



RESEARCH ARTICLE

The Mediating Role of Internal Audit Quality in the Relationship between Cyber Security and Reducing the Risks of Cloud Accounting Governance

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ABSTRACT

The objective of this study was to evaluate the effect of cyber security governance with respect to cloud accounting risk management among the Jordanian industrial companies, placing emphasis on internal audit quality as a mediating variable. We adopted a descriptive-analytical approach to address the study's specific aims. This study targeted 49 Jordanian public-shareholding industrial companies listed on the Amman stock exchange (ASE) as of the beginning of 2024 (ASE, 2024). The study's population consisted of managers and their deputies, heads of departments, and employees from the IT and accounting departments of industrial companies that utilize cloud accounting services. We reached the administration through their respective company websites and electronically sent the relevant sample. 350 respondents received electronic questionnaires, of which 239 were completed and returned, making the response percentage 95.6. All questionnaires were used for statistical analysis. The research's analysis revealed a significant impact of cyber security governance on cloud accounting risk management in Jordanian industrial companies, with an alpha value of less than 0.05. In this relationship, the quality of the internal audit emerged as a partial mediating variable.

INTRODUCTION

Companies are more active than ever in relation to the information and communication technologies, seeking to capitalize on the advancements of this domain. The development of technology that allows for various activities to be performed over the internet as an example, is widely accepted and changing the way accounting practice is being carried out from a hitherto paper based model to a modern digital model, which most organizations now and in the future are aspiring to adopt (Alqudah, A. Z., 2022). The rise of cloud accounting is attributed to the growing popularity of cloud computing applications. Cloud computing can be described as an easier method of accessing various services, resources, and software over the internet irrespective of the user's location. Zheng, Jiang, Wu & Liu (2013) explain that the emergence of the internet and website portals enables accounting information to be done in a timely manner and retrieved more quickly, improving and redefining service delivery. Unfortunately, there will be risks that these types of systems will face such as; time-

related risks, loss of information, and even the risk that the data may be captured by third parties, all of which could hinder the provision of reliable services to users (Rawashdeh, 2024).

As cloud accounting continues to grow in popularity, there has been the increasing emergence of providing security guarantees in regard to cyber control governance to minimize the emerging cloud accounting risks. Internal auditing can be seen as one of the basic regulatory mechanisms that are appropriate for the achievement of organizational objectives through a structured framework for assessment and improvement of governance, risk management, and control mechanisms (Alqudah, A. Z., 2023). A critical aspect of internal auditing, which can make one of the greatest contributions to the overall achievement of the internal control objectives, has to be performed in a good quality while ensuring proper workflow and risk management, which in contemporary business environment with increasing technology and cloud accounting has a significant impact on the work environment. Therefore, this study aims to examine the internal audit quality's mediating effect on the association of cybersecurity governance and the mitigation of cloud accounting risks in Jordanian public shareholding industrial companies (Alqudah, 2024).

2. Problem Statement

Since a number of companies are more reliant on cloud accounting and cyberspace, cybersecurity has significantly matured as a pillar in safeguarding and buttressing accounting systems. Certain risks come with cloud accounting like data breaches, loss of data and cyber-attacks which can seriously threaten the trust of investors in the accounts and growth and sustainability of the companies, hence strong cyber security governance is necessary. A good Internal auditing is also required in order to enhance governance and use of effective internal control system which will help in securing the financial data and reduce weaknesses and risks as well (Steinbart, 2018).

From this perspective, the study seeks to answer the following questions:

1. What is the impact of cybersecurity governance on reducing cloud accounting risks within Jordanian public shareholding industrial companies?
2. What is the impact of cybersecurity governance on the quality of internal auditing in Jordanian public shareholding industrial companies?
3. What is the impact of internal audit quality on reducing cloud accounting risks in Jordanian public shareholding industrial companies?
4. What is the impact of cybersecurity governance on reducing cloud accounting risks, considering internal audit quality as a mediating variable within Jordanian public shareholding industrial companies?

