

Internal Audit Independence and Corporate Governance: Effects on Financial Performance

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Abstract

Internal audit independence and effective corporate governance are widely recognized as critical mechanisms for enhancing organizational accountability and financial performance. This study examines the relationship between internal audit independence, corporate governance structures, and firm financial performance. Using an empirical research design, the analysis investigates how the autonomy of internal audit functions measured through reporting lines, organizational status, and freedom from managerial influence interacts with key corporate governance attributes such as board independence, audit committee effectiveness, and ownership structure. The findings indicate that higher levels of internal audit independence are positively associated with improved financial performance, reflected in stronger profitability, efficiency, and risk management outcomes. Moreover, the results suggest that corporate governance mechanisms play a moderating role, strengthening the impact of internal audit independence on firm performance when governance structures are robust. The study contributes to the literature by providing evidence on the complementary relationship between internal auditing and corporate governance and offers practical implications for boards, regulators, and policymakers seeking to enhance financial performance through stronger governance and independent assurance functions.

Keywords

Internal Audit Independence; Corporate Governance; Financial Performance; Audit Committee Effectiveness; Board Independence; Firm Performance; Risk Management.

Introduction:

The importance of corporate governance emerged as a result of the economic and financial crises that affected many organizations around the world. It was found that the most important causes of the crises that led to the collapse of these organizations are due to financial and administrative corruption and weak regulatory systems. Hence the need for procedures to be developed and implemented by those responsible for managing these organizations to preserve the rights of the concerned gatherings and accomplish responsibility and oversight all the more adequately, as compelling corporate administration prompts guarantee the precision of monetary reports, for example, the report on inside control strategies and the report. Revealing the monetary outcomes and the viability of inside control strategies. Internal auditing is considered as the administrative tool that can be relied upon in organizing the movement of things, according to the paths that are set for them to achieve the required goals. Organizations have given the internal audit function great attention, believing in the importance of the services performed by this function. Therefore, developing the performance of internal auditors and upgrading the quality of internal auditing has become extremely important to reach the desired goals of contemporary business organizations. Hence, this study, which examines the relationship between the foundations of corporate governance and the quality of internal auditing, came out. The primary objective of this research is to contribute to financial auditing processes by utilizing advanced machine learning techniques for anomaly and fraud detection in accounting records. Financial reporting and auditing environments are increasingly challenged by factors such as growing data volume, complexity, and the need for timely detection of anomalies. Traditional auditing methods often rely on limited approaches, such as sampling and red flag indicators, and these methods are insufficient for detecting rare, sophisticated, or hidden fraudulent activities. These limitations create significant audit risks, reduce the reliability of financial reporting, and erode stakeholder trust (Mehmet & Ganji, 2021; Ayboğa & Gani, 2022).

In recent decades, AI has had a profound impact on various industries, including banking. By providing advanced tools for data analysis and automating processes, AI has helped banks achieve significant improvements in productivity, cost reduction, and customer experience enhancement. This article explores the diverse applications of

AI in banking. Banks use machine learning models to detect fraud patterns. These models analyze transaction data and identify abnormal behaviors that may indicate fraudulent activity. For instance, if a customer suddenly starts making large transactions in locations far from their usual area, AI models can flag this as suspicious activity. Non-supervised models are also used to identify unknown frauds by detecting unusual patterns in data.

An example of a bank using AI for fraud detection is Danske Bank, a Danish bank, which has increased its fraud detection capabilities by 50% and reduced false positives by 60% by implementing AI-driven fraud detection algorithms. Internal auditors are an essential part of any organization, responsible for ensuring that the company's operations are being carried out in compliance with the law and the company's policies. In today's business world, where good corporate governance is crucial, the role of internal auditors has become more critical than ever. Internal auditors have a unique position in the organization, which enables them to promote good corporate governance. In this section, we will discuss the value of internal auditors in promoting good corporate governance.

1. promoting transparency and accountability:

Internal auditors play a significant role in promoting transparency and accountability within the organization. They ensure that the company's financial statements are accurate and reliable, and the company's operations are being carried out in compliance with the law and the company's policies. Internal auditors also monitor the company's compliance with regulatory requirements and identify potential risks that may affect the company's operations.

2. enhancing risk management:

Internal auditors are responsible for identifying and assessing risks that may affect the organization's operations. They work with the company's management to develop and implement risk management strategies that help mitigate these risks. Internal auditors also monitor the effectiveness of these strategies and provide recommendations for improvement.

