The Impact of Sustainable Auditing on Enterprise Risk Management in Jordanian Commercial Banks

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ABSTRACT

This study aimed to identify the impact of sustainable auditing on enterprise risk management in Jordanian commercial banks. To achieve the study's objectives, a descriptive-analytical approach was employed. The study population consisted of Jordanian commercial banks, and statistics from the Central Bank indicate that there are 12 commercial banks in total. Since the study population is considered small, all Jordanian commercial banks were included in the sample, making the study sample size 12 banks. The unit of analysis comprised employees from the finance, control, auditing, and risk departments within the main administrations of Jordanian commercial banks. To analyze the study data and test its hypotheses, the Statistical Package for Social Sciences (SPSS) version 20 was used. The statistical analysis revealed several findings, the most notable being that sustainable auditing positively affects enterprise risk management in Jordanian commercial banks. This highlights the essential and primary role of sustainable auditing in enhancing transparency and operational efficiency within Jordanian commercial banks. The study also presented several recommendations, the most significant of which was the necessity for Jordanian commercial banks to integrate sustainable auditing as a core component of their strategic vision aligned with national goals for sustainability and comprehensive development.

Keywords: Sustainable Auditing, Enterprise Risk Management, Jordanian Commercial Banks

INTRODUCTION

Modern auditing tools and techniques, particularly sustainable auditing, have significantly contributed to advancements in auditing methods and applications. They have enhanced and amplified its role in planning and monitoring processes, providing precise and rapid auditing information that meets the needs of all users and ensures their satisfaction. Additionally, these tools have strengthened their role in regulating and organizing risk management in banks (Marko, Sergeja & Tina, 2020). This is achieved through the provision of control standards and indicators that aid in detecting and addressing errors and deviations in a timely manner, supporting decision-makers in anticipating and managing potential enterprise risks using all available control methods. Accordingly, this study aimed to examine the impact of sustainable auditing on enterprise risk management in Jordanian commercial banks.

Significance of the study

The importance of this study stems from its focus on a vital and critical sector of Jordan's economy—the Jordanian commercial banking sector. This sector plays a key role in achieving positive economic growth rates, offering diverse banking services, and attracting investors by optimally managing and investing in its activities and operations. It emphasizes the utilization of available opportunities and successfully managing and mitigating potential risks to ensure sustainability and continuity. Sustainable auditing, as an effective control strategy, stands out as a comprehensive approach to enterprise risk management and is one of the control practices that ensure safety and security within the sector.

Research Problem and Questions

Organizations in general, and banks in particular, face numerous challenges and risks that obstruct their path toward achieving their goals and realizing their strategic aspirations. Ignoring these institutional challenges and risks can incur significant costs for banks, potentially leading to their liquidation in the long run. Recognizing this reality, banks have understood that the first step toward successfully managing and mitigating these risks lies in managing them efficiently and effectively. This enables banks to achieve their outlined objectives, enhance performance, and adopt sustainable auditing as a comprehensive control strategy in their pursuit of pioneering enterprise risk management.

Main Research Question

The study seeks to answer the primary question: "Is there statistically significant impact at a significance level of ($\alpha \leq 0.05$) of sustainable auditing with its dimensions (economic dimension auditing, environmental dimension auditing, social dimension auditing) on enterprise risk management in Jordanian commercial banks?"

Sub-questions

To address the main research question, the following sub-questions are formulated:

First Sub-question

"Is there a statistically significant impact at the significance level ($\alpha \leq 0.05$) of economic dimension auditing on enterprise risk management in Jordanian commercial banks?"

Second Sub-question

"Is there a statistically significant impact at the significance level ($\alpha \leq 0.05$) of environmental dimension auditing on enterprise risk management in Jordanian commercial banks?"

Third Sub-question

"Is there a statistically significant impact at the significance level ($\alpha \leq 0.05$) of social dimension auditing on enterprise risk management in Jordanian commercial banks?"

Fourth Sub-question

"Is there a statistically significant impact at the significance level ($\alpha \leq 0.05$) of institutional performance auditing on enterprise risk management in Jordanian commercial banks?"