3. Objective of Study

This study aims to achieve a set of objectives, including:

- 1- Aim to underscore the concept of cybersecurity governance and its function in reducing cloud accounting hazards.
- 2- Aim to evaluate the influence of cybersecurity governance on the effectiveness of internal audits in Jordanian public shareholding industrial enterprises.
- 3- Aim to investigate how internal audit quality contributes to reducing cloud accounting risks in Jordanian public shareholding industrial enterprises.

- 4- Aim to investigate how internal audit quality influences the correlation between cybersecurity governance practices and cloud accounting risk management techniques in publicly traded industrial shareholding companies in Jordan.

4. Significant Of Study

4.1 Theoretical significance

The theoretical contribution of this study stems from what the author considers as a modern and still unexplored research problem. It focuses on the quality of internal audit and its ability to moderate the relationship between governance of cybersecurity and lowering cloud accounting risks in Jordanian public shareholding industrial companies. Thus, this study is expected to fill an important gap in the knowledge in this area of research on more of these authors. This work not only increases the Arabic library but also paves the way for further studies on this issue conducted within the framework of the Jordanian reality (Maqsood, 2024).

4.2 Practical significance

The applicability of this study is clear with respect to the ability of cybersecurity governance to decrease the risk associated with cloud accounting, including the moderation of internal audit quality in this regard which is crucial for the development and progression of the Jordanian economy (Alqudah, A. Z., 2022). Also, the study seeks to make industrial companies aware of the significance of incorporating cybersecurity governance in order to reduce the risks related to cloud accounting as well as the effect which internal auditing of a higher quality would have in enhancing this effect. The other practical contribution of the study is with regards to the recommendations it provides to organisations on improving cybersecurity governance and the need to enhance internal audit quality as a way of managing cloud accounting risks to the lowest levels, particularly as these firms are growing in their use of cloud accounting.

5. LITERATURE REVIEW

5.1 Cybersecurity Governance and Cloud Accounting Risks

The digital advancement of the accounting profession has seen cloud accounting bring many solutions, both scalable and efficient. On the other hand, such transition has accentuated such security issues as the breach of personal data, unauthorized access and the problems of compliance. Nowadays, it is rather essential to have an effective model of cybersecurity governance to cater for these strains. Oftentimes, knowledge that risk management and compliance in the governance framework depends upon the user of such security resources as IT or internal audit functions. There is a growing body of evidence that robust cyber security governance can help in the mitigation of cloud accounting risks due to creation of a culture of accountability and resilience to cyber threats (Sharma & Patel, 2021) Internal Audit Quality as a Mediator Internal audit is integral in this situation as it improves cybersecurity governance through objective evaluation and verification and identification of weakness potentially an area of non-compliance. It has been suggested by research that well performed internal audits are beneficial in management of risks and have the ability to link cyber security tactics with applied practices (Zhou et al., 2020). Throught monitoring, internal audits assist users on compliance with set procedures on control measures implemented on information security within cloud accounting. This function

5.2 Interplay between Cybersecurity Governance and Internal Audit in Risk Mitigation

There is a mutual; and also a synergistic relationship between cyber security governance and internal audit quality. Internal control in the internal audit has been proven to be effective whereby firms do not only sift through the security threats but also have the capacity to prevent the threats from occurring (Alqudah, A. Z., 2023). Companies' objectives in respect to cybersecurity are adjusted to be in line with the companies' strategies by internal auditors thereby ensuring that risks are identified and catered for in a systematic manner. The changing landscape of cybersecurity concerns necessitates the need for the advancement of internal audit practice so that organizations are able to adequately prevent and respond to information security breaches in cloud accounting (Kim & Im, 2022).