3. Improving internal controls:

Internal auditors are responsible for evaluating the effectiveness of the company's internal controls. They identify weaknesses in the company's internal controls and provide recommendations for improvement. Internal auditors also monitor the implementation of these recommendations and ensure that the company's internal controls are effective.

4. Enhancing compliance:

Internal auditors play a crucial role in ensuring that the company's operations are in compliance with regulatory requirements. They monitor the company's compliance with laws and regulations and identify potential areas of non-compliance. Internal auditors also work with the company's management to develop and implement compliance strategies that help ensure that the company's operations are in compliance with regulatory requirements.

5. Providing assurance:

Internal auditors provide assurance to the company's management and stakeholders that the company's operations are being carried out in compliance with the law and the company's policies. They provide independent and objective assessments of the company's operations, which help to enhance the credibility of the company's financial statements and operations.

The value of internal auditors in promoting good corporate governance cannot be overstated. Internal auditors play a critical role in ensuring that the company's operations are being carried out in compliance with the law and the company's policies. They promote transparency and accountability, enhance risk management, improve internal controls, enhance compliance, and provide assurance to the company's management and stakeholders. Therefore, organizations must invest in their internal audit function to ensure that they have the necessary resources to carry out their responsibilities effectively.

From a theoretical perspective, this study aims to fill a gap in the accounting and auditing literature. While anomaly detection has been widely studied in areas such as cybersecurity and network breach detection, it appears that such

applications in accounting information systems have not been adequately addressed. The aim of this study is to develop a novel approach to anomaly detection by adapting deep learning methodologies to the unique characteristics of financial transactions. Autoencoder neural networks can be particularly effective in detecting subtle deviations in complex data relationships (Ganji, 2024).

From a practical perspective, the research aims to contribute to audit practice by providing a powerful AI-powered tool for auditors, regulators, and organizations to provide full-population testing. Unlike traditional sample-based approaches, the proposed model offers anomaly detection and tracking capabilities across all ledger entries, thereby enhancing the timely and effective functioning of fraud detection and internal control systems (Ganji & Ganji, 2025). Furthermore, the integration of the anomaly detection system into accounting information systems can support proactive risk management, reduce the likelihood of fraudulent activities going undetected, and ultimately strengthen investor confidence and corporate governance (Apak & Ganji, 2025). To comply with the standard, internal auditors must understand what independence and objectivity are and what is required in practice.

Simate Gift Namutulo, Internal Audit Lead - Access Bank Zambia Limited mentions, "As audit, we must not only be independent, but as well appear to be independent", echoing the principle that primarily, the avoidance of circumstances that may cause a reasonable and uninformed third party to conclude the auditors' integrity, objectivity or professional skepticism has been compromised is paramount within our profession.

The far-reaching effects of ignoring this are beyond perception, but also our ability to objectively add value. The purpose of our work is to provide independent assurance over how well the business is managing its risks, taking advantage of fast-moving opportunities and whether corporate governance processes are operating effectively, our independence ensures that we achieve this free of bias.

Needless to say, our ability to execute this is tied to our ability to build and manage relationships with the people we work with. Emmanuel Johannes, African Federation of Institutes of Internal Auditors (AFIIA) Board Chairman, shares insight into managing crucial conversations where our independence may be threatened or brought into question by saying, "We must focus on a win-win situation and learn how to compromise. The first step is to kill ego, it prefers talking over doing, it convinces us of our own greatness and erodes our will to work for continued success". The success of the business is our interest, therefore our prime inner-interest is our ability to build relationships that show our independence as a source of building confidence and trust.

Ahadi Chacha, seasoned Chief Internal Auditor with 18+ years experience, expands on the basic layout for approaching issues raised through our work and how to form a solid blend to express our objectivity better, and therefore compliment our independence. He reminds us that findings on an audit should clearly outline (i) Facts, (ii) Observations, (iii) Opinions and (iv) Conclusions to form a bedrock that strikes impartial conversation and conclusive value-add. In today's rapidly evolving business landscape, organizations face an array of risks that can significantly impact their operations, reputation, and bottom line. As the guardians of good governance and risk management, internal auditors play a crucial role in identifying and mitigating these risks. However, it is not enough for internal auditors to simply react to risks as they arise; a proactive approach is essential to effectively manage potential threats.

To develop a robust risk mitigation strategy, internal auditors must adopt best practices that encompass various perspectives within the organization. By considering insights from different stakeholders, auditors can gain a comprehensive understanding of the risks faced by the organization and tailor their strategies accordingly.

