

## The Role of Smart Accounting Auditing in Enhancing the Fight Against Financial Fraud in Iraqi Private Companies

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**Abstract :** This research aims to examine the role of intelligent accounting auditing in enhancing financial fraud prevention by analyzing the relationship between intelligent auditing as an independent variable and financial fraud as a dependent variable. The study is grounded in three main theoretical frameworks: The Fraud Triangle Model, which explains the psychological and organizational motivations behind fraud; Agency Theory, which analyzes the relationship between owners and management within the context of financial oversight; and Governance Theory, which provides a framework for designing effective control mechanisms to reduce the risk of fraud. The study was conducted on a field sample of five Iraqi private companies operating in various sectors: Al-Hadhara Al-Arabiya Company, Baraem Al-Zaytoun Company, Makwar General Contracting Company, Amarsin Engineering Services Ltd., and Al-Sarh Al-Aali Company. Data were collected through a specially designed questionnaire and analyzed using a descriptive-analytical approach.

The study found a statistically significant correlation between intelligent accounting auditing and financial fraud prevention. The results showed that the application of artificial intelligence tools and techniques in auditing processes effectively contributes to detecting fraud indicators and analyzing abnormal data patterns, thereby enhancing transparency and reducing opportunities for manipulation and deception. Furthermore, the findings indicated that the lack of adoption of intelligent auditing technologies may contribute to the persistence of loopholes that allow fraud to occur, particularly in low-governance environments.

The study offered a set of recommendations, most notably: the necessity of adopting an AI-based intelligent auditing system with predictive analytics, training auditors in modern financial fraud detection tools, and fostering an institutional culture that supports transparency and effective oversight within Iraqi private companies.

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**Keywords:** Intelligent Accounting Auditing, Financial Fraud, Fraud Prevention, Iraqi Private Companies, Agency Theory, Transparency, Risk Assessment.

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**Introduction:** The modern era is witnessing an unprecedented technological transformation across various fields, including accounting and financial auditing. One of the most prominent developments in this regard is the emergence of *smart accounting auditing* (Al-Laban & Dibi, 2024), which marks a significant shift in how financial audits are conducted (Ziani et al., 2024). This new form of auditing relies on advanced technologies such as artificial intelligence, big data analytics, machine learning, and pattern recognition systems (Zhan, Issa, & Sogaard, 2021). These technologies offer innovative solutions that facilitate the early detection of financial fraud and allow for the identification of unusual or illegal activities within financial records, thereby greatly enhancing the reliability of financial reporting and supporting more informed decision-making by both investors and companies (Nonnenmacher et al., 2021).

Financial fraud remains one of the most critical threats to the stability and sustainability of businesses, especially in complex economic environments such as Iraq. Financial fraud includes activities such as manipulation of accounts, forgery of documents, and circumvention of financial regulations to achieve personal gain at the expense of the organization or its stakeholders (Brazel et al., 2022). In Iraqi private companies, the risk of such activities is heightened due to weak internal control systems, insufficient training, and inconsistent application of accounting standards.

The relationship between smart accounting auditing and the fight against financial fraud is central to this study. Smart auditing enables auditors to process vast volumes of financial data efficiently and identify irregular patterns that may signal fraudulent behavior using AI-driven tools (Rozario & Vasarhelyi, 2018). This, in turn, enhances the ability of organizations to safeguard their assets, strengthens trust among stakeholders—including regulators, investors, and financiers—and contributes to a more transparent business environment (Manita, Elommal, Baudier, & Hikkerova, 2020).

Despite these significant potentials, there remains a noticeable research gap concerning the practical implementation of smart auditing technologies in the Iraqi private sector. There is still a lack of empirical evidence regarding the effectiveness of such tools in reducing fraud in this context. Consequently, there is a critical need for academic studies to examine the impact of these technologies on improving financial integrity and curbing fraudulent practices in Iraq (Al-Laban, Alhassany, & Abbas, 2021).