5.3 Practical Issues and Gaps in Literature

The quality of an internal audit is regarded as a moderating variable in this research scope of interest, such as that between dispersed ownership and accounting scandals. The risk management of ownership structure has only been discussed broadly, but the focus consists of the impacts of integrating cybersecurity as a strategy in mitigating accounting risks. Internal audit quality has not received much attention in the literature. The development of such frameworks would be valuable for future examination of the TMP's avenues in a cloud accounting context. It is possible to obtain such mediation on the basis of organizational resource allocation. Reconstructing objectives and capabilities of internal audit and strengthening structures of cybersecurity governance are among the goals for achieving such mediation. Such measures are justified as necessary to minimize risks of companies who utilize cloud platforms for financial data through the perspectives of combined internal audit and cybersecurity (Wang et al., 2023).

6. RESEARCH METHOD

In order to attain the objectives of the study and analyze the nature of the relationship existing between the cyber security governance and the internal audit quality towards the mitigation of risks associated with cloud accounting, the scholar used a descriptive-analytical research design. The study was cross sectional and covered all employees in the targeted positions: managers, deputies, heads of departments and staff members working in the IT and accounting departments within the publicly owned shareholding industrial companies in the Kingdom of Jordan registered at the Amman Stock Exchange for the year 2024, who make use of the cloud accounting services.

The researcher distributed an electronic questionnaire after contacting the companies' administrations via their official websites, sending out 350 questionnaires. Of these, 239 were returned, yielding a response rate of 95.6%, all of which were valid for statistical analysis. The questionnaire was designed based on relevant literature and prior studies to measure the mediating role of internal audit quality between cybersecurity governance and the reduction of cloud accounting risks. It included multiple-choice questions, organized into two sections, to analyze the main variables of the study.

7. RESEARCH FINDING

7.1 Description of the Independent Variable: Cybersecurity Governance

The researcher calculated the arithmetic means and standard deviations to assess the levels at which the targeted companies implement cybersecurity governance, reduce cloud accounting risks, and ensure internal audit quality, as follows:

Cybersecurity governance represents the independent variable in this study. This variable was measured through specific questions within the questionnaire. Below is an analysis of the responses from the study sample to questions that measure this variable, along with a description of the results. Table (5-6) presents the arithmetic means and standard deviations of the study sample's responses concerning the statements related to the variable "cybersecurity governance.

Table 1: Arithmetic Means and Standard Deviations for the Study Sample's Estimates Regarding Statements on the "Cybersecurity Governance"

Rank	No.	Statement	Arithmetic Mean	Standard Deviation	Evaluation Level
1	5	The company collaborates with external entities in cases of security emergencies.	4.41	0.73	High
2	1	The company adopts action plans, initiatives, and projects to enhance compliance with cybersecurity regulations.	4.26	0.76	High
3	3	The company has effective and timely response plans for cybersecurity incidents and risks.	4.21	0.83	High
4	2	The company has a comprehensive security framework to detect abnormal or suspicious activity indicative of a breach.	4.12	0.66	High
5	4	The company has precautionary measures in place to maintain backups of critical data for effective cybersecurity.	4.05	0.72	High

It is evident from Table 1 that the arithmetic means of the sample's estimates regarding the statements on the "cybersecurity governance" dimension ranged from 4.05 to 4.41, with a high evaluation level for all statements. The statement ranked first was statement number 5, which states: "The company collaborates with external entities in cases of security emergencies," achieving an arithmetic mean of 4.41 and a standard deviation of 0.73. On the other hand, the respondents who provided the lowest ranking for the statement placed it in the fourth position. This statement read: "The company has put in place arrangements to recover essential data in case there are troubles with the company's cybersecurity systems". Its arithmetic mean was 4.05 with standard deviation of 0.72. All the same, the mean score in the 'cybersecurity governance' domain was 4.21, which shows a high level of appreciation.

7.2. Description of the Dependent Variable: Reduction of Cloud Accounting Risks

In this study, the cloud accounting risks decrease variable is the dependent variable. This sustains a reduction of risk in cloud accounting which was evaluated using ten statements intended to assess different dimensions of cloud accounting risks reduction. An examination of the responses from this study's respondents regarding the assessment items that measure this variable is done below. The focus is directed towards the calculation of the arithmetic means and standard deviations of the responses of the participants to every statement and explores the degree to which the risk managers in the studied companies perceive the risk delays and control measures in cloud accounting.