1. Collaborate with Management:

Internal auditors should actively engage with senior management to understand the organization's strategic objectives and risk appetite. By aligning their efforts with management's vision, auditors can prioritize risks that are most critical to achieving organizational goals. For example, if a company aims to expand into new markets, auditors should focus on assessing the associated market entry risks such as regulatory compliance or competitive threats.

2. Involve Operational Teams:

Risk mitigation is not solely the responsibility of internal auditors; it requires collaboration with operational teams across different departments. By involving these teams in risk assessments and mitigation planning, auditors can tap into their expertise and gain valuable insights into potential vulnerabilities. For instance, if auditing a manufacturing process, involving the production team can help identify operational risks related to equipment failure or supply chain disruptions.

3. *Leverage Technology*:

In today's digital age, technology plays a pivotal role in both creating and mitigating risks. Internal auditors should leverage technological tools such as data analytics software to identify patterns and anomalies that may indicate potential risks. For example, analyzing financial transactions using data analytics can help detect fraudulent activities or irregularities in financial reporting.

4. Conduct *Risk Assessments*:

Regular risk assessments are essential for identifying and prioritizing potential risks. Internal auditors should conduct comprehensive risk assessments that encompass both internal and external factors. By evaluating the likelihood and impact of each risk, auditors can determine the appropriate mitigation strategies. For instance, if a company operates in a region prone to natural disasters, auditors may recommend implementing disaster recovery plans or securing insurance coverage.

5. Monitor key Risk indicators:

To ensure the effectiveness of risk mitigation strategies, internal auditors should establish key risk indicators (KRIs) that act as early warning signals.

It should be recognized that there may be certain situations where the independence and objectivity of the internal audit activity are threatened. Depending on the source of the threat, internal auditors should use the existing internal governance structure to escalate and resolve the conflict or challenges accordingly. The direct reporting line to the chair of the audit committee, Managing Director or the Board, could provide such route for escalation.

However, if in the unlikely event, that the source of the challenge originated from a level of seniority within the reporting line then whistle-blower procedures may be used. In extreme scenarios where internal audits independence and objectivity are impaired, the internal auditor should be aware of the direct route of whistleblowing to Regulators.

IIA Global provide further guidance on impairment of independence and objectivity, see Standard 1130 Impairment to Independence or Objectivity, and the implementation guidance associated with the Standard.

Literature Review:

The need for institutional governance has emerged in many advanced and emerging economies during the past few decades, especially in the wake of the economic collapses and financial crises that have occurred in many countries, which prompted the world to pay attention to governance (Al-Essawi, 2003). The theoretical and historical basis for governance is due first to the agency theory, which first appeared to the Americans Berls and Means in 1932, who saw that there is a division between the responsibility for organization's capital and the cycle of control and oversight inside the organizations, and this partition has suggestions for the level of the organization's presentation (Fateh & Aishy, 2008). The Global Account Company has characterized administration as: "the framework by which organizations are overseen and their organizations are controlled" (Alamgir, 2007). The Organization for Economic Cooperation and Development defined it as: "a set of relationships among those in charge of the company's management, the board of directors, shareholders, and other stakeholders" (Freeland, 2007). Williamson (1999) believes that corporate governance is a strategy adopted by the organization in its endeavor to achieve its main objectives. Given the increasing interest in institutional governance, many institutions have been keen to study, dissect and set explicit principles for its execution. Among these foundations are the Association for Financial Collaboration and Improvement, the Bank for Global Settlements addressed by the Basel Council, and the Worldwide Money Company of the World Bank. Institutional administration looks to ensure the privileges of investors, accomplish equity, secure the interests of different gatherings, give data and the respectability of correspondence channels, and characterize the technique of the foundation (OECD, 1999).

It means the overlapping of institutional governance rules in numerous laws, for example, corporate laws, monetary business sectors, banks, bookkeeping and inspecting, and different laws and enactments that explain the rights and obligations of investors (Zingales, 1997).

The inside review work assumes a significant part in the administration interaction, as it improves this cycle by expanding the capacity of residents to consider the organization responsible. Through the exercises they do, inner evaluator's increment validity, reasonableness, improve the conduct of representatives working in organizations and lessen the dangers of authoritative and monetary debasement (Archambeault, 2002). The professional and regulatory bodies have recognized the importance of the internal audit function in the governance process and the interrelationship between them. The Cadbury committee, for example, emphasized the importance of the internal auditor's responsibility in preventing and detecting fraud and fraud. For this function to achieve its objectives, it should be autonomous, efficient, and dependent on its enactment. Thus, the freedom of this capacity is fortified when it reports straightforwardly to the Review Board of trustees and not to the administration. Likewise, the adequacy of the review board of trustees may increment when it can circulate the inner review staff to get significant data on issues explicit to the organization, for example, fortifying the inside control framework and the nature of the bookkeeping arrangements utilized (Cohen et al., 2004) as well as performing governance. For companies to ensure the exactness of monetary reports, for example, the report on inside control methods and the report on monetary outcomes, and the adequacy of interior control techniques (IIA, 2003).

