

“The Role of Internal Auditing in Strengthening Corporate Governance in Economic Institutions: A Case Study of ALFAPIPE National Pipe Manufacturing Company – Ghardaia and Annaba Units”

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Abstract:

This study aims to demonstrate the extent to which the internal auditing function contributes to strengthening corporate governance within the ALFAPIPE National Pipe Manufacturing Company, focusing on its Ghardaia and Annaba units. A descriptive and analytical approach was employed to emphasize the role of internal auditing in enforcing the principles of corporate governance. To achieve the study's objectives, a structured questionnaire was utilized to assess the influence of internal auditing on corporate governance. The sample comprised 60 individuals, including managers, department heads, internal and external auditors, and other employees from the company. Data were analyzed using the SPSS statistical software (version 28).

The findings revealed that internal auditing plays a significant role in enhancing corporate governance by ensuring the application of fundamental principles such as transparency and disclosure, particularly in presenting accurate information that reflects the organization's true status.

Keywords: Internal Auditing, Corporate Governance, Disclosure, Transparency.

1. Introduction

Corporate governance is considered one of the foundational tools that bolster the stability and success of economic institutions, especially within the ever-evolving and complex business landscape. It serves as a framework for rules and procedures that direct and manage organizations in a manner that promotes transparency, fairness, and trust among all stakeholders, including shareholders, management, customers, and the broader community. In this context, internal auditing assumes a pivotal role in ensuring the effectiveness of internal systems and controls. It is an indispensable tool for monitoring and improving organizational performance, providing assurance regarding the accuracy of financial information, operational efficiency, and adherence to applicable laws and policies. The Institute of Internal Auditors (IIA, 2023) defines internal auditing as an independent, objective assurance and consulting activity designed to enhance operational effectiveness and organizational efficiency while ensuring compliance with policies, procedures, and regulations. With the increasing complexity

and dynamism of the modern business environment, the role of internal auditing has grown more critical than ever. It demands a higher level of objectivity and independence to deliver analyses that reinforce transparency, mitigate risks, and ensure compliance.

Through this study, we aim to examine how internal auditing can enhance corporate governance by focusing on its contribution to improving organizational systems and procedures, ensuring integrity and transparency, mitigating risks, and promoting accountability.

2. Research Problem: (Main Question)

Does internal auditing contribute to establishing corporate governance principles in the ALFAPIPE?

3. Sub-questions:

- a. Is there a statistically significant relationship between internal auditing and the principle of safeguarding shareholder rights within the studied organization?
- b. Does internal auditing significantly influence the principle of equitable treatment of shareholders in the organization?
- c. What is the relationship between internal auditing and the principle of transparency and disclosure in the organization?
- d. How does internal auditing align with the responsibilities of the board of directors?
- e. Is there a connection between internal auditing and the role of stakeholders in the organization?
- f. Are there statistically significant differences in the impact of internal auditing on corporate governance attributed to professional experience ?

4. Study Hypotheses:

- There is a statistically significant relationship between internal auditing and the principle of safeguarding shareholders' rights within the organization under study.
- There is a statistically significant relationship between internal auditing and the principle of equitable treatment of shareholders in the organization under study.
- There is a statistically significant relationship between internal auditing and the principle of transparency and disclosure in the organization under study.
- There is a statistically significant relationship between internal auditing and the principle of the board of directors' responsibilities in the organization under study.
- There is a statistically significant relationship between internal auditing and the principle of stakeholders' roles in the organization under study.
- There are statistically significant differences in the impact of internal auditing on corporate governance attributable to the variable of professional experience.
- There are statistically significant differences in the impact of internal auditing on corporate governance attributable to the variable of professional experience.

5. Significance of the Study:

The significance of this study stems from the crucial role that corporate governance occupies in contemporary times and the importance of internal auditing as a foundational pillar of governance, particularly in separating management from ownership. Internal auditing

contributes to risk reduction and the protection of stakeholder rights while also examining and evaluating operational activities and internal control systems. Furthermore, it ensures the accuracy of the organization's strategic directions and the proper implementation of those strategies.

6. Rationale:

- To shed light on corporate governance and understand the concept and practices of internal auditing.
- To study and analyze the role of internal auditing as one of the primary pillars in achieving the concept of governance.
- To explore the practical application of internal auditing within the organization under study.
- To identify the relationship between internal auditing and the implementation of corporate governance principles and suggest ways to enhance governance practices in Algeria.