Table 2 Means and Standard Deviations of the Sample Study Estimates on Statements Regarding Cloud Accounting Risk Mitigation

Rank	Number	Statement	Mean	Standard Deviation	Evaluation Degree
1	11	The company accurately reflects the true state of accounting data on the cloud platform.	4.34	0.76	High
2	8	The company relies on regular backup techniques to minimize data loss and expedite recovery processes.	4.27	0.81	High
3	15	There is collaboration with cloud service providers and accounting software vendors to ensure compatibility and integration between accounting programs and the cloud platform.	4.20	0.97	High
4	14	Accounting software is regularly updated to ensure compatibility with technological advancements and technical and security cloud requirements.	4.18	0.89	High
5	9	The transfer of accounting data from one cloud to another is examined and organized, and contingency plans are developed and implemented to deal with system breach incidents.	4.16	1.12	High
6	18	Periodic verification that cloud service providers comply with agreed standards and requirements, and taking necessary measures to correct any deviations if present.	4.14	0.97	High
7	1	Employees in the company are educated about cyber risks and trained to handle them safely on the cloud platform.	4.04	0.88	High
8	12	Employees in the company are informed and trained about legal compliance requirements for cloud operations.	4.00	0.81	High
9	2	Digital encryption techniques are used to protect data on the cloud platform and ensure the confidentiality and integrity of communications.	3.99	0.79	High
10	10	The company's cloud service providers comply with local laws and regulations, as well as international standards concerning data protection.	3.97	0.89	High
Overall Field of "Cloud Accounting Risk Mitigation"			3.91	0.58	High

The data on Jordanian Public Shareholding Industrial Companies shows that a great level of concentration is put in place to lessen the accounting cloud risks through appropriate cut practices

and policies in governance structures, cyber security governance and internal audit quality. The greatest average values were assigned to Statements dealing with the accuracy of information stored in the cloud, which scored a high mean of 4.34, which shows the ability of the firms to portray the accurate information about its financial data stored in the cloud infrastructure. Also, regular backup procedures scored high mean values 4.27 showing companies concerns for ensuring preservation of data and assurance of recovery of lost data. In addition, companies understand the need to work alongside the cloud providers to tailor accounting software to the cloud system and such improve accounting function while controlling risks.

Conversely, statements regarding the compliance of cloud service providers with local laws and regulations received the lowest ratings, despite achieving a high degree, suggesting potential challenges in achieving full compliance. Overall, these results highlight the companies' awareness of the importance of managing cyber risks and applying effective internal auditing measures to mitigate cloud accounting risks, achieving a high overall rating of 3.91, indicating a responsive and significant interest in data governance on the cloud.

7.3 Description of the Mediating Variable: Internal Audit Quality

The variable of internal audit quality serves as the mediating variable in this study, and it was measured through eight statements. Below is an analysis of the responses from the study sample concerning the statements that measure this variable.

Table 3 Means and Standard Deviations of the Sample Study Estimates on Statements Related to "Internal Audit Quality"

Rank	Number	Statement	Mean	Standard Deviation	Evaluation Degree
2	1	The internal auditor completes their work in the company without any interference or pressure.	4.41	0.61	High
18	2	The internal audit department reports to the highest management level.	3.85	0.81	High
1	3	The internal auditor expresses their opinion impartially without any obstacles.	4.44	0.69	High
16	4	The internal auditor possesses the skills and practical experience to perform their work effectively.	4.05	0.76	High
8	5	The internal auditor has the academic qualifications that enable them to perform their tasks optimally.	4.17	0.93	High
5	6	The internal auditor exercises due professional care in conducting their work.	4.21	0.61	High
10	7	The head of the internal audit department prepares a program to ensure and improve quality in the internal audit activity.	4.14	0.69	High
3	8	The quality assurance and improvement program related to internal audit activities encompasses all aspects of this activity.	4.30	0.83	High
Overall Field of "Internal Audit Quality"			4.16	0.50	High

The findings of this research, in relation to the evaluation of internal audit quality, indicate that the level of internal audit quality in Jordanian public shareholding industrial companies is considered high, as most of the figures were rated well. According to the findings, it was evident that the analysis of the impartiality of the internal auditor (section 3) was much more commendable, with a mean of 4.44. Reflecting high level of trust in the integrity of the auditors and their capacity to provide opinions void of any hindrances. The statement about the auditor having completed his work in no circumstances given a mean of 4.41, also receives satisfactory rating, and suggests that an enable environment free from external influence in the course of auditor's work can be achieved.