Quality is defined characterized as the degree of similarity with necessities, as associations look to screen execution, exercises, and every day work to arrive at the most extensive level of value, by decreasing mistakes and identifying deviations in a way that prompts addressing the requirements of the administration (Dres, 2010). The quality of internal auditing is based on the great execution of the interior control framework, just as the propriety of the applied bookkeeping framework, to arrive at the fitting viability and effectiveness in tasks and limitations on a continuous premise inside the association to serve its targets and ensure resources (Al-Qadi, 2008). The internal and external auditing standards also talked about the necessary factors to determine and ensure the quality of internal auditing. The list of auditing standards No. 65 issued by the American Institute of Certified Public Accountants (AICPA 1991) indicated that the quality factors of the internal audit function include eligibility, which is measured through academic qualification and certificates. Professionalism, objectivity, which is measured by the entity to which internal audit reports are submitted, the entity responsible for appointing and dispensing with internal auditors, and the quality of performing tasks, which are measured through the accuracy and adequacy of audit programs and the scope of the audit. As for the quality factors of the internal audit function according to the standards issued by the Institute of Internal Auditors. It was represented by independence, objectivity, professionalism, and due diligence (IIA, 2003b).

The study problem can be confined to an attempt to answer the following main question:

Does the use of the establishments of corporate administration addressed by divulgence, straightforwardness, responsibility, obligation, reasonableness, freedom, laws and guidelines, affect the nature of inward examining in the modern organizations recorded on the Iraq Stock Trade?

The study is based on the main hypothesis that:

HO There is no statistically significant effect of implementing the foundations of corporate governance represented by disclosure, transparency, accountability, responsibility, fairness, independence, laws and regulations, on the quality of internal auditing in industrial companies listed on the Iraq Stock Exchange.