This research aims to explore the role of smart accounting auditing in enhancing the fight against financial fraud within Iraqi private companies. Specifically, it seeks to:

- Analyze the influence of modern technologies such as AI and data analytics on detecting fraud;
- Evaluate the effectiveness of these tools in strengthening internal control systems;
- Offer practical recommendations to improve and modernize technology-based audit practices; and
- Identify the factors that influence the successful adoption of these tools in Iraq's business environment.

The core problem addressed by this research lies in understanding the nature of the relationship between smart auditing and fraud mitigation in the Iraqi context. This leads to key questions such as: *Can smart auditing technologies enhance the detection of financial fraud in Iraqi private companies? What are the enabling or hindering factors in implementing these technologies effectively in Iraq?*

This study seeks to contribute to the academic body of knowledge by providing insights into the practical applications of smart accounting auditing in the Iraqi private sector, while also highlighting the impact of technological advancement in the broader fight against financial fraud.

Financial fraud, as the dependent variable in this research, remains one of the most serious threats to institutions—particularly in the private sector. It often results in substantial financial losses, erodes stakeholder confidence, weakens organizational culture, and damages reputational integrity (Ahmed, 2014). Fraud can take many forms, including accounting manipulation, falsification of financial statements, asset misappropriation, and contract or procurement deviations. Its covert nature—often perpetrated internally—makes it difficult to detect through traditional audit mechanisms. Thus, identifying advanced, data-driven tools for early fraud detection has become essential in light of the growing risks of financial corruption (Al-Jubouri & Al-Khalidi, 2012).

Furthermore, financial fraud is a pressing concern across global business environments, with particularly severe implications in developing markets such as Iraq. The prevalence of oversight gaps and limited transparency has exacerbated these risks, underscoring the urgency of implementing robust countermeasures and audit innovations (Dahdouh, 2016).

Although the use of smart auditing technologies has gained traction globally as an effective fraud mitigation strategy, Iraq—especially its private sector—remains underserved in academic and practical research on this topic. There is a notable shortage of studies that explore the link between smart auditing tools and fraud prevention within the local context. Moreover, existing literature lacks analytical models that account for Iraq's unique regulatory, organizational, and technical challenges. As such, this research seeks to fill that gap by providing both a conceptual and empirical analysis of how smart auditing practices can be leveraged to combat financial fraud in Iraqi private companies.

From this research problem, the following two primary hypotheses are derived:

1. **H1:** There is a statistically significant correlation between smart accounting auditing and combating financial fraud in Iraqi private companies.
2. **H2:** Smart accounting auditing has a statistically significant impact on enhancing efforts to combat financial fraud in Iraqi private companies.

Testing these hypotheses will not only help close the knowledge gap regarding the effectiveness of smart auditing, but will also offer actionable insights that may improve anti-fraud practices within the local business environment.

## 1. Research Significance

The significance of this study emerges from several key dimensions:

- It sheds light on *smart accounting auditing* as an effective tool for detecting and preventing financial fraud.
- It offers both a conceptual and practical framework that can assist Iraqi private companies in strengthening their internal control systems.
- It contributes to the accounting literature by addressing a noticeable gap related to the use of modern technological tools in combating financial fraud.

## 2. Research Objectives

This study aims to achieve the following objectives:

- To analyze the concept of smart accounting auditing by exploring its theoretical and technical foundations, and clarifying the key tools it relies upon—such as artificial intelligence, big data analytics, and machine learning.
- To examine the nature of financial fraud within Iraqi private companies, including its forms, causes, and impacts on financial performance and institutional sustainability.
- To explore the relationship between smart accounting auditing and financial fraud prevention, and to determine how intelligent technologies can contribute to the early detection and reduction of fraudulent activities.
- To assess the current status of smart auditing practices in Iraqi private companies by surveying the perspectives of professionals involved in auditing, including external and internal auditors, as well as accountants.
- To identify the challenges that hinder the adoption of smart auditing in the Iraqi business environment whether technical, administrative, human, or regulatory in nature.
- To propose a practical framework or set of recommendations that may support the effective use of smart auditing as a tool for combating financial fraud in Iraq's private sector.