Outstanding ratings have also went towards other statements before regarding the competences and skills of the Auditors such as statement number 6 which has due professional care and received a mean of 4.21 plus rating of 4.17 for statement 5 which dealt with Academic qualifications. In this respect, the necessity of focusing on competences enhancement of the auditors is to be noted in relation to fulfillment of internal audit quality.

The point or statement receiving least favorable evaluation was number; "the internal audit department reported to the most senior management level" which attained a mean of 3.85. This could mean the problems in structural hierarchy of the management for a few of the companies.

. Nevertheless, the overall evaluation of internal audit quality was high, with a total mean of 4.16 and a standard deviation of 0.50, indicating a good level of agreement in assessing internal audit quality and recognizing it as a crucial element in enhancing performance and ensuring integrity and independence within companies.

8. RESULTS OF THE STUDY HYPOTHESES

5-4-1 Results Related to the First Main Hypothesis H01: There is no statistically significant effect at the significance level ($\alpha \leq 0.05$) of cybersecurity governance and its dimensions on mitigating cloud accounting risks in Jordanian public shareholding industrial companies.

To verify the validity of the first main hypothesis, multiple regression analysis was applied to study the effect of cybersecurity governance dimensions on mitigating cloud accounting risks in Jordanian public shareholding industrial companies. Table 4 illustrates these results.

Table4: Results of the Multiple Regression Equation Studying the Effect of Cybersecurity Governance on Mitigating Cloud Accounting Risks in Jordanian Public Shareholding Industrial Companies

Variable	Unstandardized Coefficients	Standardized Coefficients	R	R ²	F	Statistical Significance
	B	Standard Error	β	T	Statistical Significance	
Constant	0.475	0.164		2.901	0.004	0.837
Cybersecurity Governance	0.143	0.060	0.143	2.374	0.018	

The regression model represented in the present table whereby cybersecurity governance as an independent variable regressed the internal audit quality in the industrial companies which are registered in the Jordanian public shareholding companies is statistically significant. The coefficient of determination (R^2), in this case, stands at 0.700 meaning that, 70% of the variations internal audit

quality can be thought due to the variations in cybersecurity governance. This goes a long way in demonstrating the strength of the model in explaining the relationship between cybersecurity governance and internal audit quality.

Moreover the model's constant term has unstandardised regression coefficient(B)=0.475 with the probability level of achieving such effect in the population being 0.004 thus inferring that the model constant has an important effect. In terms of the coefficients and their direction, it was found out that governance of the organizations structure and processes focused on cybersecurity has an unstandardised regression coefficient (B) of 0.143 implying a contradiction for the constructive willingness theory with respect to the effect of cybersecurity governance on internal audit quality to be that this effect P=0.018 and this statistically significant because, in practical terms, 0.05 is greater than 0.018. Furthermore, the F-value for the model is 90.128, with a statistical significance of 0.000, indicating that the model as a whole is statistically significant. This underscores the importance of cybersecurity governance in enhancing internal audit quality in companies.