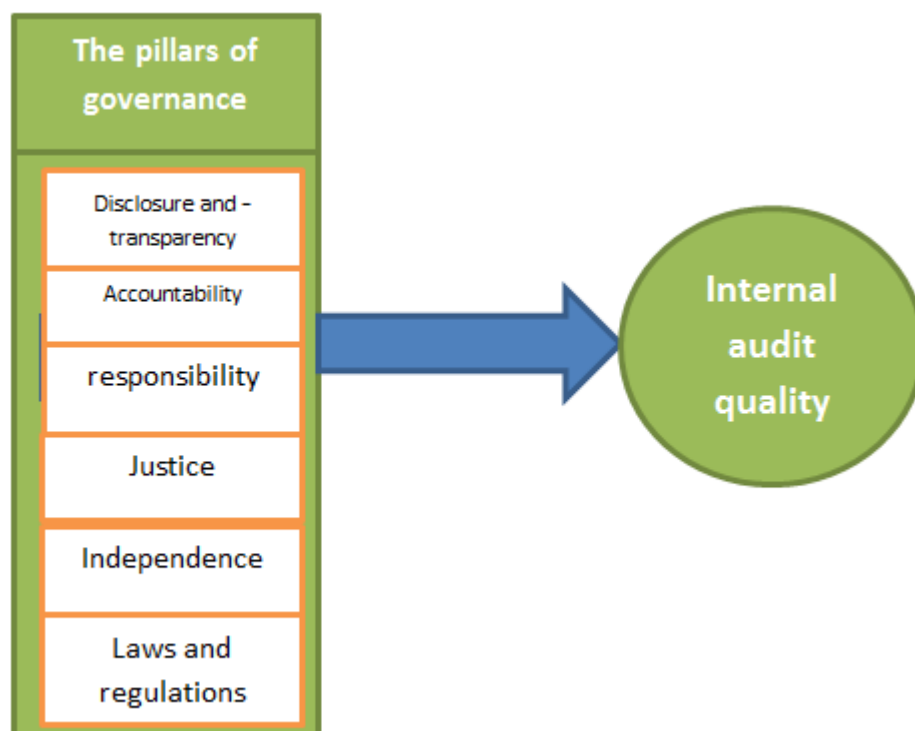


Figure 1 : Theoretical Framework

Research Methods

The main purpose of this paper is to measure the impact of the pillars of governance on internal audit quality. Auditing and account managers in 163 industrial companies listed on the Iraq Stock Exchange are selected based on comfortable sampling. About 750 questionnaires were distributed to managers and after one month, only 645 valid responses were received, with a response rate of approximately 86 percent. A five-point Likert survey response scale was used for each answer. Statistical methods were used within the Statistical Program for Social Sciences (SPSS) to process the data obtained through the field study, as the following statistical methods were used: the arithmetic mean, percentages, and standard deviation, as well as multiple and simple regression analysis with the F-test using the ANOVA table. To ensure the validity of the questionnaire as a tool for collecting the necessary data for the study, and the extent of reliability on it was tested using the Cronbach Alpha coefficient, and the reliability of the questionnaire according to the Cronbach Alpha criterion reached (96.64%), which is an excellent ratio for the approval of the results (Malhotra, 2003). The accepted generalization of the results of such studies is (60%).

Results and Discussion

To test the hypothesis of the study, we must:

First, know the arithmetic mean and standard deviation was used to find out the effect of the foundations of corporate governance (disclosure, transparency, accountability, responsibility, fairness, independence, laws, and regulations) on the quality of internal auditing, which is shown in Table (1)

Disclosure	3.7661	0.9652	High,
Transparency	3.8267	0.8887	High
Accountability	3.7947	0.9263	High
Responsibility	3.8684	0.9443	High
Fairness	3.3087	1.1883	High
Independence	3.5624	0.8043	medium
Laws and regulations	3.9561	1.0659	High

The overall average	3.6947	0.9547	High
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Table No. (1) Indicates that all levels of importance for the pillars of governance had a high level of influence, except for the independent variable, which came at a medium level. The general result in this aspect indicates that there is a high level of influence of the pillars of governance on the quality of internal auditing in the industrial companies listed on the Iraq Stock Exchange from the respondents' point of view, as the general arithmetic mean reached (3.6947), while the standard deviation reached (0.9547). This result is consistent with the outcome of the study of (Issa, 2008), which showed that increasing the objectivity of internal auditors by increasing the degree of governance pillars leads to an increase in the quality of the internal audit function.

Second: Utilizing various straight relapse investigations to discover the impact of the institutional administration columns (exposure, straightforwardness, responsibility, obligation, decency, autonomy, laws, and guidelines) on the nature of inward review.

It is evident from the data contained in Table No. (2) that there is a measurably critical effect of the relative multitude of mainstays of institutional administration (divulgence, straightforwardness, responsibility, obligation, decency, autonomy, laws and guidelines) on the nature of the inward review, as the numerous relationship coefficient R came to (0.647). As for the coefficient of determination, R², it explained a percentage (0.42) of the variance in the dependent variable, meaning that the value of (42%) of the changes in the quality of internal audit resulted from the change in the corporate governance pillars combined (disclosure, transparency, accountability, responsibility, fairness, and independence Laws and regulations). The significance of this effect confirms the calculated F value of (2.29), which is a function at a significant level (0.05).

Table 2:Results of Multiple Regression Analysis Of The Pillars Of Corporate Governance And Internal Audit Quality						
Internal audit quality	0.647	0.42	2.29	Disclosure and Transparency	0.262	0
				Accountability	0.151	0
				Responsibility	0.133	0
				Fairness	0.239	0
				Independence	0.144	0
				Laws and regulations	0.251	0

The results of the analysis of variance shown in **Table No. (3)** Confirm the above, as the calculated F value reached (2.999), which is greater than its tabular value of (2.29) at the level of significance (0.05). Accordingly, it rejects the nihilistic hypothesis and accepts the alternative hypothesis which states that there is a statistically significant effect of applying the foundations of institutional governance represented by divulgence, straightforwardness, responsibility, obligation, decency, autonomy, laws and guidelines, on the nature of inward inspecting in mechanical organizations recorded on the Iraq Stock Trade

Table 3:Results of Anova Analysis Of The Impact Of Institutional Governance Pillars				
Governance pillars	2.999	2.29	0	Refusal

Results

The most important results of the study can be summarized as follows:

1. Corporate governance represents the confluence of sound practices and procedures, and these procedures and practices operate by binding standards and rules that govern them and aim to ensure that there is no contradiction between the strategic objectives of the company and the method of work of management in achieving those goals.
2. The inside review enhances the organization through the capacities that it has become to perform inside the structure of corporate administration, which incorporates giving data to the board at all levels, assessing the interior control framework, hazard the executives, and the organization's obligation to the standards of administration.
3. The consequences of the investigation demonstrated that the use of the mainstays of corporate administration joined (revelation, straightforwardness, responsibility, duty, decency, freedom, laws and guidelines) affected the nature of inner reviewing in mechanical organizations recorded on the Kuwait Stock Trade, as the estimation of the assurance factor (R²) reached 0.42).In theory, internal auditors are expected to remain independent even though they

report directly to management; they are responsible for evaluating and improving an organization's risk management, internal controls, and governance processes.