1) Theoretical Framework of Internal Auditing

1.1 Definition of Internal Auditing:

Internal auditing has been defined in various ways by institutions, researchers, and professional associations. Despite differences, the definitions share common goals and operational domains. Below are notable definitions:

- Institute of Internal Auditors (IIA): Internal auditing is "an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps the organization achieve its objectives by applying a systematic and disciplined approach to evaluating and enhancing the effectiveness of risk management, control, and governance processes".(Interne qualité, 2023)
- French Institute of Internal Audit and Internal Control (IFACI): Internal auditing is "an independent, objective activity aimed at providing the organization with assurance about the control over its operations while offering recommendations for improvement and contributing to added value". (Oussif, 2017, p. 130)
- Renard Jacques: Internal auditing is "an independent evaluative function established within an organization to examine and assess its activities. The objective is to fulfill organizational responsibilities efficiently by providing analysis, evaluation, recommendations, advice, and information related to the activities being audited". (Renard, 2000, p. 27)
- From these definitions, it is evident that internal auditing provides assurance services regarding internal control systems, risk management, and governance, primarily for the audit committee and board of directors. It also offers advisory services through recommendations. Objectivity, independence, and professional freedom are critical to its effective execution.

1.2 Characteristics of Internal Auditing:

Internal auditing is characterized by the following features: (Al-Khalifa, 2020, p. 273)

- a) **Independent Evaluation Function:** Internal auditors must operate independently from the activities they review.

- b) **Advisory Function:**It provides management and the board with suitable studies and recommendations for informed decision-making at the right time.
- c) **Assurance Function:**It assesses the adequacy and effectiveness of internal control systems based on risk assessment results, reassuring management that these risks are understood and can be managed effectively.
- d) **Objective Function:**Internal auditors perform their duties impartially, exercising fairness and integrity in collecting and evaluating evidence. Objectivity enables auditors to provide assurance and consulting services to stakeholders, including the board and other interested parties.

1.3 Functions of Internal Auditing:

The functions of internal auditing vary depending on the size and nature of the organization. The primary roles include:

- a) **Evaluating Internal and Accounting Control Systems:**Ensuring the systems are sound and appropriate while recommending necessary improvements.
- b) **Reviewing Policies and Procedures:**Identifying discrepancies and proposing solutions across all aspects of the organization, not limited to financial or accounting activities.
- c) **Safeguarding Organizational Assets:**Preventing fraud, manipulation, and losses caused by negligence or indifference.
- d) **Validating Financial and Accounting Information:**Ensuring the reliability of data used by internal and external stakeholders in decision-making.
- e) **Monitoring Operational Activities:**Examining operational performance, analyzing cost accounts, and reconciling them with financial statements.

1.4 Objectives of Internal Auditing:

Internal auditing has two primary objectives:

A. Protective Objective:

Historically, internal auditing focused on safeguarding organizational assets and ensuring the integrity of internal controls to prevent fraud and theft. This objective includes (Al-Qabbani, 2006, p. 29) :

- Ensuring the reliability of prepared accounting information.
- Protecting organizational assets.
- Verifying compliance with accounting policies, measurement methods, and procedures.
- Maximizing the efficient use of resources.
- Ensuring the achievement of operational objectives.

B. Constructive Objective:

With the evolution of internal auditing, a new objective emerged—enhancing organizational performance by recommending remedies and improvements based on evaluations. The shift reflects an increased focus on consulting services to meet management’s needs.(Ayadi, 2008, p. 88)

1.5 Importance of Internal Auditing:

The importance of internal auditing has grown significantly due to its role in identifying and addressing deviations from organizational objectives. It acts as a safeguard for management, functioning as its "eyes and ears".

Key factors contributing to its development include: (Hamed Nour El-Din, 2016, p. 23)

- **Organizational Growth and Geographical Expansion:** Larger, dispersed organizations require internal auditing to bridge the gap between upper management and employees.
- **The Rise of Joint-Stock Companies:** These organizations need transparent and fair disclosures to reassure shareholders about the safety of their investments and the accuracy of financial statements.
- **Organizational Independence:** With decentralized management structures and multiple levels of hierarchy, internal auditing ensures proper delegation of authority and compliance with policies and procedures.
- **Societal Demand for Reliable Data:** Stakeholders require accurate and validated information to make sound decisions, necessitating robust internal control and auditing systems.
- **Decentralized Management Practices:** While decentralization allows for delegated authority, internal auditing ensures adherence to policies and operational effectiveness in larger organizations.