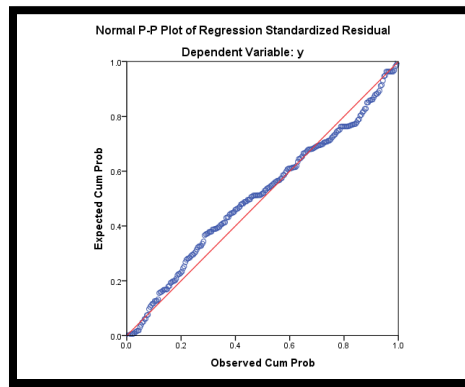


Figure 5-1: Scatter Plot Illustrating the Relationship between Combined Dimensions of Cybersecurity Governance and Mitigating Cloud Accounting Risks

The previous scatter diagram indicates a strong, positive correlation between the governance of cyber security and the reduction of cloud accounting risks, albeit not a perfect one. The scatter diagram depicts a scatter of multiple points near the line, signifying a perfect relationship when R equals 1. The scatter points around the line of the relationship show how close it is.

2. Results Related to the Second Main Hypothesis H2: There is no statistically significant effect at the significance level ($\alpha \leq 0.05$) of cybersecurity governance and its dimensions on internal audit quality in Jordanian public shareholding industrial companies.

To verify the validity of the second main hypothesis, multiple regression analysis was applied to study the effect of cybersecurity governance dimensions on internal audit quality in Jordanian public shareholding industrial companies. Table 7 illustrates these results.

Table 7 Results of Multiple Regression Analysis Examining the Impact of Cybersecurity Governance on the Quality of Internal Auditing in Jordanian Publicly Held Industrial Companies

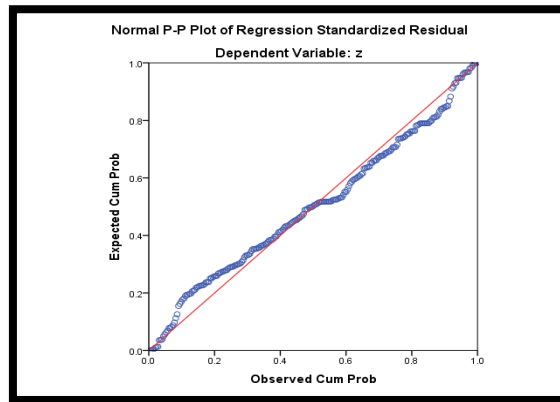
Variable	Unstandardized Coefficients	Standardized Coefficients	R	R ²	F	Statistical Significance
	B	Standard Error	β	T		

Variable	Unstandardized Coefficients	Standardized Coefficients	R	R ²	F	Statistical Significance
Intercept	1.485	0.165		9.006	0.000	
Cybersecurity Governance	0.040	0.061	0.046	0.660		

According to the results presented in Table 8, cybersecurity governance has a considerable influence on the quality of internal auditing practices in Jordanian publicly held industrial companies, with a significance level of ($\alpha \leq 0.05$). Such a significant value is $R=0.776$ which means that there exists a strong positive correlation between the two variables, which in this case is cybersecurity governance and the quality of internal auditing within the company.

The R-squared value, which is 0.602 means that about 60.2% percent of the variance in the internal auditing practices implemented in respect of cyber security governance can be accounted for by other dimensions that fall under practice such as policies and structure. This further establishes that the aggregate of the dimensions of the cyber security governance framework quality greatly determines the quality of internal auditing in these companies.

Additionally, the F-value is 58.458 with a statistical significance of 0.000, which signifies that there is a significant variation in the collective effect of cybersecurity governance on the quality of internal auditing. Consequently, the null hypothesis is rejected in favor of the alternative hypothesis, concluding that there is a statistically significant impact of cybersecurity governance on the quality of internal auditing in Jordanian publicly held industrial companies. Figure 5-2 The scatter plot illustrates the relationship between the dimensions of cybersecurity governance and the quality of internal auditing.



The previous graph shows that the degree of relationship between cybersecurity governance and the quality of internal auditing was strong and positively correlated, but not perfect; as there is a spread of points in the scatter plot around the straight line, which represents a perfect relationship ($R=1$). The proximity of the points to the straight line indicates the strength of the relationship.

The results related to the main hypothesis H3: There is no statistically significant effect at the significance level ($\alpha \leq 0.05$) of the quality of internal auditing in cloud accounting in publicly traded industrial companies in Jordan. To verify this hypothesis, a simple regression equation was applied to study the effect of the quality of internal auditing in cloud accounting in publicly traded industrial companies in Jordan. Table No. (9) illustrates this.