Research Hypotheses

Based on the research problem and questions, the study hypotheses are formulated as follows:

Main Hypothesis

"There is no statistically significant impact at a significance level of ($\alpha \leq 0.05$) of sustainable auditing with its dimensions (economic dimension auditing, environmental dimension auditing, social dimension auditing) on enterprise risk management in Jordanian commercial banks."

Sub-hypotheses

First Sub-hypothesis

"There is no statistically significant impact at the significance level ($\alpha \leq 0.05$) of economic dimension auditing on enterprise risk management in Jordanian commercial banks."

Second Sub-hypothesis

"There is no statistically significant impact at the significance level ($\alpha \leq 0.05$) of environmental dimension auditing on enterprise risk management in Jordanian commercial banks."

Third Sub-hypothesis

"There is no statistically significant impact at the significance level ($\alpha \leq 0.05$) of social dimension auditing on enterprise risk management in Jordanian commercial banks."

Fourth Sub-hypothesis

"There is no statistically significant impact at the significance level ($\alpha \leq 0.05$) of institutional performance auditing on enterprise risk management in Jordanian commercial banks."

Theoretical Framework of the Study

Sustainable Auditing: A Contemporary Intellectual Approach

Definition and Importance of Sustainable Auditing and Its Dimensions:

Sustainable auditing is a tool that enables effective regulatory bodies to examine and evaluate the achievements of economic entities such as banks and companies undergoing the auditing process. It ensures a pioneering approach in assessing the extent to which predetermined objectives are being achieved. Sustainable auditing plays a crucial role in enhancing control and auditing processes by evaluating the performance of the audited entity. It helps organizations assess and refine their activities, adopt best pioneering practices, and support and enhance outcomes related to their sustainability-driven plans and activities (Financial Audit Bureau, 2017: 12-13).

Sustainable auditing services have been defined as those offered by external auditors with a forward-thinking perspective, providing assurance and reporting on the sustainable activities of economic entities (Ogando et al., 2018:3).

According to (Al-Wakeel 2021:30), sustainable auditing is described as "a professional attest function aimed at providing an absolute positive assurance on management performance concerning economic, social, environmental, and governance aspects in an integrated manner. This leads to a positive conclusion regarding the credibility and fairness of such claims, based on specific measurement standards to serve stakeholders."

(Yahya & Samir 2022) define it as "a new independent professional service aimed at enhancing the quality of information and improving its credibility and relevance for various decision-makers. This is achieved by testing management performance regarding sustainability, providing assurances about the components of sustainability performance (economic performance, social performance, environmental performance, and institutional performance) through a neutral, independent party, in accordance with international auditing and assurance standards."

The Importance of Sustainable Performance Auditing:

Sustainable performance auditing increases the confidence of both managers and stakeholders in the quality of sustainability performance data. According to (Simoni et al. 2020: 1061), "It provides stakeholders, including investors, with greater assurance that the presented data is clear, accurate, and transparent."

Dimensions of Sustainable Performance Auditing

Sustainable performance auditing encompasses several dimensions that focus on various aspects of sustainability. These dimensions include:

A. Economic Performance Auditing

Economic performance auditing involves a critical examination of financial records and documents to verify the accuracy and integrity of declared financial information. It ensures compliance with applicable principles, regulations, and laws (Al-Ghuraibi, 2020: 80).

B. Environmental Performance Auditing

This dimension is concerned with preserving biological and physical environmental resources. Environmental auditing includes various types such as:

- Auditing of environmental management systems,
- Environmental compliance auditing,
- Operational process auditing,
- Auditing for property transfers or acquisitions,
- Waste auditing,
- Site or activity auditing,
- Environmentally audited financial statements (Stanescu et al., 2020: 202).

C. Social Performance Auditing

Social performance auditing evaluates an economic entity’s ability to manage human-related issues stemming from its surrounding environment by utilizing the necessary workforce for its activities. According to Grigorescu and Hategan (2016: 1103), this dimension aims to ensure social justice by supporting and enhancing equality, distributing natural and economic resources fairly, and fostering cultural development within society. Social performance builds community relationships emphasizing equality in participation and resource distribution, cultural diversity, and the sustainability of economic entities (Jaff et al., 2021: 365).