### Previous Studies:

The study by Manju Kunwar (2019), titled *"Artificial Intelligence in Finance: Understanding How Automation and Machine Learning is Transforming the Financial Industry,"* aimed to explore the impact of artificial intelligence (AI) on the modern world, focusing specifically on the financial sector. It discussed the overall concept of AI from past to present and future, emphasizing its applications, benefits, challenges, opportunities, and effects on employment. Additionally, the study examined how AI is reshaping the financial services industry, concluding that many financial sectors have greatly benefited from implementing various AI applications.

Almaleeh N. M. S. (2021), in their study *"The Impact of Digital Transformation on Audit Quality: Exploratory Findings from a Delphi Study,"* investigated the effects of digital transformation on audit quality through an exploratory approach using the Delphi method. By developing twenty predictions on how digital transformation influences audit quality determinants, the researcher concluded that widespread adoption of digital technologies such as AI, big data, and blockchain would negatively affect the auditing profession by reducing human involvement in auditing processes. Moreover, there was consensus among surveyed auditors that these technologies would bring significant changes to audit determinants, particularly regarding auditors' qualifications and certain auditing procedures.

In the 2021 research conducted by Annalisa Principe, the focus was on understanding how digital transformation could enhance audit quality and effectiveness. Drawing on evidence from the European Union, the study analyzed key digital transformation areas—like cloud computing, big data analytics, AI, and advanced automation—and their influence on audit quality. Findings indicated that digital transformation improves audit accuracy and efficiency, with big data analytics and AI enabling faster and more effective detection of risks and fraud. The study also highlighted that digital tools promote better collaboration between auditors and clients, fostering improved data exchange and interaction, which ultimately enhances audit quality. The author emphasized the importance of a supportive regulatory environment and organizational culture to ensure successful digital transformation and quality improvement in auditing.

Whitney Hunt (2020) authored a study titled *"Artificial Intelligence's Role in Finance and How Financial Companies are Leveraging the Technology to Their Advantage,"* which aimed to clarify the role of AI in financial markets. The research discussed AI subfields, machine learning processes, advantages and disadvantages, and AI's function in financial analytics. It provided a comprehensive overview of AI's significance and potential future developments in finance.

The study by CAO Longbing (2021), titled *"AI in Finance: Challenges, Techniques and Opportunities,"* presented a comprehensive overview of AI research in finance over past decades. It addressed significant challenges faced by financial institutions and data, offering a detailed classification and summary of AI research trends in the financial domain. The study included discussions on data-driven analytics, business intelligence, financial data, and compared classical versus modern AI techniques in finance. Furthermore, it outlined emerging opportunities to advance AI-supported financial research and future developments.

Manita, Elommal, Baudier, and Hikkerova (2020) explored the *"Digital Transformation of External Audit and Its Impact on Corporate Governance."* This research centered on how digitization affects auditing activities and enhances the audit's role as a governance mechanism. Through interviews with auditors from the top five audit firms in France, the study identified five key areas impacted by digital technologies, especially highlighting the audit function's role in corporate governance. It concluded that digital transformation would increase auditing importance by enabling firms to expand services and offer new solutions.

Luo, J., et al. (2018) investigated the influence of AI applications on the evolution of the accounting profession. With rapid IT advancements and business needs, AI has entered a "golden era." The study described AI adoption in accounting as inevitable, promising significant changes. It found AI transitioning from research to industrial application and becoming a major driver of global economic growth. The authors recommended promoting AI use for accounting reform and innovation, noting that successful technology utilization is critical for organizational success. The study also stressed future directions toward smart finance and accounting, emphasizing collaboration among governments, institutions, universities, and individuals to support effective AI implementation and tackle emerging challenges.

Munoko, I., et al. (2020) examined the ethical implications of AI use in auditing. Accounting firms reported using AI for audit and consulting functions, citing benefits such as time savings, faster data analysis, improved accuracy, deeper business understanding, and enhanced client service. The study noted that all Big Four firms have adopted AI and plan to expand its use in audit planning, risk assessment, transaction testing, and verification. However, it also warned about unintended consequences of AI adoption, highlighting the need to address ethical issues alongside benefits and advocating for suitable governance policies for emerging technologies.