1.6 Internal Auditing Standards:

The standards of internal auditing, as defined by the Institute of Internal Auditors (IIA), are categorized into two main groups (Muhammad, 2016, p. 42):

A. Attribute Standards :

- ✓ **Standard 1000 – Purpose, Authority, and Responsibility:** The purpose, authority, and responsibility of internal auditing must be formally defined in an audit charter. This should align with the definition of internal auditing, professional ethics, and the international standards for professional internal auditing practice. The Chief Audit Executive (CAE) is responsible for periodically reviewing the charter and submitting it to senior management and the board for approval.
- ✓ **Standard 1100 – Independence and Objectivity:** Internal auditing must be independent, and internal auditors must maintain objectivity in performing their work.
- ✓ **Standard 1200 – Proficiency and Due Professional Care:** The Chief Audit Executive must ensure a quality assurance and improvement program is in place, covering all aspects of internal audit activities. (The Institute of Internal Auditors, 2017, pp. 4-7)

B. Performance Standards :

- ✓ **Standard 2000 – Managing the Internal Audit Activity:** The Chief Audit Executive must effectively manage the internal audit activity to ensure it provides value to the organization.
- ✓ **Standard 2100 – Nature of Work:** Internal audit activities should evaluate and contribute to the improvement of governance processes, risk management, and control. A structured and systematic approach must be followed.

- ✓ **Standard 2200 – Engagement Planning:**Internal auditors must develop and document a work plan for each engagement. This plan should include the engagement’s objectives, scope, documentation, and allocated resources.
- ✓ **Standard 2300 – Performing the Engagement:**Internal auditors must identify, analyze, and document sufficient information to achieve the engagement’s objectives.
- ✓ **Standard 2400 – Communicating Results:**Internal auditors are required to communicate the results of their engagements effectively.
- ✓ **Standard 2500 – Monitoring Progress:**The Chief Audit Executive must establish a follow-up system to monitor actions taken in response to audit results communicated to management.
- ✓ **Standard 2600 – Addressing Acceptance of Risks:**If the Chief Audit Executive believes that senior management has accepted a level of residual risk that may be unacceptable to the organization, they must discuss the issue with management. If unresolved, the matter should be escalated to the board for resolution." (The Institute of Internal Auditors, 2017, pp. 10-12-14-16-17-20)

Chapter Two: The Essence of Corporate Governance

2.1 Definition of Corporate Governance :

The term "Corporate Governance" is a concise translation of the English term "Corporate Governance." Its scientific definition, widely accepted, is: "The method by which the powers of governance are exercised through a framework of relationships among the director, board of directors, shareholders, and stakeholders to establish the objectives of the economic entity and oversee its performance".(Mehran, (2003), pp. 1-3)

Several definitions have been proposed, reflecting different perspectives:

- Corporate governance is "the system through which the organization’s activities are directed and controlled at the highest level to achieve its objectives while adhering to standards of responsibility, integrity, and transparency". (Hammad, 2007-2008, p. 11)
- The International Finance Corporation (IFC) defines corporate governance as: "The system by which companies are managed and controlled". (Tawfiq, 2012, p. 222)
- The Organization for Economic Cooperation and Development (OECD) describes it as: "A set of relationships between the company’s management, board of directors, shareholders, and other stakeholders". (Organization of cooperation and economic development , 2004, p. 17)
- According to the Institute of Internal Auditors (IIA), corporate governance involves: "Processes and structures used by stakeholder representatives to oversee risk management, monitor controls, and ensure adequacy to achieve objectives and safeguard organizational values". (Hassan, p. 40)

From these definitions, corporate governance can be summarized as a system aimed at organizing the relationship between the company’s management and its shareholders, with an emphasis on control to prevent managerial dominance.

2.2 Importance of Corporate Governance :

Corporate governance provides significant benefits to organizations and shareholders, including:

- a. **Enhancing Economic Efficiency:** Establishing a framework for relationships between managers and the board of directors improves organizational performance.
- b. **Defining Organizational Structure:** Setting up a structure that enables clear organizational objectives and provides incentives for board members and executives to prioritize shareholder interests.
- c. **Facilitating Access to Global Capital Markets:** Corporate governance increases transparency, attracting a broader investor base, including foreign investors, and improving access to capital at reduced costs. (Mohsen, 2020, pp. 17-18)
- d. **Reducing Financial and Administrative Corruption Risks:** Effective governance lowers corruption risks at both corporate and national levels.
- e. **Promoting Integrity and Accountability:** Governance ensures integrity from board members to executives, fostering trust.
- f. **Enhancing Auditor Effectiveness:** Ensures external auditors remain independent and free from external pressures.
- g. **Strengthening Global Competitiveness:** Enables organizations to compete internationally and explore new markets. (Al-Maghribi, 2020, p. 14)

2.3 Objectives of Corporate Governance :

Corporate governance aims to (others, 2011, p. 192):

- ✓ **Protect Shareholder Rights:** Safeguarding investments and ensuring shareholder confidence.
- ✓ **Ensure Fairness:** Ensuring equity among all shareholders, irrespective of their roles, nationalities, or investment sizes.
- ✓ **Protect Stakeholder Rights:** Governance upholds the rights of all stakeholders, including employees, suppliers, and creditors, fostering loyalty and improving performance.
- ✓ **Facilitate Access to Accurate Information:** Ensuring timely and accurate information flow within and outside the organization enhances stakeholder confidence.
- ✓ **Influence Corporate Strategy:** Governance supports strategic development by addressing deficiencies and adapting plans to changing conditions.
- ✓ **Manage Risks Effectively:** Through robust internal controls and coordination with external auditors, governance enhances risk management.