In reality, however, they frequently find themselves stuck between the Board Audit Committee and management, striving to deliver meaningful assurance while navigating corporate politics, budget constraints, and the constant threat of having their findings ignored or sidelined; they are increasingly pulled into advisory and operational roles that compromise their oversight.

At its essence, internal auditing is a governance paradox: an indispensable element of corporate oversight that is perpetually at risk of being undermined.

The tension between compliance, assurance, and management support creates an identity crisis for internal audit; its one that often leaves auditors questioning their true purpose and effectiveness.

This article explores why internal auditing is so difficult, looking at theoretical challenges, corporate power dynamics, and the struggles auditors face in balancing their competing responsibilities. Theoretically, internal audit is designed to serve as the "third line of defense" in corporate governance, standing apart from management to offer an independent evaluation of risk and control effectiveness. According to the Three Lines of Defense Model, the first line (management) owns and manages risks, the second line (risk and compliance) oversees these controls, and the third line (internal audit) provides an independent review for the board. The problem, however, is that the model presumes that internal auditors can operate independently, a presumption that rarely holds true in practice. In many organizations, internal auditors report administratively to the CFO or CEO, the very individuals they are tasked with auditing. Boards expect internal audit to identify and challenge management weaknesses, yet management controls the budget, resources, and, in many cases, the job security of the auditors. Internal auditors play a crucial role in promoting corporate governance within organizations. As the guardians of ethical practices and risk management, they ensure that companies adhere to regulatory requirements and maintain transparency in their operations. By conducting independent assessments, internal auditors provide valuable insights into the effectiveness of internal controls, identify areas for improvement, and help mitigate potential risks. In this section, we will explore some best practices that internal auditors can adopt to become true champions of corporate governance.

1. Establish a strong ethical culture: Internal auditors should actively promote an ethical culture within the organization. This involves setting the tone at the top by demonstrating integrity and ethical behavior themselves. By fostering an environment where employees feel comfortable reporting unethical conduct, internal auditors can help prevent fraud and misconduct.

For example, an internal auditor could organize regular ethics training sessions for employees, highlighting real-life scenarios and discussing appropriate actions. By encouraging open dialogue and providing guidance on ethical dilemmas, internal auditors can contribute to a culture of integrity.

2. Maintain independence and objectivity: Independence is a cornerstone of effective internal auditing. To ensure unbiased assessments, internal auditors must have autonomy from management influence. They should report directly to the board or an audit committee to avoid conflicts of interest.

For instance, if an internal auditor discovers irregularities in financial statements that may implicate senior management, it is essential for them to report directly to the board rather than going through management channels. This ensures that findings are not suppressed or manipulated.

3. Conduct risk-based audits: Internal auditors should prioritize their audit activities based on risk assessment. By focusing on high-risk areas, they can allocate resources effectively and provide meaningful recommendations for improvement.

For example, if a company operates in a highly regulated industry with significant compliance risks, internal auditors should dedicate more time and effort to auditing those specific areas. This approach allows them to address critical vulnerabilities and enhance corporate governance practices.

4. Foster collaboration with other departments: Internal auditors should actively collaborate with various departments within the organization. By working closely with risk management, compliance, and legal

teams, they can gain a comprehensive understanding of potential risks and ensure that appropriate controls are in place.

For instance, internal auditors can participate in cross-functional meetings to discuss emerging risks or changes in regulations. This collaboration enables them to provide valuable insights and recommendations that align with the organization's overall objectives.

References :

