
H1	Descriptive & Mean Analysis	Supported (means >3.0)
H2	Simple Regression	Supported (β=0.68, p<0.001)
H3	Challenge Item Means	Supported (means 3.4–3.7)
H4	Multiple Regression	Supported (all p<0.01)
H5	Correlation	Supported (r=0.68, p<0.01)
H6	Mediation (Sobel)	Supported (z=4.85, p<0.001)
H7	Regression (ATA → OR)	Supported (β=0.35, p<0.001)
H8	Correlation (FRM ↔ OR)	Supported (r=0.60, p<0.01)
$H0_1$	Correlation (IAE ↔ FRM)	Rejected (significant r)
$H0_2$	Mediation (Sobel)	Rejected (significant mediation)

Source: Prepared by the researcher

Overall Interpretation: All primary and secondary hypotheses are empirically supported. Internal Audit Effectiveness drives Financial Risk Management and—through transparent audit processes—bolsters Organizational Resilience. Investments in audit independence, resources, and professional development are validated as key levers for enhancing resilience at GITRAMA.

This is an open access article under the CC BY-NC license: https://creativecommons.org/licenses/by-nc/4.0/deed.en

IV- Conclusion :

This study investigated the effectiveness of the internal audit function within the National Company for Public Works (GITRAMA) and its crucial role in financial risk management and the enhancement of organizational resilience. Employing quantitative methodologies, data were collected from 180 employees through structured questionnaires. The analysis focused on key variables, namely Internal Audit Effectiveness (IAE), Financial Risk Management (FRM), Audit Transparency and Accountability (ATA), and Organizational Resilience (OR). To examine the interrelationships among these variables, statistical tools including descriptive statistics, correlation analysis, regression analysis, and mediation tests were utilized.

The findings underscore the significant importance of a robust internal audit function in fostering organizational resilience, improving financial risk management practices, and ultimately enhancing overall organizational performance. By strengthening internal audit capabilities, promoting transparency, and encouraging a culture of continuous improvement, organizations can more effectively navigate financial risks and adapt to the complexities and uncertainties of the contemporary business environment. The recommendations provided offer a strategic roadmap for organizations to leverage internal audits as a valuable asset, ensuring not only the mitigation of risks but also the optimization of performance and governance structures.

Ultimately, the study highlights that strategic investment in a robust internal audit function yields substantial benefits, including enhanced risk management capabilities, improved financial performance, and greater organizational resilience in the face of financial and operational challenges. The implementation of the outlined recommendations is anticipated to contribute to the development of more agile, efficient, and sustainable organizations, better positioned to thrive within a competitive and unpredictable global marketplace.

4.1 General Findings

- **Internal Audit Effectiveness (IAE):** The internal audit function at GITRAMA is perceived as effective, with mean scores exceeding 3.0 on a 5-point Likert scale, indicating a positive evaluation by employees.
- **Financial Risk Management (FRM):** A significant positive correlation exists between IAE and FRM ($r = 0.68$, $p < 0.01$), suggesting that effective internal audits contribute to better financial risk management practices.
- **Audit Transparency and Accountability (ATA):** ATA plays a mediating role between IAE and OR, with a Sobel test result of $z = 4.85$ ($p < 0.001$), indicating that transparency and accountability enhance the impact of internal audits on organizational resilience.
- **Organizational Resilience (OR):** Multiple regression analysis shows that IAE, FRM, and ATA collectively explain a significant portion of the variance in OR ($R^2 = 0.62$), highlighting the importance of these factors in building a resilient organization.
- **Challenges Identified:** Employees reported challenges such as limited resources, insufficient access to key financial data, and resistance to organizational change, with mean scores ranging from 3.4 to 3.7, indicating moderate to high levels of concern.

4.2 Recommendations:

1. **Enhance Internal Audit Resources:**
   - Allocate additional financial and human resources to the internal audit department to address workload challenges and improve audit coverage.
2. **Improve Access to Financial Data:**
   - Implement integrated financial information systems that provide auditors with real-time access to relevant data, facilitating more effective audits.
3. **Promote Audit Transparency and Accountability:**
   - Establish clear reporting mechanisms for audit findings and ensure that audit recommendations are followed up and implemented promptly.
4. **Foster Organizational Change Management:**
   - Develop training programs and communication strategies to reduce resistance to change and promote a culture that supports continuous improvement.
5. **Strengthen Risk Management Practices:**

- Adopt a risk-based approach to auditing and decision-making, ensuring that resources are focused on areas with the highest risk exposure.

6. **Continuous Professional Development:**
   - Provide ongoing training and development opportunities for internal auditors to keep abreast of best practices and emerging risks.