2.4 Principles of Corporate Governance :

Corporate governance principles, as defined internationally, are organized into six main groups:

- a) **Effective Governance Framework:** Governance frameworks must promote market transparency and efficiency, comply with legal standards, and clearly delineate responsibilities among oversight bodies. (Bouzwina, 2022, p. 297)
- b) **Shareholder Rights:** Governance must protect shareholder rights, including registering ownership, transferring shares, accessing relevant information, voting in general meetings, electing board members, and receiving dividends. (Al-Faliti, 2010, pp. 29-30)

- c) **Equitable Treatment of Shareholders:**Shareholders must be treated equally within each share class. They should have the right to vote, defend their legal rights, and be protected from unfair mergers, insider trading, or questionable acquisitions. (Ghadir, 2012, p. 20)
- d) **Stakeholder Roles in Governance:**Governance should acknowledge the rights of stakeholders established by law or mutual agreements and encourage their cooperation to create wealth, job opportunities, and financially stable organizations. (Aal, 2007, p. 45)
- e) **Disclosure and Transparency:**Governance ensures accurate, timely disclosure of material matters, including financial performance, ownership, and governance structures. (Asma, 2016, p. 76)
- f) **Responsibilities of the Board of Directors:**The board is primarily responsible for overseeing management performance and ensuring returns to shareholders. Effective governance requires an independent board capable of objective judgment. (Suleiman, 2006, p. 55)

2.5 Contributions of Internal Auditing to Corporate Governance :

Internal auditing supports organizations in achieving their goals, ensuring effective internal controls, and collaborating with the board and audit committees to manage risks, improve processes, and guarantee the accuracy of disclosed information.

A. Role of Internal Auditing in Enhancing Governance Under International Standards:

- ✓ **Standard 2110 – Governance:**Internal auditing should evaluate governance processes and propose recommendations to improve governance mechanisms, ensuring (The Institute of Internal Auditors, 2017, p. 01 07):
 - Strategic and operational decision-making.
 - Oversight of risk management and control processes.
 - Reinforcement of ethical values within the organization.
 - Effective performance management and accountability at all levels.
 - Communication of risk and control information to relevant stakeholders.
 - Coordination of activities and information exchange between the board, internal, and external auditors.
- ✓ **Standard 2120 – Risk Management:**Internal auditing must assess and enhance risk management effectiveness. Auditors evaluate whether organizational goals align with its mission and contribute to its achievement by (The Institute of Internal Auditors/Global, 2017, p. 20):
 - Identifying and assessing significant risks.
 - Monitoring risk management processes through managerial activities or independent evaluations.
 - Providing timely communication of risk information.

- ✓ **Standard 2130 – Controls:** Internal auditing should evaluate and recommend improvements to governance processes to achieve objectives such as (Al-Dughji, p. 257):
 - Strengthening organizational ethics and values.
 - Ensuring effective administrative performance and accountability.
 - Delivering timely and accurate risk and control information.
 - Facilitating effective communication and coordination between the board, management, and auditors.

B. Internal Auditing’s Relationship with Other Governance Mechanisms:

- ✓ **Relationship with the Board of Directors:** As key governance players, the board and senior management significantly impact governance quality. Internal auditing provides risk assessments, control evaluations, and periodic reports on governance activities, supporting the board’s strategic and operational oversight.
- ✓ **Relationship with the Audit Committee:** The audit committee, a vital governance tool, acts as a link between the board, internal auditors, and external auditors. Studies emphasize the importance of this relationship in enhancing organizational oversight and governance. (Boushamba, p. 65)

3. Field Study at ALFAPIPE National Pipe Manufacturing Company

In this chapter, we will address the study’s methodology, including the study population, sample, variables, and the tools used to measure these variables.

3.1 Study Methodology:

To achieve the study’s objectives, a descriptive analytical methodology was employed. This approach enabled the analysis of collected data and the interpretation of results to highlight the role of internal auditing in activating corporate governance at ALFAPIPE National Pipe Manufacturing Company, specifically in the Ghardaia and Annaba units.

The fieldwork component relied on a survey questionnaire as the primary tool for gathering and consolidating data relevant to the study’s subject matter. The collected responses were then processed and analyzed using IBM SPSS statistical software (version 28) to derive the study’s conclusions.