D. Institutional Performance Auditing

Institutional performance auditing focuses on evaluating the organizational structure, roles, responsibilities, and the implementation of policies. It also reviews how information is communicated across different subsidiaries. This dimension is closely tied to the efficient use of resources, enhancing the economic entity's value, and strengthening its competitive position. It enables organizations to secure local and global funding sources, fostering development and growth while generating new opportunities (Stanescu et al., 2020: 202).

Enterprise Risk Management: A Contemporary Intellectual Approach

Concept of Risk

Understanding the concept of risk is a prerequisite to comprehending enterprise risk management, as risk management specifically addresses the potential risks that companies might face.

Kazaz et al. (2019) define risk as "the uncertainty of outcomes resulting from events, threats, or activities. It is an inevitable element in the business world that can influence the achievement of an organization’s strategic objectives."

Agarwal and Ansell (2016) describe risk as "a term used to express the uncertainty associated with future events or expected outcomes, which may have a significant impact on the organization’s performance and act as a barrier to achieving its goals."

Risks are also regarded as "events or activities that could go wrong, causing adverse effects on an organization’s performance, budget, or timelines. Risk management involves prioritizing, classifying, and planning for risks before they occur" (Ayers & Hutchins, 2019, p.16).

According to (Addo et al. 2021), risks are "issues that affect a bank’s ability to achieve its objectives, the negative impact of an action or event that weakens an institution’s capability to meet its goals, or the likelihood of an unfortunate event occurring. Risk refers to the probability of encountering undesired negative outcomes from an event."

Concept of Risk Management

Risk management is a systematic and organized approach aimed at identifying, assessing, and controlling risks to mitigate their impact.

(Jesry et al. 2022) explain risk management as "a structured and planned process designed to help project teams make sound decisions promptly. It involves identifying, classifying, managing, and controlling risks. Effective initial risk identification is fundamental to successful risk management, enabling the formulation of a well-structured plan to mitigate their effects during actual implementation."

(Chen et al. 2020) highlight risk management as "a strategy that revolves around identifying, evaluating, and prioritizing risks. It involves reshaping strategies within an organizational context to manage and address these risks effectively."

Concept of Enterprise Risk Management (ERM)

Enterprise Risk Management (ERM) is a comprehensive approach to managing risks by integrating them into the organizational framework, especially within banks. It coordinates operations and personnel to adopt a holistic perspective on risk management, ultimately reducing the organization's overall risk exposure and enhancing its value (Yang et al., 2018).

According to (Annamalah et al. 2018), ERM is "a method of proactively identifying and analyzing responses to numerous risks within a company or bank. It is a continuous process that involves measuring and monitoring risks while developing suitable strategies or corrective actions to manage them. This approach is interactive and consistent, aiming to evaluate and handle all risks collectively at the organizational level."

ERM is also defined as "the science employed by organizations and banks to assess, verify, control, and monitor potential risks arising from any activity. Its goal is to enhance competitiveness and meet both short-term and long-term shareholder requirements. ERM serves as a tool aligned with the organization's strategic plans, helping to analyze dimensions that may add value to the organization and its shareholders" (Bribirsa & Deble, 2019).

The Importance of Enterprise Risk Management

The importance of enterprise risk management (ERM) lies in its ability to provide flexibility in managing the risks and challenges that banks face. It protects the rights of shareholders through administrative performance transparency and the implementation of corporate governance practices in the bank. ERM is an effective tool that helps bank management bear responsibility toward stakeholders and enables the bank to deal with uncertainties related to future events and outcomes (Lechner & Gatzert, 2018).

ERM adds value to users when management and employees apply ERM skills, as this facilitates the smooth implementation of the system, enhancing the value of the institution (Birbirsa & Deble, 2019).

Moreover, the implementation of ERM enhances business value by reducing earnings volatility, lowering the commercial cost of capital, providing higher returns, and improving efficiency (Zou et al., 2017).