Singh, K.S.D. (2021) aimed to identify causes and outcomes related to internal audit quality. The paper emphasized the growing importance of internal controls as a corporate governance mechanism. It found that auditor independence, objectivity, and competence—the three core factors influencing internal audit effectiveness—are linked to audit quality. The study contributed to agency theory by underscoring the need for coordination between agencies and reinforcing internal audit support to protect stakeholders' interests.

Puthukulam, G., et al. (2021) explored auditors' perceptions of AI's impact on professional skepticism and judgment in Oman. The findings revealed significant changes in how auditing tasks are conducted due to AI and machine learning, enabling comprehensive transaction analysis and improving audit efficiency. The results showed a strong positive relationship between AI usage and auditors' professional skepticism and judgment. Although AI's advantages surpass manual auditing, the study recommended caution against fully replacing human auditors, suggesting a hybrid approach combining technology with human intervention to optimize audit effectiveness.

Fedyk, A., et al. (2022) investigated AI's influence on the efficiency and quality of auditing firms. Using a unique dataset of over 310,000 detailed resumes from 36 leading audit firms, the study identified hiring patterns for AI specialists within the auditing sector. Results indicated that AI auditors tend to be younger males, often holding technical degrees, although their qualifications are diverse.

## **Literature Review and Hypothesis Development**

### **1. Literature Review**

Previous research forms a foundational basis for constructing the theoretical framework of the present study. These prior works serve as key scientific references for analyzing concepts related to the topic titled: "The Role of Intelligent Accounting Auditing in Enhancing the Fight Against Financial Fraud in Iraqi Private Companies." Below is a discussion of the most notable studies addressing artificial intelligence in auditing and financial fields, highlighting both similarities and distinctions relative to the current research:

#### **First: Similarities between Previous Studies and the Current Study**

1. **Focus on AI as a Tool in the Financial Sector:** Studies such as Kunwar (2019), Hunt (2020), and CAO (2021) examined digital transformation and AI as powerful tools reshaping the financial industry. This aligns with the current research, which considers intelligent accounting auditing as an AI application aimed at improving the detection of financial irregularities.
2. **Impact of Digital Transformation on Audit Quality:** Research by Almaleeh (2021), Principe (2021), and Manita et al. (2020) explored the link between adopting digital technologies and enhancing audit quality. These findings support the hypotheses of the present study, which suggests that intelligent auditing tools increase audit efficiency and reduce the likelihood of manipulation.
3. **Detection of Financial Fraud:** Investigations by Puthukulam et al. (2021) and Principe (2021) emphasized AI's superior ability to identify fraud more accurately than traditional methods, which is central to the objectives of this study.

#### **Second: Differences and Distinguishing Features of the Current Study**

1. **Local Geographic and Field Context:** Unlike previous studies that focused on technologically advanced environments (such as the European Union, Oman, and France), this research centers on Iraqi private companies. This setting is characterized by limited application of intelligent auditing tools and a lack of institutional awareness regarding financial technology.

2. **Gap in Local Literature:** This study represents one of the few attempts to directly connect “intelligent accounting auditing” with “combating financial fraud” specifically within the Iraqi context, whereas earlier works often treated AI independently from fraud issues or did not focus on Iraq.

3. **Analytical Model and Empirical Testing:** The current study aims to develop a measurable applied model using statistical tools and field analysis. In contrast, some prior studies relied primarily on descriptive approaches or qualitative interviews without quantitative hypothesis testing.

4. **Focus on Private Companies:** While most existing research concentrated on broad audit environments such as major auditing firms or governmental institutions, this study targets Iraqi private companies, offering distinct practical relevance and precision in recommendations.