Table (9): Results of Applying Simple Regression Equation to Examine the Impact of Internal Audit Quality on Cloud Accounting in Jordanian Public Shareholding Industrial Companies

Dimension	Unstandardized Coefficients	Standardized Coefficients	R	R ²	Adjusted R ²	F	Statistical Significance
	B	Standard Error	Beta	T	P-value		
Constant	0.207	0.196		1.057	0.292	0.778	0.605
Internal Audit Quality in Cloud Accounting	0.889	0.047	0.778	19.042	0.000		362.592

The data in Table (5-24) indicates a statistically significant effect at the significance level ($\alpha \leq 0.05$) of internal audit quality on cloud accounting in Jordanian public shareholding industrial companies. The correlation coefficient (R) value is (0.778), which is statistically significant, demonstrating a strong statistical association between internal audit quality in cloud accounting and the mitigation of cloud accounting risks. The R-square (R²) value reached (0.605), which is statistically significant, explaining that internal audit quality in cloud accounting accounts for 60.5% of the variance in reducing cloud accounting risks.

The F-test value of (362.592) with a p-value of (0.00) supports the statistical validity, showing that there is a relevant variability in the strength of the internal audit in cloud accounting, in being able to contribute to risk reduction in the cloud accounting. Therefore, the null version of the major hypothesis is ruled out, and it is concluded that: There exists at least a significant impact at the level of significance ($\alpha \leq 0.05$) of internal audit quality on cloud accounting within Jordanian shareholding industry companies..

Results of Testing Hypothesis H4: There is no statistically significant effect at the ($\alpha \leq 0.05$) significance level of cybersecurity governance on reducing cloud accounting risks in Jordanian public shareholding industrial companies, with internal audit quality as a mediating variable.

To test the validity of Hypothesis H4, which concerns both direct and indirect effects, Path Analysis was employed using the Amos software supported by the Statistical Package for the Social Sciences (SPSS). This analysis aimed to examine the existence of direct and indirect effects of the study variables. The analysis was conducted on the main hypothesis H4, and the results were as follows:

Table (5-25): Results of Path Analysis to Verify the Direct and Indirect Effects of Cybersecurity Governance on Reducing Cloud Accounting Risks, with Internal Audit Quality as a Mediating Variable.

Model Fit

Indicator	Chi ² /df	Sig	GFI	CFI	NFI	RAMSEA
Internal Audit Quality	2.517	0.000	0.956	0.986	0.977	0.080

Explanation of Indicators:

- GFI - Goodness of Fit Index: Measures the model's quality fit.
- CFI - Comparative Fit Index: Assesses model fit relative to a baseline.

- NFI - Normed Fit Index: Indicates the model's normative fit.
- RAMSEA - Root Mean Square Error of Approximation: Evaluates approximation error, with values closer to zero indicating better fit.

The statistical analysis results shown in Table (5-25) indicate a chi-squared value divided by the degree of freedom ($\text{Chi}^2/\text{df} = 2.517$) which is less than 5. This value indicates that the model is fitted well. The level of significance of the model is value is ($\text{Sig}=0.000$) which is less than 0.05 meaning the model is statistically significant. The value of Root Mean Square Error of Approximation (RAMSEA) is 0.080 which is almost zero indicating the model is of good fit.

In addition, the Goodness of Fit Index (GFI) presently stands at 0.956 which is closer to one supporting the good fit of the model. The Comparative Fit Index (CFI) also stands at 0.986 which also is closer to one as well as the Normed Fit Index (NFI) at 0.977. All these values collectively suggest that all the indicators are well fitted.