ERM also provides the institution with the most effective solutions based on market demands and allows timely responses to changes in the external environment. The activities of institutions are largely determined by the level of supply and demand for services, which are evaluated based on economic performance criteria (Al-Shamsi, 2020).

Thus, the researcher believes that sustainable auditing has a positive impact on institutional risk management in commercial banks seeking banking leadership. This highlights the important and primary role that sustainable auditing plays in enhancing transparency and operational efficiency in commercial banks. By adopting the sustainable auditing approach, these banks ensure a comprehensive and periodic evaluation of their administrative and financial systems while considering environmental and social factors. This helps them proactively identify and monitor risks, leading to effective strategic decision-making. Additionally, sustainable auditing contributes to building and strengthening the trust of stakeholders in the bank by providing reports characterized by high accuracy and credibility, which ultimately reduces capital-related risks and preserves the bank's reputation. Therefore, it is essential to provide the requirements for sustainable performance auditing in banks seeking institutional leadership. These requirements include the presence of a range of social, economic, environmental, and institutional activities carried out by the audited banks, aiming to achieve sustainable performance goals. It is also necessary to have a highly qualified and experienced human resources team to carry out sustainable performance auditing to reduce institutional risks. Moreover, there must be a specific system for accounting for sustainable performance activities to measure and communicate relevant data to the concerned parties in the community. In addition, there should be performance measurement standards or indicators for economic, social, environmental, and institutional performance in those banks. This is achieved through the availability of binding legal instructions for measuring the performance of sustainability activities, which will undoubtedly impact institutional risk management.

Practical Side of the Study:

- **Study Methodology:** The study adopts a descriptive analytical methodology, which is one of the core approaches in field and applied research. This methodology provides descriptive and quantitative facts and information about the topic under study, using statistical analytical methods to uncover the relationship between the study variables and the type of impact among them.
- **Study Population and Sample:** The study population consists of Jordanian commercial banks. According to Central Bank statistics, there are (12) commercial banks. Since the study population is classified as a small community, all Jordanian commercial banks were included in the study sample, making the sample size (12) commercial banks.
- **Sample Unit:** The study targeted employees in the financial, auditing, and risk management departments of the main offices of the Jordanian commercial banks. Since there were no disclosures regarding the number of these employees from the Central Bank of Jordan or the commercial banks themselves, the researcher decided to distribute (120) questionnaires, with an average of (10) questionnaires per bank to ensure the inclusion of as many as possible. The questionnaires were distributed electronically through Google Drive documents, by sending a link to the questionnaire on the official website of the Human Resources Department of each bank. The responses were retrieved in the same manner, totaling (107) valid responses for analysis, resulting in a response rate of (89.2%).

The following table shows the basic information of the targeted individuals in the study:

Table (1): Basic Information Description of the Targeted Individuals in the Study

Variable	Category	Repeats	Percentage
Age	Less than 30 years	12	11.2
	30 – Less than 40 years	38	35.5
	40 – Less than 50 years	42	39.3
	50 years and above	15	14.0
Educational Qualification	Bachelor's degree	76	71.0
	Master's degree	22	20.6

	PhD	9	8.4
Job Title	Department Manager / Deputy Department Manager	3	2.8
	Head of Department / Assistant Head of Department	6	5.6
	Employee	98	91.6
Years of Experience	Less than 5 years	16	15.0
	5 – Less than 10 year	38	35.5
	10 – Less than 15 years	43	40.2
	15 years and above	10	9.3
Total		107	%100