3.2 Study Population and Sample :

The study population comprised employees from various departments within ALFAPIPE’s management structure. This included managers, department heads, accountants, internal auditors and their assistants, and external auditors and their assistants. A total of 90 questionnaires were distributed to the study population in May of the current year. Out of these, 78 questionnaires were retrieved, but 12 were excluded due to incomplete or insincere responses. As a result, the number of valid questionnaires subjected to analysis was 60, representing 85% of the total study population.

Table 1: Status of Questionnaires Distributed to the Study Sample

Description	Frequency	Percentage
Valid Questionnaires for Study	60	%83
Excluded Questionnaires (Incomplete)	12	%91
Questionnaires Retrieved	78	8%
Total Questionnaires Distributed	90	%100

Source: Prepared by the researchers based on the results of the questionnaire.

3.3 Validity and Reliability of the Questionnaire Tool:

To ensure the validity and reliability of the study instrument, the questionnaire was reviewed by academic and professional experts for evaluation and refinement. Additionally, it was tested on a pilot sample from the study population. Necessary adjustments were made based on their feedback.

After processing the data from the retrieved and analyzable questionnaires, the following results were obtained

Table 2: Measurement of Reliability for the Questionnaire Items and the Overall Average for All Items.

Section	Number of Statements	Cronbach's Alpha
Internal Auditing and the Principle of Safeguarding Shareholder Rights	04	0.734
Internal Auditing and the Principle of Equitable Treatment of Shareholders	04	0.764
Internal Auditing and the Principle of Disclosure and Transparency	04	0.858
Internal Auditing and the Principle of Board Responsibilities	04	0.842
Internal Auditing and the Principle of Stakeholders' Roles	04	0.866
Overall Reliability for All Sections	20	0.809

Source: Prepared by the researchers based on SPSS results.

From the above table, it is evident that the Cronbach's Alpha reliability coefficient for the entire questionnaire reached 0.809, which is statistically considered a strong value. This indicates that if the questionnaire were redistributed to the same sample, there is an 80% probability of obtaining similar results. The reliability values for the study's sections ranged from 0.734 to 0.866, as shown in the table, reflecting a high and statistically acceptable level of reliability, close to the ideal value of 1. This confirms the validity and reliability of the questionnaire and its suitability for analyzing the results and addressing the research problem.

3.3.1 Testing Data Normality (Kolmogorov-Smirnov Test) :

To verify the appropriateness of the data for analysis, the Kolmogorov-Smirnov Test was used to determine whether the sample data followed a normal distribution. This test is essential for

hypothesis testing, as most parametric statistical tests require the data to adhere to a **Normal Distribution**.

The hypotheses tested are as follows:

- Null Hypothesis (H₀): The data follow a normal distribution.
- Alternative Hypothesis (H₁): The data do not follow a normal distribution.

Table 03: presents the results of the normality test for the study data.

Section		Number of Items	Z-Value	Significance Level
Section 01	Internal Auditing and the Principle of Safeguarding Shareholder Rights	04	0.151	0.129
Section 02	Internal Auditing and the Principle of Equitable Treatment of Shareholders	04	0.147	0.124
Section 03	Internal Auditing and the Principle of Disclosure and Transparency	04	0.175	0.128
Section 04	Internal Auditing and the Principle of Board Responsibilities	04	0.178	0.123
Section 05	Internal Auditing and the Principle of Stakeholders' Roles	04	0.182	0.122
Overall Questionnaire Sections		20	0.193	0.125

Source: Prepared by the researchers based on SPSS results.

From the table above, it is clear that the Z-value for the first dimension is 0.151, and the significance level is 0.12, which is statistically significant (greater than 0.05). The Z-value for the second dimension is 0.147, with a significance level of 0.124, also greater than 0.05. The Z-value for the third dimension is 0.175, with a significance level of 0.128. The Z-value for the fourth dimension is 0.178, with a significance level of 0.123, and the Z-value for the fifth dimension is 0.182, with a significance level of 0.122, all of which are greater than 0.05.

Since the significance level for all the dimensions is greater than 0.05 at a 95% confidence level, this indicates that the data follows a normal distribution. Therefore, we accept the null hypothesis (H₀) and reject the alternative hypothesis (H₁), and this supports the use of parametric analysis methods and tools.

3.5 Testing and Analyzing the Study Hypotheses:

The following decision rule was used to test the hypotheses:

Accept H₁: If the calculated significance level is less than the established significance level (0.05)

Reject H₁: If the calculated significance level is greater than the established significance level (0.05)

First: Testing and Analyzing the Main Hypothesis and its Sub-Hypotheses

A simple regression analysis was used to test the main hypothesis and its sub-hypotheses. The results, as shown in the table below, present the correlation coefficient between internal auditing and corporate governance and its dimensions

Table 4: Results of the Correlation Coefficient between Internal Auditing and Corporate Governance and its Dimensions:

		Equitable Treatment of Shareholders	Disclosure and Transparency	Responsibilities of the Board of Directors	Role of Stakeholders	Safeguarding Shareholder Rights
Internal Auditing	Correlation Coefficient	0,09	0,17	**0,34	-0.016	- 0,24
	Significance Level	0,48	0,17	0,007	0,90	0,06
	Sample	60	60	60	60	60

Source: Prepared by the researchers based on SPSS results.