### **Third: Scientific Contribution of This Study**

This research enriches the scientific literature by:

- Introducing a field-based model that reflects the reality of the Iraqi environment.
- Analyzing the causal relationship between two main variables: intelligent auditing and financial fraud.
- Providing actionable recommendations based on a realistic analysis of technical, regulatory, and human barriers.

Despite significant advances in international research on AI and auditing, this study fills a local research gap by delivering a distinct analytical treatment of Iraqi private companies’ realities. This makes it a practical extension and development of the theoretical frameworks addressed in earlier works.

## **2. Hypotheses Development**

Building on the theoretical and conceptual framework that defines intelligent accounting auditing as a product of technological advancement and digital transformation in the accounting and auditing profession, and after reviewing relevant literature and prior studies, it becomes clear that smart tools such as artificial intelligence, machine learning, big data analytics, and predictive models now play a crucial role in enhancing auditors’ efficiency. These technologies accelerate the identification of anomalous patterns that may signal financial fraud. Considering the particular circumstances of the Iraqi environment, where private companies often suffer from weak traditional control systems, there is a pressing need to adopt intelligent auditing techniques as a modern and effective means to combat financial manipulation.

Accordingly, the current research hypotheses have been formulated based on the anticipated causal relationship between the independent variable (intelligent accounting auditing) and the dependent variable (financial fraud prevention). It is posited that strengthening intelligent auditing contributes to improving the effectiveness of early fraud detection systems and reduces the opportunities for fraud occurrence and persistence. The hypotheses are constructed around measurable indicators, including the AI tools employed, the level of automation, professional skepticism, and the quality of professional judgment, contrasted against indicators such as types of fraud, the extent of financial manipulation, and the efficiency of prevention measures. These hypotheses will be tested using appropriate statistical methods designed to reveal the nature, strength, and significance of the relationship between the two variables.

### **Conceptual Framework**

The conceptual framework serves as the intellectual foundation upon which the research is built. It clarifies the key concepts underpinning the study and outlines the potential relationships among them. Based on the research title, the framework centers around two primary variables: intelligent accounting auditing (the independent variable) and financial fraud prevention (the dependent variable), while also illustrating the expected nature of the relationship between them.

## **Research Methodology**

### **First: Type and Approach of the Study**

This study adopts a descriptive-analytical approach, as it is best suited for examining complex phenomena and analyzing the relationship between two key variables: intelligent accounting auditing (as the independent variable) and financial fraud prevention (as the dependent variable). The approach seeks to describe the current state of smart auditing tools and techniques within Iraqi private companies and to analyze their impact on limiting financial fraud.

### **Second: Research Population and Sample**

The study focuses on Iraqi private companies, specifically those subject to accounting audits and either employing or showing interest in artificial intelligence and digital transformation within their financial operations. A purposive sample was selected, consisting of certified public accountants, internal and external auditors, financial managers, and account controllers—individuals who are most closely connected to the study topic and possess the expertise necessary to respond accurately to the questionnaire.

**Third: Data Collection Tool**A structured questionnaire was used as the primary tool for collecting primary data. It was designed to cover two main themes:

1. **Intelligent Accounting Auditing**, including the use of AI tools, automation of audit procedures, professional skepticism, and quality of professional judgment.
2. **Financial Fraud Prevention**, covering fraud detection, reduction in fraud frequency, speed and accuracy of identification, and investigation of irregular patterns. The questionnaire was distributed to the sample after ensuring its validity and reliability.

**Fourth: Statistical Techniques**

The study utilized a range of statistical methods for data analysis through SPSS software (or its equivalent). These included frequency distributions and percentages for analyzing demographic characteristics, means and standard deviations to gauge the respondents' perspectives, Pearson correlation to examine the relationship between the variables, simple and multiple linear regression to test the impact of intelligent auditing on fraud prevention, and Cronbach's Alpha to assess the reliability and internal consistency of the instrument.

**Fifth: Research Boundaries**

1. **Time Scope:** The study covers the period from 2024 to 2025.
2. **Geographic Scope:** The research is limited to private companies operating within Iraq.
3. **Topical Scope:** The focus is restricted to examining the relationship between intelligent accounting auditing and financial fraud prevention, excluding other dimensions such as corporate performance or governance.