Table (1), which describes the basic information of the individuals targeted in the study, indicates that the largest percentage of individuals working in the targeted departments in Jordanian commercial banks were aged between 40 and less than 50 years (39.3%). A further 35.5% were between 30 and less than 40 years old, while the remaining age groups were smaller in proportion. This can be attributed to the nature of the work in the targeted departments, which requires employees to have sufficient knowledge and understanding of their tasks and possess the necessary experience, which typically takes a relatively long period of time to acquire. The table also shows that 71.0% of the individuals working in the targeted departments hold a bachelor's degree, while 29.0% have higher academic qualifications (master's or doctorate degrees). This is likely due to the requirement by commercial banks for employees to have at least a bachelor's degree to work with them. Additionally, the table reveals that 91.6% of the individuals working in the targeted departments are employees working as accountants, auditors, and staff in the auditing and risk departments, while the remaining 8.4% are department heads, assistant heads, department managers, and their deputies. This aligns with the general distribution of employees according to the organizational hierarchy, where there are more employees in lower administrative levels and fewer in middle and upper levels. The table further indicates that 40.2% of individuals working in the targeted departments have between 10 and less than 15 years of experience, and 35.5% have between 5 and less than 10 years of experience. The remaining sample of the study is distributed across other experience categories in smaller proportions. This reflects that the employees in these departments possess the practical experience and competence necessary to perform their work effectively.

Statistical Methods Used

The data collected through the study tool (the questionnaire) were subjected to various statistical and analytical tests available in the Statistical Package for Social Sciences (SPSS V.20), as follows:

1. Descriptive Tests: These tests were used to describe the responses of the study sample on parts of the study tool. These tests included frequencies and percentages to describe the basic information of the respondents, as well as means and standard deviations to describe the study variables.
2. Cronbach's Alpha Coefficient: This was used to test the reliability of the study tool.
3. Variance Inflation Factor (VIF) and Tolerance: These tests were used to verify the independence of the independent variables.

4. Multiple Linear and Stepwise Regression Analysis: These were used to test the hypotheses of the study.

Data Analysis and Hypothesis Testing

- Reliability of the Study Tool

The Cronbach's Alpha Coefficient is one of the primary tests used to verify the reliability of the study tool. This test measures the consistency of the responses. Alpha values of 70% or higher indicate the reliability of the tool.

Looking at Table (2), which shows the Cronbach's Alpha values for the study variables, there is significant reliability in the study tool, as the values ranged from 0.736 to 0.927, all of which are above 70% (Al-Najjar et al., 2017).

Table (2): Cronbach's Alpha Coefficients for the Study Tool.

Variable	Dimensions-Variable	# of Paragraphs	Alpha
Independent Variable	Economic dimension auditing	8	0.777
	Environmental dimension auditing	8	0.736
	Social dimension auditing	8	0.791
	Institutional performance auditing	8	0.763
	Sustainable Audit	32	0.927
Dependent Variable	Enterprise Risk Management	15	0.851

Independence of Independent Variables (Multicollinearity)

The independence of independent variables is one of the key conditions that ensure the validity of applying the general linear model. The independence of these variables is determined by checking for the absence of high (perfect or near-perfect) linear correlations between them, as the presence of such correlations leads to misleading and unrealistic interpretations about the ability of these variables to explain the variation in the dependent variable.

The Variance Inflation Factor (VIF) test and the Tolerance test are essential statistical tests in this context. The VIF values range from 1 to 10, and the Tolerance values range from 0.1 to 1, both of which indicate the absence of high linear correlations between the independent variables, thus confirming their independence.

Looking at Table 3, it can be seen that the VIF values range from 2.640 to 7.717, and the Tolerance values range from 0.130 to 0.379, both falling within the acceptable limits for each test. This indicates that there are no high linear correlations between the independent variables in the study, confirming their independence.

Table (3).Variance Inflation Factor and Tolerance Values for the Study's Independent Variable

Variable	VIF	Tolerance
Economic dimension auditing	2.640	0.379
Environmental dimension auditing	5.077	0.197
Social dimension auditing	6.006	0.167
Institutional performance auditing	7.717	0.130

Descriptive Analysis of the Study Data

The study included two main variables: Sustainable Auditing, measured by (economic dimension auditing, environmental dimension auditing, social dimension auditing), and Enterprise Risk Management. These variables were described using descriptive statistical tests, including mean values, standard deviations, as well as ranks and relative significance levels.