- Alamgir, M. (2007). Corporate governance: A risk perspective, paper presented to corporate governance and reform: Paving the way to financial stability and development.
- AICPA. (1991). The auditors' consideration of the internal audit function in an audit of financial statements, statement on auditing standards No. 65. New York, NY: AICPA.
- Al-Essawi, I. (2003). Development in a changing world: A study in the concept of development and its indicators. Cairo: Dar Al-Shorouk Publishing.
- Al-Tamimi, H. (1998). Introduction to auditing: From a theory and practical standards. Amman: Kahlon Books Center.
- Al-Qadi, H. (2008). Internal audit, (First Edition). Damascus: Damascus University Publications.
- Archambeault, D.S. (2002). The relation between corporate governance strength and fraudulent financial reporting: Evidence from SEC enforcement cases. USA: Prentice-Hall International, Inc.
- Carroll, A.B. (2003). The pyramid of corporate social responsibility business ethics and social responsibility. Retrieved from <http://www.CSR>.
- Catherine, L.K.H., & Sullivan, J.D. (2003). Afforesting the corporate governance in the development and rising and transitional economies. Retrieved from www.cipe.orgtopic/corruption.
- Cohen, J., Krishnamoorthy, G., & Wright, A. (2004). The corporate governance mosaic and financial reporting quality. Journal of Accounting Literature, 43(1), 33-34.
- Dardas, K.W. (2010). The impact of providing internal audit service from external bodies on the quality of internal auditing in companies listed on the Amman stock exchange: Field Study.
- Fatih, D., & Aashi, B.B. (2008). Corporate governance as a tool to ensure the truthfulness of financial information and accounting systems and their impact on the level of market performance. Amman, Jordan: Applied Science Private University.
- Fawzy, S. (2003). Assessment of corporate governance in Egypt. Egypt: The Egyptian Center for Economic Studies.
- Freeland, C. (2007). Basel committee guidance on corporate governance for banks. Paper presented to: Corporate governance and reform paving the way to financial stability and development.
- Gill, A. (2003). Corporate governance in credit Lyonnais S.A (CLSA), Association for investment and Research. Retrieved www.clsa.com.
- Guy, D.M., Alderman, W.C., & Winters, A.J. (1999). Auditing, (5th Edition). USA: Harcourt Brace & Company.
- Hermanson, D.R., & Rittenberg, L.E. (2003). Internal audit and organizational governance. The institute of internal auditors research foundation.
- IIA. (1999). Exposes new internal audit definition. Internal Auditor, 56(1), 13-14.
- IIA. (2003). Simply good business. Retrieved from <http://www.theiia.org/ecm/guideframe>.
- IIA. (2003b). International standards for the professional practice of internal auditing. Retrieved from <http://www.theiia.org/ecm/guideframe>.

- Issa, S.K.M. (2008). Factors determining the quality of the internal audit function in improving corporate governance quality: With an applied study. *Journal of the Faculty of Commerce for Scientific Research*, 1(45), 1-57.
- Jane, F.M. (2003). Independence and objectivity: A framework for research opportunities in internal auditing. *The Institute of Internal Auditors Research*.
- Japan committee. (2001). Corporate governance forum, japan corporate governance committee, revised corporate governance principles. Retrieved from [http:// www.Japan.org](http://www.Japan.org).
- Mehmet, H., & Ganji, F. (2021). Detecting fraud in insurance companies and solutions to fight it using coverage data in the COVID-19 pandemic. *PalArch's Journal of Archaeology of Egypt / Egyptology*, 18(15), 392–407. https://scholar.google.com/citations?view_op=view_citation&hl=tr&user=_RyCeTEAAAAJ&citation_for_view=_RyCeTEAAAAJ:Y0pCki6q_DkC
- Ayboğa, M. H., & Ganji, F. (2022). The Covid 19 Crisis and The Future of Bitcoin in E-Commerce. *Journal of Organizational Behavior Research*, 7(2), 203-213. <https://doi.org/10.51847/hta7Jg55of>
- GANJI, F. (2024). LEVERAGING BIO-INSPIRED ALGORITHMS TO ENHANCE EFFICIENCY IN COVID-19 VACCINE DISTRIBUTION. *TMP Universal Journal of Research and Review Archives*, 3(4). <https://doi.org/10.69557/ujrra.v3i4.103>.
- Ganji, F. (2024). Incorporating emotional intelligence in shark algorithms: Boosting trading success with affective AI. *TMP Universal Journal of Research and Review Archives*, 3(4). <https://doi.org/10.69557/ujrra.v3i4.105>
- Ganji, F., & Ganji, F. (2025). The Role of Sports Sponsorships in Shaping Financial Strategy and Accounting Practices. *International Journal of Business Management and Entrepreneurship*, 4(2), 86–99. Retrieved from <https://www.mbjournal.ir/index.php/IJBME/article/view/79>
- Ganji, F., & Ganji, F. (2025). The Impact of Financial Reporting Standards on Sports Franchise Valuation. *International Journal of Business Management and Entrepreneurship*, 4(1), 46–60. Retrieved from <https://mbjournal.ir/index.php/IJBME/article/view/64>
- GANJI, F. (2024). ASSESSING ELECTRIC VEHICLE VIABILITY: A COMPARATIVE ANALYSIS OF URBAN VERSUS LONG-DISTANCE USE WITH FINANCIAL AND AUDITING INSIGHTS. *TMP Universal Journal of Research and Review Archives*, 3(4). <https://doi.org/10.69557/ujrra.v3i4.107>
- GANJI, F. (2025). Exploring the Integration of Quantum Computing and Shark Algorithms in Stock Market Trading: Implications for Accounting, Finance and Auditing. *International Journal of Business Management and Entrepreneurship*, 4(2), 40–56. Retrieved from <https://mbajournal.ir/index.php/IJBME/article/view/76>
- Joshua, R. (2006). A proposed corporate governance reform: Financial statements insurance. *Journal of Engineering and Technology Management*, 23(1-2), 130-146.
- Jumaa, A.H. (2003). Institutional control and dimensions of development in the context of the practice of the internal auditing profession: The Jordanian association of certified public accountants, the fifth professional scientific conference, under the slogan of Institutional Control and Establishment Continuity. Amman, Jordan.
- Khoury, N.S. (2003). The accounting profession between financial stumbling and institutional control in companies. United Arab Emirates: Al Bayan Newspaper.
- Kuwait Stock Exchange. (2010). Public relations department. Annual bulletin.
- Malhotra, N. (2003). *Marketing research*, (4th Edition). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Mangena, M., & Pike, R. (2005). The effect of audit committee shareholding, financial expertise and size on interim financial disclosures. *Accounting and Business Research*, 35(4), 327-549.