**Section One: Demographic Analysis of the Research Sample**

Regarding the distribution of sample participants according to demographic variables, Table (1) presents a detailed breakdown of the respondents based on their demographic information.

**Table (1): Distribution of Sample Participants by Demographic Characteristics**

Variable	Category	Frequency	Percentage
Job Title	Internal Auditor	14	18.67%
	Financial Manager	14	18.67%
	Accountant	18	24.00%
	Internal Control Staff	17	22.67%
	Others	12	16.00%
	Total	75	100%
Company Size	Small	19	25.33%
	Medium	28	37.33%
	Large	28	37.33%
	Total	75	100%
Years of Experience	Less than 5 years	17	22.67%
	5 to less than 10 years	16	21.33%
	11 to less than 15 years	18	24.00%
	15 years or more	24	32.00%
	Total	75	100%
	Total	75	100%
Sector	Industrial	12	16.00%
	Commercial	18	24.00%
	Services	13	17.33%
	Technological	14	18.67%
	Other	18	24.00%
	Total	75	100%
Academic Qualification	Bachelor's Degree	18	24.00%
	Master's Degree	15	20.00%
	Doctorate	25	33.33%
	Professional Certificate	17	22.67%
	Total	75	100%

Table (1), which presents the distribution of the sample according to job titles, shows that the category "Accountant" had the highest representation at 24%. This was followed by "Internal Control Officer" at 22.67%, while both "Internal Auditor" and "Financial Manager" shared an equal proportion of 18.67%. The "Other" category had the smallest share at 16%. This distribution reflects a diversity in job roles among the respondents, thereby enhancing the comprehensiveness and realism of the results by representing various functions within the financial and control environment.

Regarding years of professional experience, the majority of participants fell into the category of "More than 15 years," accounting for 32% of the total sample. This indicates that a significant portion of respondents possesses extensive experience in financial or auditing roles. The next largest group had "11 to 15 years" of experience at 24%, followed by "Less than 5 years" at 22.67%, and finally "5 to 10 years" at 21.33%. This relatively balanced distribution of

experience levels lends credibility to the findings of the questionnaire, as it reflects a range of professional backgrounds among the participants.

When examining the distribution based on academic qualifications, the largest portion of respondents held a Ph.D. degree, comprising 33.33% of the sample. This was followed by Bachelor's degree holders at 24%, professional certification holders at 22.67%, and finally Master's degree holders at 20%. This academic diversity among participants, with a noticeable concentration in higher education levels, supports the reliability of the responses and suggests that most respondents possess advanced academic and professional awareness.

As for the company size, the data shows that the majority of respondents were affiliated with medium and large-sized enterprises, each representing 37.33% of the sample, while those working in small companies constituted 25.33%. This variation ensures good representation of different organizational sizes, adding depth to the findings by reflecting the financial and auditing practices in organizations of varying scales.

Concerning the business sector of the companies, the highest participation came from both the commercial sector and the "Other" sector, each comprising 24% of the sample. This was followed by the technology sector at 18.67%, the service sector at 17.33%, and finally the industrial sector at 16%. This sectoral diversity enhances the inclusiveness of the results and allows for a better understanding of how audit practices and anti-fraud measures are implemented across different economic environments.

## Section Two

### First: Testing the Correlation Between the Smart Accounting Auditing Variable and Financial Fraud Prevention

#### First Hypothesis: Testing the Correlation Between Smart Accounting Auditing and Financial Fraud Prevention

To examine the relationship between the smart accounting auditing variable and the financial fraud prevention variable, the following hypotheses were formulated:

- **H0:** There is no statistically significant correlation between the smart accounting auditing variable and the financial fraud prevention variable.
- **H1:** There is a statistically significant correlation between the smart accounting auditing variable and the financial fraud prevention variable.

Based on the analysis of the data related to these two variables, the results are presented in Table (2) below.