Looking at Table 4, it is evident that there is a high level of interest from Jordanian commercial banks in all the study variables. The descriptive results for the Sustainable Auditing variable showed that its mean was (3.996), with a standard deviation of (0.395). Additionally, there was a high level of attention given to all the dimensions that measure this variable. economic dimension auditing ranked first with a mean of (4.044) and a standard deviation of (0.448), followed by environmental dimension auditing with a mean of (3.984) and a standard deviation of (0.430), then social dimension auditing with a mean of (3.979) and a standard deviation of (0.390), and finally, auditing on institutional performance with a mean of (3.978) and a standard deviation of (0.443).

Furthermore, the results for the descriptive analysis of the Enterprise Risk Management variable showed that its mean was (3.984), with a standard deviation of (0.433).

Table (4) Description of the Study Variables.

Variable	Mean	Standard deviation	Rank	Relative importance
Economic dimension auditing	4.044	0.448	1	High
Environmental dimension auditing	3.984	0.430	2	High
Social dimension auditing	3.979	0.390	3	High
Institutional performance auditing	3.978	0.443	4	High

Sustainable Audit	3.996	0.395	-	High
Enterprise Risk Management	3.984	0.433	-	High

Hypothesis Testing

The study hypotheses examined the impact of sustainable auditing and its dimensions on enterprise risk management in Jordanian commercial banks. A main hypothesis was constructed, from which three sub-hypotheses were derived. These hypotheses were tested using analytical statistical methods, including Multiple Linear Regression and Stepwise Linear Regression. The results are as follows:

First: Results of Testing the Main Hypothesis

The main hypothesis stated:

"There is no statistically significant impact at a significance level of ($\alpha \leq 0.05$) of sustainable auditing with its dimensions (economic dimension auditing, environmental dimension auditing, social dimension auditing) on enterprise risk management in Jordanian commercial banks."

Table (5) The impact of sustainable auditing and its dimensions on enterprise risk management.

Dependent Variable	**Independent Variable**	**Unstandardized Coefficients**		**Standardized Coefficients**		
		coefficient B	**Standard Error**	**β coefficient**	**Calculated T**	**Sig. T**
Enterprise Risk Management	**Economic dimension auditing**	0.099	0.049	0.102	2.030	0.045
	Environmental dimension auditing	0.360	0.070	0.357	5.107	0.000
	Social dimension auditing	0.258	0.084	0.232	3.052	0.003
	Institutional performance auditing	0.312	0.084	0.318	3.696	0.000
	R		**R^2**	**Calculated F**	**Sig. F**	
	0.950		0.902	234.389	0.000	

Table (5) presents that sustainable auditing has a strong relationship with enterprise risk management, with a correlation coefficient of (R=0.950). This indicates that (90.2%) of the variation in enterprise risk management can be explained by sustainable auditing, with other factors held constant. The table also shows a significant effect of sustainable auditing on enterprise risk management, with a calculated F value of (234.389) and a significance level (Sig.F=0.000), which is less than 0.05. Based on these results, it can be concluded that:

"There is a statistically significant impact at a significance level of ($\alpha \leq 0.05$) of sustainable auditing with its dimensions (economic dimension auditing, environmental dimension auditing, social dimension auditing) on enterprise risk management in Jordanian commercial banks."

Second: Results of Testing the Sub-Hypotheses

Results of Testing the First Sub-Hypothesis

The first sub-hypothesis stated: "There is no statistically significant impact at a significance level of ($\alpha \leq 0.05$) of economic dimension auditing on enterprise risk management in Jordanian commercial banks."

Looking at Table (5), it is evident that economic dimension auditing has a strong positive correlation with enterprise risk management, with a B value of (0.099), indicating that an increase in economic dimension auditing by one unit leads to an increase in enterprise risk management by (0.099). The table also shows a significant effect of economic dimension auditing on enterprise risk management, with a calculated T value of (2.030) and a significance level (Sig.T=0.045), which is less than 0.05. Based on these results, it can be concluded that: "There is a statistically significant impact at a significance level of ($\alpha \leq 0.05$) of economic dimension auditing on enterprise risk management in Jordanian commercial banks."