Table (5-26): Direct, Indirect, and Total Effects for Testing Main Hypothesis H4

Effect	Direct Effect	Indirect Effect	Total Effect
	Cybersecurity Governance	Internal Audit Quality	Cybersecurity Governance
Internal Audit Quality	0.792	-	-
Reduction of Cloud Accounting Risks	0.610	0.295	0.233

The Table (5-26) indicates that the direct impact of cybersecurity governance on the quality of internal audit is (0.792) which is statistically significant. On the other hand, the impact of cybersecurity governance on cloud accounting risks is (0.610) and the relationship between internal audit quality and cloud accounting risks is (0.295). The table further shows that the mediating effect of internal audit quality on the effect of cybersecurity governance on cloud accounting risks is (0.233). This notable mediating impact establishes the fact that internal audit quality does indeed mediate the relations between cybersecurity governance and risk reduction of cloud accounting. Incorporating the mediating impact of internal audit quality, the overall impact of cybersecurity governance is (0.843) and this result is statistically significant since it is less than the critical value of 0.05. Thus, internal audit quality acts as a partial mediator in this instance.

The conclusion asserts the importance of internal audit functions in mitigating the cloud accounting risks beyond just the governance bodies forming the audit committee. Therefore, we can answer the research hypothesis by saying that there exists a second mechanism through which cyber-gov managers operate and functionalize audit forms at an infrastructural level mitigating risks remarkably. According to the conclusion, the null statement, which represents the central focus of the fourth major hypothesis, is not supported, rather the alternative hypothec; which deals with the significance of cybersecurity governance in reducing cloud computing in Jordan's market and industries through the usage of quality internal audit function is believed to be the answer. This research provides practical recommendations for the improvements in further audits and more strict implementation of information policy in organizations and public shareholding industrial companies in Jordan.

9. DISCUSSION

The figures suggest that cybersecurity governance is a critical factor for the improvement of the effectiveness of internal auditing and to reduce the risks arising from cloud accounting in the industrial companies listed in the Jordanian public shareholding. The study revealed that the independent variable's relative level (cybersecurity governance) is high. This implies that companies are keen on its application because of the benefits that are derived from it.

The results also establish that there is statistically significant impact of cybersecurity governance on the level of cloud accounting risk exposure hence confirms its positive role in this regard. Furthermore, internal audit Quality expansion has been demonstrated to contribute to the minimization of cloud computing accounting risk with observable statistical significance degree ($\alpha \leq 0.05$) in regard of the role of cybersecurity governance through the internal audit quality as a moderator in the cloud risk mitigation. All this builds up the relevance of this interactive relation to the responsiveness of the performance of the organizations in the case of companies.

10. Implication

The findings of the study seem to put forward several practical suggestions which may enhance the effectiveness of Jordanian public shareholding industrial companies. They highlight the importance of adopting cybersecurity governance in mitigating the risks associated with the use of cloud accounting and stress the need to enhance organizational governance and compliance strategies. It is recommended that businesses focus on implementing employee training initiatives to mitigate the impacts of cybersecurity threats, and also to acquire appropriate security measures. Internal audit quality enhancement is also considered to be one of the important factors for improving governance since it curtails the possibility of malpractices and enhances the integrity of the accounting information system. It is recommended that organizations devise effective communication tools for various units of the firm to facilitate moderating the relationship between internal audit quality and cybersecurity governance to improve efficiency and mitigate risks. All in all, this study demonstrates how it is possible to articulate the strategies of governance with the strategy of financial performance that will advance the welfare of the Jordanian economy.

11. CONCLUSION

This study examines the role of cybersecurity governance and internal audit functions in enhancing the safety and efficiency of cloud accounting in Jordanian public shareholding industrial firms. The results reveal a positive relationship between these variables with a statistically significance level so highly that it is good to adopt some strong governance measures in preventing the risks of cloud accounting. The findings also emphasize moderation effect of internal audit quality on the risk management effectiveness, thus, increasing the importance of tackling this risk up to the level of improving governance. As a result, the findings are quite clear fast time for companies to work on adjusting their cyber security integrate and internal audit so as to be at a place to be sustainable and grow in the current working environment climate. This study extends the body of knowledge in academic literature and broadens understanding in this area so that it can be built on and exploited in future research.

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