- Matar, M. (2003). The role of disclosure of accounting information in promoting and activating institutional arbitration. The Jordanian Association of Certified Public Accountants, the Fifth Professional Scientific Conference. Amman: Jordan.
- Matar, M., & Noor, A.N. (2007). The extent of Jordanian public shareholding companies' commitment to the principles of corporate governance: a comparative analytical study between the banking and industrial sectors. *Jordanian Journal of Business Administration*, 3(1), 46-71.
- Messier, Jr W.F. (2000). *Auditing & assurance services: A systematic approach*, (second edition). New York: McGraw-Hill Companies, Inc.
- OECD. (1999). *Principles of corporate governance*, organization for economic co-operation and development publications service. Retrieved from <http://www.oecd.org>.
- Rezaee, Z.K., & Mimmier, G. (2003). Improving corporate governance: The role of audit committee disclosures. *Managerial Auditing Journal*, 18(6/7), 530-537.
- GANJI, F. (2025). Biomimetic Shark Algorithms: Leveraging Natural Predator Strategies for Superior Market Performance and Advanced Accounting Techniques. *International Journal of Business Management and Entrepreneurship*, 4(2), 57–70. Retrieved from <https://mbajournal.ir/index.php/IJBME/article/view/77>
- APAK, . R., & GANJI, F. . (2025). Using Decision Tree Algorithms and Artificial Intelligence to Increase Audit Quality: A Data-Based Approach to Predicting Financial Risks. *International Journal of Business Management and Entrepreneurship*, 4(1), 87–99. Retrieved from <https://mbajournal.ir/index.php/IJBME/article/view/65>
- GANJI, F. (2025). Investigating Neuroscience-Inspired Shark Algorithms: Mimicking Human Decision-Making in Trading Systems and Their Implications for Accounting, Risk Management, Technical Analysis, and the Stock Market. *International Journal of Business Management and Entrepreneurship*, 4(2), 71–85. Retrieved from <https://www.mbajournal.ir/index.php/IJBME/article/view/78>
- Ganji, F. (2021). Knowledge and acceptance and use of technology in accounting students. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(13), 7466–7479. https://scholar.google.com/citations?view_op=view_citation&hl=tr&user=RyCeTEAAAAAJ&citation_for_view=RyCeTEAAAAAJ:4DMP91E08xMC
- Saudi organization for certified public accountants, (2007). *Professional conduct and ethics guide*.
- Williamson, Q.E. (1999). *The mechanism of governance*. Oxford: Oxford University Press.
- Zewailf, I., & Al-Jawhar, K. (2007). The role of adherence to the elements of internal control in strengthening the pillars of institutional control. *Journal of Research and Human Studies*, 232-258.
- Zingales, L. (1997). *Corporate governance*. Retrieved from <http://www.theiia.org>.
- GANJI, F. . (2025). Advanced Accounting Techniques for Pandemic-Era Financial Reporting. *International Journal of Business Management and Entrepreneurship*, 4(1), 36–45. Retrieved from <https://mbajournal.ir/index.php/IJBME/article/view/63>