Results of Testing the Second Sub-Hypothesis

The second sub-hypothesis stated: "There is no statistically significant impact at a significance level of ($\alpha \leq 0.05$) of environmental dimension auditing on enterprise risk management in Jordanian commercial banks."

Looking at Table (5), it shows that environmental dimension auditing has a strong positive correlation with enterprise risk management, with a B value of (0.360), indicating that an increase in environmental dimension auditing by one unit leads to an increase in enterprise risk management by (0.360). The table also shows a significant effect of environmental dimension auditing on enterprise risk management, with a calculated T value of (5.107) and a significance level (Sig.T=0.000), which is less than 0.05. Based on these results, it can be concluded that: "There is a statistically significant impact at a significance level of ($\alpha \leq 0.05$) of environmental dimension auditing on enterprise risk management in Jordanian commercial banks."

Results of Testing the Third Sub-Hypothesis

The third sub-hypothesis stated: "There is no statistically significant impact at a significance level of ($\alpha \leq 0.05$) of social dimension auditing on enterprise risk management in Jordanian commercial banks."

Looking at Table (5), it is clear that social dimension auditing has a strong positive correlation with enterprise risk management, with a B value of (0.258), indicating that an increase in social dimension auditing by one unit leads to an increase in enterprise risk management by (0.258). The table also shows a significant effect social dimension auditing on enterprise risk management, with a calculated T value of (3.052) and a significance level (Sig.T=0.003), which is less than 0.05. Based on these results, it can be concluded that: “There is a statistically significant impact at a significance level of ($\alpha \leq 0.05$) of social dimension auditing on enterprise risk management in Jordanian commercial banks."

Results of Testing the Fourth Sub-Hypothesis

The fourth sub-hypothesis stated: “There is no statistically significant impact at a significance level of ($\alpha \leq 0.05$) of institutional performance auditing on enterprise risk management in Jordanian commercial banks."

Looking at Table (5), it is evident that institutional performance auditing has a strong positive correlation with enterprise risk management, with a B value of (0.312), indicating that an increase in institutional performance auditing by one unit leads to an increase in enterprise risk management by (0.312). The table also shows a significant effect of institutional performance auditing on enterprise risk management, with a calculated T value of (3.696) and a significance level (Sig.T=0.000), which is less than 0.05. Based on these results, it can be concluded that: ″There is a statistically significant impact at a significance level of ($\alpha \leq 0.05$) of institutional performance auditing on enterprise risk management in Jordanian commercial banks."

Results

The descriptive and analytical statistical tests indicated the following:

1. The Jordanian commercial banks' interest in sustainable auditing and its dimensions (economic dimension auditing, environmental dimension auditing, social dimension auditing and institutional performance auditing) is high, respectively. This high interest indicates that Jordanian commercial banks are adopting a strategic role that goes beyond their traditional goals of profitability to include enhancing their responsibility towards the economy, environment, and society. The banks' interest in sustainable auditing reflects their commitment to achieving long-term economic efficiency through enhanced transparency, reducing financial risks, and ensuring compliance with institutional governance standards. It also reflects their commitment to integrating environmental considerations into their investment decisions and operational processes, such as supporting green projects and reducing carbon emissions. Moreover, it highlights their efforts to promote social justice and improve community welfare through financing projects that empower individuals, support small and medium-sized enterprises, and apply fair labor practices. Additionally, it shows their high awareness of the importance of integrating their institutional performance with their strategic goals, adopting management models based on sustainability and effectiveness, and their commitment to evaluating their administrative and financial practices based on standards that extend beyond their traditional financial objectives. This is likely to position Jordanian commercial banks as key partners in achieving sustainability and integrated development, demonstrating their commitment to ethical and environmental practices, thus enhancing trust in them.