3.5.1 Testing and Analyzing the First Hypothesis and its Sub-Hypotheses:

- **Testing and Analyzing the First Sub-Hypothesis:**

The calculated significance level is 0.06, which is greater than the accepted significance level of 0.05. Therefore, we reject the alternative hypothesis (H1) and accept the null hypothesis (H0). This indicates that there is no relationship between the internal auditing function and the principle of safeguarding shareholder rights. The reason is that internal auditing in the organization under study does not guarantee shareholders' right to express their opinions on the appointment of board members or to participate in decisions either personally or by proxy, as these decisions fall within the authority of the board of directors.

- **Testing and Analyzing the Second Sub-Hypothesis:**

The calculated significance level is 0.48, which is greater than the accepted significance level of 0.05. Therefore, we accept the null hypothesis (H0) and reject the alternative hypothesis (H1), indicating no relationship between internal auditing and the principle of equitable

treatment of shareholders. This explains that internal auditing, in the organization under study, does not ensure equal treatment of shareholders, whether from the same or different categories (large or small shareholders), regarding access to financial reports or the transparency of stock trading, due to the lack of sufficient information disclosure.

- **Testing and Analyzing the Third Sub-Hypothesis:**

The calculated significance level is 0.17, which is greater than the accepted significance level of 0.05. Therefore, we accept the null hypothesis (H₀) and reject the alternative hypothesis (H₁). This indicates that there is no relationship between internal auditing and the principle of disclosure and transparency. Despite internal auditing reviewing financial reports and ensuring transparency in financial statements, according to the sample members' views on corporate governance practices, it does not guarantee adequate disclosure of policies or sufficient transparency in the governance framework to ensure that the information in financial reports reaches all shareholders and stakeholders in a timely manner.

- **Testing and Analyzing the Fourth Sub-Hypothesis:**

The calculated significance level is 0.007, which is less than the accepted significance level of 0.05. Therefore, we accept the alternative hypothesis (H₁) and reject the null hypothesis (H₀). This means there is a relationship between internal auditing and the principle of board of directors' responsibilities, with a 34% correlation as indicated by the correlation coefficient. This suggests that internal auditing helps the board of directors' review and guide the company's strategy and conduct objective assessments of its operations. It also ensures the integrity and accuracy of financial reports by linking the auditing department directly with the board, as the board controls the auditing process within the company.

- **Testing and Analyzing the Fifth Sub-Hypothesis:**

The calculated significance level is 0.90, which is greater than the accepted significance level of 0.05. Therefore, we accept the null hypothesis (H₀) and reject the alternative hypothesis (H₁), indicating no relationship between internal auditing and the principle of stakeholders' roles. This suggests that internal auditing, in the companies studied, does not guarantee the respect of stakeholders' rights or establish mechanisms for their involvement in improving the company's performance. This is likely due to the lack of timely information delivery.

- **Testing and Analyzing the Main First Hypothesis:**

Based on the analysis of the sub-hypotheses, we conclude that there is a relationship between internal auditing and the principles of corporate governance; however, this relationship is limited by the board of directors. This is due to the existence of a relationship between internal auditing and the principle of the board of directors' responsibilities, and the lack of relationships between internal auditing and the principles of safeguarding shareholder rights, equitable treatment of shareholders, disclosure and transparency, and stakeholders' roles in the companies studied. The reason for this could be the absence of an auditing department in some companies or an insufficient sample size.

3.5.2 Testing and Analyzing the Second Main Hypothesis and its Sub-Hypotheses:

- Testing and Analyzing the First Sub-Hypothesis:

Table 5: Results of One-Way ANOVA to Test Differences in the Means of Internal Auditing on Corporate Governance by Job Category.

Job Title	Sample Size (n)	Mean	Standard Deviation	F Calculated	Significance Level (p)
Manager	2	3,42	0,4	1,14	0,33
Department Head	20	3,36	0,42		
Internal Auditor	1	3,53	0,46		
External Auditor	1	3,23	0,46		
Employee	36	3,47	0,33		
Total	60	3,44	0,43		

Source: Prepared by the researchers based on SPSS results.

Analysis of Results Based on Job Category: From the results presented in the table above, we can see that the calculated significance level is 0.33, which is greater than the accepted significance level of 0.05. Therefore, we accept the null hypothesis (H0) and reject the alternative hypothesis (H1). This indicates that there are no statistically significant differences in the impact of internal auditing on corporate governance attributable to the job category variable.