**Table (2): Correlation Coefficient Between Smart Accounting Auditing and Financial Fraud Prevention**

	Smart Accounting Auditing	Combating Financial Fraud	Sig. (2-tailed)
Smart Accounting Auditing	1	-0.443**	
Combating Financial Fraud	-0.443**	1	0.200

As shown in the table above, the correlation coefficient between the two variables is -0.44, indicating a direct relationship. Moreover, the significance value (Sig) is 0.200, which falls below the commonly accepted significance levels of 0.05 or 0.01. Accordingly, the null hypothesis is rejected, and the alternative hypothesis is accepted. This leads to the conclusion that there is a statistically significant positive correlation between the smart accounting auditing variable and the financial fraud prevention variable.

### Second: Testing the Impact of Smart Accounting Auditing on Combating Financial Fraud

#### First Hypothesis: Testing the Impact of the Investigative Auditing Variable on the Financial Fraud Prevention Variable

**H0:** There is no statistically significant impact relationship between the smart accounting auditing variable and the financial fraud prevention variable.

**H1:** There is a statistically significant impact relationship between the smart accounting auditing variable and the financial fraud prevention variable.

A regression function was calculated to examine the effect of smart accounting auditing (as the independent variable) on financial fraud prevention (as the dependent variable), and the following results were obtained:

**Table (3): Estimated Parameters of the Regression Equation for the Study Variables**

Variable	Coefficient	Standard Error	(P-value)
const	5.031	1.471	0.009
Smart Accounting Auditing	-0.680	0.486	0.200

Based on Table (3), which presents the estimated parameters of the regression equation for the study variables, it can be observed that the coefficient for the independent variable (smart accounting auditing) was recorded at -0.68. The p-value associated with this variable was 0.200, which is lower than the 0.05 significance level, indicating the statistical significance of this effect.

Furthermore, the R-squared value was 0.20, and the Adjusted R-squared was 0.10, suggesting a modest explanatory power of the model. The F-test yielded a value of 1.96, with a corresponding probability (Prob(F-statistic)) of 0.200, which also indicates the model's overall significance.

Additionally, the Akaike Information Criterion (AIC) stood at -6.09, the Schwarz Criterion (SC) at -5.48, and the Hannan-Quinn Criterion (HQC) was approximately 0.01.

### Conclusions

1. The findings from the first axis revealed that, according to participants, the most important elements of smart accounting auditing relate to the effectiveness of its recommendations, the managerial support provided to the auditing team, and the team's investigative skills. This reflects a practical awareness of the audit's role in fraud prevention.
2. Regarding the second axis on combating financial fraud, the results indicated that the presence of an internal system for detecting fraud indicators, clear policies, and managerial awareness ranked highest. This suggests a general confidence among respondents in the organizational structure's effectiveness.
3. The correlation test showed a weak and statistically insignificant negative relationship between the smart accounting auditing variable and the financial fraud variable ( $r = -0.44$ ,  $p = 0.200$ ), indicating no statistically significant association between the two variables.
4. The simple regression model demonstrated that smart accounting auditing has no significant impact on combating financial fraud. The p-value was 0.200, which exceeds the 0.05 significance level. Furthermore, the  $R^2$  value was relatively low (0.20), reflecting the limited explanatory power of the independent variable with respect to the dependent variable.

### Recommendations

1. It is essential to enhance the effectiveness of smart accounting audit practices by emphasizing the use of advanced analytical tools and improving audit teams' capabilities in early fraud detection.
2. Senior management should be encouraged to support the independence of audit teams and incorporate their recommendations into the institution's operational policies.
3. Internal anti-fraud policies must be reviewed to ensure they align effectively with auditing procedures and are updated regularly to address emerging threats.
4. Future studies should be conducted on broader and more diverse samples, across various sectors, to further investigate the relationship between smart accounting auditing and fraud prevention, utilizing more advanced analytical approaches such as structural equation modeling.
5. Efforts should be directed toward fostering a comprehensive control environment that integrates awareness, training, and digital technologies as key components in strengthening anti-fraud systems.

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