2. The Jordanian commercial banks' interest in institutional risk management is high. This high interest indicates the awareness of Jordanian commercial banks and their recognition of the importance of protecting their assets and ensuring the stability of their operations in an environment that faces severe challenges and competition. This is achieved through their commitment to implementing comprehensive systems and procedures to identify and assess the risks that threaten their continuity, and by using advanced analytical tools to analyze their operations and environment, which helps reduce the likelihood of losses and enhances their ability to confront crises, emergencies, and respond to changes efficiently.
3. Sustainable auditing positively impacts institutional risk management in Jordanian commercial banks. This indicates the crucial and primary role that sustainable auditing plays in enhancing transparency and operational efficiency in these banks. By adopting a sustainable auditing approach, these banks ensure a comprehensive and periodic evaluation of their administrative and financial systems, considering environmental and social factors. This helps them proactively identify and monitor risks, allowing for effective strategic decision-making. Moreover, sustainable auditing contributes to building and strengthening stakeholder trust by providing highly accurate and credible reports, which reduces capital-related risks and preserves the bank's reputation.

4. Auditing the economic dimension positively impacts institutional risk management in Jordanian commercial banks. This highlights the importance of auditing all economic factors in enhancing the ability of Jordanian commercial banks to face financial and strategic crises and challenges. A systematic and accurate approach to economic auditing helps banks analyze their profitability, financial efficiency, evaluate the quality of their investments, and analyze returns against risks. This enables the identification of financial weaknesses and imbalances, allowing for preventive actions to reduce the negative impacts of various economic risks, such as market fluctuations and financial crises. Economic auditing also contributes to ensuring compliance with accounting standards and regulatory laws, which reduces the chances of exposure to regulatory and legal risks, thus ensuring the bank's financial sustainability and increasing trust in it.

5. Auditing the environmental dimension positively impacts institutional risk management in Jordanian commercial banks. This emphasizes the importance of considering all environmental aspects in the activities and operations of Jordanian commercial banks to ensure the sustainability of their performance and reduce risks related to environmental events and changes. Environmental auditing helps banks assess the environmental impacts of their activities, operations, and investments, such as compliance with environmental standards and regulations and climate change. This contributes to reducing risks related to environmental compliance. Additionally, environmental auditing enhances their ability to predict environmental risks, adapt to them, and reduce potential costs.
6. Auditing the social dimension positively impacts institutional risk management in Jordanian commercial banks. This underscores the importance of social responsibility for Jordanian commercial banks in reducing risks and enhancing their sustainability. Social auditing helps these banks assess their commitment to social justice standards and indicators, workers' rights, and local community development, thus avoiding risks related to social tensions and labor disputes that may

threaten their reputation and financial performance. Social auditing also strengthens their ability to adapt to social changes, thereby reducing the likelihood of exposure to legal and regulatory risks.

7. Auditing institutional performance positively impacts institutional risk management in Jordanian commercial banks. This emphasizes the importance of auditing institutional performance in evaluating the internal and external processes of Jordanian commercial banks. It helps identify potential weaknesses and address them before they escalate, providing management with reports that assist in making effective decisions to proactively manage risks, which enhances their stability and reputation.

RECOMMENDATIONS

Based on the findings, the study offers the following recommendations:

1. Jordanian commercial banks should foster a culture of sustainability within their internal environment by organizing awareness programs that highlight the benefits and advantages of applying sustainable practices to enhance the bank's overall performance.
2. In collaboration with regulatory and supervisory authorities, Jordanian commercial banks should organize specialized training sessions for auditors and managers on the significance and role of sustainable auditing and its economic, environmental, and social aspects.
3. Regulatory and supervisory bodies should establish mandatory regulations and guidelines for Jordanian commercial banks to implement sustainable auditing standards, ensuring compliance with global social and environmental governance principles and international sustainability initiatives.
4. Jordanian commercial banks should establish dedicated departments or units focused on sustainable auditing to oversee the implementation of policies and procedures related to the economy, environment, and society, equipping them with advanced analytical tools to enhance their ability to monitor and assess risks comprehensively.
5. Jordanian commercial banks should develop digital monitoring systems to track performance in all sustainability areas.
6. Jordanian commercial banks should prepare periodic sustainability reports detailing their performance in the three sustainability dimensions (economic, environmental, social) and ensuring adherence to international sustainability standards.
7. Jordanian commercial banks should integrate sustainable auditing into their strategic vision, aligning it with national sustainability and comprehensive development goals.

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