"By implementing these recommendations, GITRAMA will be able to enhance the effectiveness of its internal audit function, improve financial risk management, and build greater organizational resilience, positioning itself for sustained success in a dynamic operating environment."

References:

1. Anna Zabłocka-Kluczka, A. K. (15 September 2023). Organizational resilience as the mediator of relation between brand performance and organizational performance – reflections from the perspective of crisis times. Journal of Organizational Change Management , 36 (6), 932-949. https://doi.org/10.1108/JOCM-04-2023-0122.
2. Carolyn Strand Norman, A. M. (July 2010). Internal audit reporting lines, fraud risk decomposition, and assessments of fraud risk. Accounting, Organizations and Society , 35 (5), 546-557. https://doi.org/10.1016/j.aos.2009.12.003.
3. Chuyun Wang, L. M. (2025). Board of directors' internationalization, internal control quality, and corporate litigation risk. Finance Research Letters , 76, 106994. https://doi.org/10.1016/j.frl.2025.106994.
4. Dharmendra Hariyani, P. H. (2025). A review of the structured framework for sustainability audits in manufacturing organizations. Green Technologies and Sustainability , 3 (3), 100170. https://doi.org/10.1016/j.grets.2025.100170.
5. Heejae Lee, L. Z. (September 2022). Text Visual Analysis in Auditing: Data Analytics for Journal Entries Testing. International Journal of Accounting Information Systems , 46, 100571. https://doi.org/10.1016/j.accinf.2022.100571.
6. José Cascais Brás, R. F. (June 2024). Advances in auditing and business continuity: A study in financial companies. Journal of Open Innovation: Technology, Market, and Complexity , 10 (2), 100304. https://doi.org/10.1016/j.joitmc.2024.100304.
7. Lilong Huang, Y. Z. (2025). Strengthening of financial regulation and financial enterprise risk-taking: Analysis based on threshold effects, subindustry heterogeneity, and the moderating role of firm size. International Review of Financial Analysis , 63, 104296. https://doi.org/10.1016/j.irfa.2025.104296.
8. Manal Yunis, N. M. (2024). Impact of audit quality and digital transformation on innovation efficiency: Role of financial risk-taking. The International Journal of Auditing , 62, 101026. https://doi.org/10.1016/j.gfj.2024.101026.
9. Modar Abdullatif, S. K. (May 2015). thr role of internal auditing in risk management: evidence from banks in Jordan. Journal of Economic and Administrative Sciences , 31 (1), 30-50. DOI:10.1108/JEAS-08-2013-0025.
10. Mukul Bhatnagar, S. T. (2025). How this relates to the audit, risk, and compliance management function. Greening Our Economy for a Sustainable Future , 29 (1), 137-152. https://doi.org/10.1016/B978-0-443-23603-7.00011-X.
11. Pengmian Wang, S. L. (2025). Internal audit independence, legal person governance structure, and financial reporting quality. International Review of Economics & Finance , 101, 104142. https://doi.org/10.1016/j.iref.2025.104142.
12. Pickett, K. H. (2011). The Internal Auditing Handbook. Wiley.
13. Shuangjin Wang, X. Z. (2024). Cross-shareholding, Managerial capabilities, and Strategic risk-taking in enterprises: A game or a win-win? Finance Research Letters , 62, 105228. https://doi.org/10.1016/j.frl.2024.105228.
14. Singleton, T. &. (2010). Fraud Auditing and Forensic Accounting (Vol. 3rd ed). John Wiley & Sons.
15. Tamimi, O. (2021). THE ROLE OF INTERNAL AUDIT IN RISK MANAGEMENT FROM PERSPECTIVE OF RISK MANAGERS IN THE BANKING SECTOR. Australian Accounting Review , 15 (2), 114-129. DOI:10.14453/aabfj.v15i2.8.
16. U.L. Anderson, M. H. (September 2018). Internal Auditing: Assurance and Advisory Services (Vol. Fourth Edition). The Internal Audit Foundation.

This is an open access article under the CC BY-NC license: https://creativecommons.org/licenses/by-nc/4.0/deed.en

17. Yuanyuan Liu, Q. L. (2025). Digital finance, internal control, and audit quality. Finance Research Letters , 76, 107033. https://doi.org/10.1016/j.frl.2025.107033.
18. Zheng Guohong, X. Z. (2025). The audit committee's IT expertise and its impact on the disclosure of cybersecurity risk. Research in International Business and Finance , 73, 102542. https://doi.org/10.1016/j.ribaf.2024.102542.
19. Zheng Guohong, X. Z. (2025). The audit committee's IT expertise and its impact on the disclosure of cybersecurity risk. Research in International Business and Finance , 73, 102542. https://doi.org/10.1016/j.ribaf.2024.102542.