This conclusion is based on the similar means across job categories (3.42, 3.36, 3.53, 3.23, 3.47, 3.44) and the similar standard deviations (0.4, 0.42, 0.46, 0.46, 0.33, 0.43), which suggests that the effect of internal auditing on corporate governance is similar across all job categories. The reason could be that all job categories within the company contribute to improving the effectiveness of governance principles through their collective efforts to enhance and develop the company's performance. Furthermore, the study sample was not limited to auditors but included various organizational levels, which may explain the lack of significant differences.

- Testing and Analyzing the Second Sub-Hypothesis:

Table 6: Results of One-Way ANOVA to Test Differences in the Means of Internal Auditing on Corporate Governance by Professional Experience

Professional Experience	Sample Size (n)	Mean	Standard Deviation	F Calculated	Significance Level (p)
Less than 5 years	12	3,41	0,44	0,68	0.56
From 6 to 15 years	19	3,36	0,49		
From 15 to 20 years	20	3,58	0,31		
More than 20 years	10	3,45	0,40		
Total	60	3,44	0,43		

Source: Prepared by the researchers based on SPSS results.

From the previous analysis, the following conclusions can be drawn:

- There is a relationship between internal auditing and the principle of board of directors' responsibilities.
- The study revealed no statistically significant relationship between internal auditing and the governance principles (such as safeguarding shareholder rights, equitable treatment of shareholders, disclosure and transparency, and stakeholders' roles).
- No significant differences were found in the effect of internal auditing on corporate governance due to the variables of job title and professional experience.

3.6 Conclusion:

At length, the field study primarily aimed to examine the effectiveness of internal auditing in implementing corporate governance, from the perspective of employees at ALFAPIPE National Pipe Manufacturing Company, Ghardaia and Annaba units in Algeria. To achieve this goal, the theoretical and conceptual framework of the topic was reviewed, providing a clear understanding of the background and helping to identify the variables influencing the study's issue. These variables were then formulated into a central research question.

The field study itself served as the practical application of the theoretical framework, where a questionnaire was designed to collect data from the sample population. The questionnaire responses were analyzed using statistical methods, allowing us to test the hypotheses and derive conclusions. The following are key results based on the study:

3.7 Results:

The principles underpinning corporate governance are primarily based on internal controls. Additionally, corporate governance requires mechanisms that ensure the optimal use of company resources and the achievement of stakeholders' objectives, especially those of shareholders.

- Internal auditing, through its unique position in the company's structure, evaluates risks, determines appropriate management strategies, and ensures that internal control systems are working efficiently. It also provides recommendations to the board to protect the rights of shareholders and stakeholders.
- The effectiveness of internal auditing in activating corporate governance depends on mutual understanding between internal auditors and the stakeholders involved in corporate governance, specifically regarding how internal auditing can add value to the company and protect their interests.
- There is no relationship between internal auditing and governance principles such as safeguarding shareholder rights, equitable treatment of shareholders, disclosure and transparency, and the role of stakeholders.
- There is a relationship between internal auditing and the principle of board of directors' responsibilities in ALFAPIPE's Ghardaia and Annaba units.
- No differences in the effect of internal auditing on corporate governance were observed based on job titles and professional experience within ALFAPIPE's Ghardaia and Annaba units.
- Internal auditing indirectly contributes to ensuring shareholder rights by assisting the board of directors, which represents the shareholders, in fulfilling its responsibilities.
- As internal auditing is part of the company's organizational structure, it is closely linked to upper management and follows its directives.
- Internal auditing is considered a crucial function within the company, supporting the board, audit committees, and external auditors through internal control assessments and risk management reviews. However, it cannot achieve the principles of governance alone but works effectively alongside other governance mechanisms.

3.8 Suggestions:

Based on the findings of this study, the following recommendations are proposed:

- **Reorganize the Internal Auditing Function in Algerian Companies:** Ensure the independence, objectivity, and efficiency of internal auditing practices to enhance their effectiveness.
- **Obligate Algerian Companies to Adhere to Corporate Governance Principles:** Companies should comply with fundamental governance principles, such as transparency, accountability, responsibility, fairness, and disclosure in annual reports. Penalties should be imposed on those who fail to apply these principles properly.
- **Encourage Employees in Algerian Joint-Stock Companies to Purchase Shares:** Offering incentives for employees to purchase shares in the companies they

work for will foster loyalty and promote an ownership mindset, thereby enhancing their commitment to the company's interests and sustainability.

- **Establish a Professional Organization for Internal Auditors:** This organization should regulate the auditing profession and set auditing standards in line with international norms. It should also develop an ethical code that takes the Algerian business environment into account.
- **Continuous Evaluation of Algerian Auditors:** Incorporate Algerian auditors in continuous assessments to identify strengths and weaknesses in their work. This will help improve their expertise and enable them to stay updated on modern auditing methods used in advanced economies.

References

Aal, T. A. (2007). *Corporate Governance, Public and Private Sector Companies and Banks: Concepts, Principles, Experiences, and Requirements*. Cairo: Dar Al-Jamiah.

Al-Dughji, A. H. (n.d.). *Mechanisms Governance Companies that affect in take Auditor Internal decision Ethical*. University of Baghdad.

Al-Faliti, S. b. (2010). *Governance of Public Joint Stock Companies in the Sultanate of Oman*. Jordan: Osama House.

Al-Khalifa, M. A. (2020). *Corporate Governance between Finance and Internal Audit First Edition*. Dar Al-Fikr Al-Jami'i.

Al-Maghribi, M. A.-F. (2020). *Corporate Governance*. Cairo/Egypt: Modern Academy for University Books.

Al-Qabbani, T. (2006). *Internal Auditing in the Light of Electronic Operation*. Alexandria: University House.

Asma, S. M.-K. (2016, 02 27). The Impact of Applying Internal Auditing in Activating Corporate Governance. *Al-Quds Open University Journal for Administrative and Economic Research and Studies, Issue 07 / Volume 2, Algeria*.

Ayadi, M. L. (2008). Contribution of Internal Auditing in Evaluating the Accounting Information System in the Institution. *Master's Thesis in Business Administration*. Department of Management Sciences, Faculty of Economics and Management Sciences, Algeria: University of Algiers 3.

Boushamba, B. (n.d.). *The Role of Internal Auditing in Achieving the Actual Application of Corporate Governance within the Institution*.

- Bouzwina, M. (2022, 08 06). The Extent of Internal Auditing's Contribution to Establishing Corporate Governance Principles in Light of International Internal Auditing Standards. *Journal of Economic Research, Issue 01, Blida/Algeria.*
- Ghadir, M. Y. (2012). Determinants and Standards of Governance. *a research paper presented at the international scientific conference "Globalization of Management in the Age of Knowledge".* Tripoli, Lebanon.
- Hamed Nour El-Din, A. M. (2016). *Internal Auditing of Fixtures in Economic Institutions.* Dar Zahran for Publishing and Distribution.
- Hammad, T. A. (2007-2008). *Corporate Governance, Concepts - Principles - Experiences and Requirements, Second Edition.* Cairo: University House.
- Hassan, K. M. (n.d.). The Role of Internal Auditing in Supporting Corporate Governance. *Algerian Journal of Accounting and Financial Studies, Volume 08, Issue 01, 2022.*
- Interne qualité.* (2023, 07 2). Retrieved from IFACI.AUDIT: WWW.IFACI.fr-Prize
- Mehran, H. ((2003)). Corporate Governance: What Do We Know, and What Is Different about Banks. *Federal Reserve Bank of New York Economic Policy Review. 9(1).*
- Mohsen, A.-H. A.-A. (2020). *Corporate Governance, 1st ed.* Yemen: National Library.
- Muhammad, S. (2016). *Internal Auditing and its Role in Raising the Competitiveness of the Institution.* Human Resources Research and Development Center (Rumaah).
- Organization of cooperation and economic development . (2004). *principle of government enterprise of the OCDE, Paris, France.*
- others, Z. A.-D. (2011). *Information Systems in Control and Auditing.* Jordan: Dar Al-Masirah.
- Oussif, A.-K. (2017). Towards Improving the Quality of Internal Auditing of Algerian Joint Stock Companies in Light of International Practices and Applications of Corporate Governance. *PhD Thesis in Economic Sciences, Department of Economic Sciences, Faculty of Economic Sciences, Business Sciences and Management Sciences.* M'sila: University of M'sila.
- Renard, J. (2000). *Theorie and internal audit practice, 3ed.* Paris: edition of the organization.
- Suleiman, M. M. (2006). *Corporate Governance and Addressing Financial and Administrative Corruption.* Alexandria: Culture Publishing House.
- Tawfiq, O. I. (2012). Auditing of Institutional Control (Corporate Governance) in Light of Auditing Standards. *Algerian Institutional Performance Magazine, Issue 02, Algeria.*

The Institute of Internal Auditors. (2017). *INTERNATIONAL STANDARDS FOR THE PROFESSIONAL PRACTICE OF INTERNAL AUDITING (STANDARDS)*.

The Institute of Internal Auditors. (2017). *International Standards For Professional Practice Of Internal Auditing*.

The Institute of Internal Auditors/Global. (2017). *NORMES INTERNATIONALES POUR LA PRATIQUE PROFESSIONNELLE DE L'AUDIT INTERNE (LES NORMES)*.