

The impact of cloud accounting on reducing creative accounting practices in commercial banks: The moderating role of internal audit

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ABSTRACT

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This study attempts to study the impact of the moderating role of internal audit between cloud accounting and limiting creative accounting practices in commercial banks. The study utilized a descriptive and analytical approach. The target population of this research consists of all employees of the 13 Jordanian commercial banks listed on the Amman Stock Exchange, while the number of employees in commercial banks is (22,407) employees. This led to the use of a simple random sample of (400) employees. The results found that there is a positive effect of the moderating role of internal audit on the impact of cloud accounting on reducing creative accounting practices in commercial banks. The study suggests that future studies should give recommendations and proposals to improve and develop cloud accounting and internal auditing in commercial banks, increase transparency, monitoring and compliance in accounting and financial operations, and reduce the risks associated with cloud accounting and creative accounting practices.

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1. Introduction

Individuals worldwide are employing cloud technology to connect with customers and enhance their business operations, ranging from internet-based education programs to connected appliances (Haji et al., 2020). An emerging trend among businesses is the adoption of Internet-based technology for accounting purposes. Presently, small enterprises worldwide are utilizing cloud technology to efficiently handle their financial operations, reducing their reliance on physical storage devices for accessing and storing accounting data (Khanom, 2017). Banks, which are considered the backbone of countries' economies, seek to maintain this position by taking advantage of financial technology (Stulz, 2019). Therefore, modernizing and renewing their infrastructure has become an urgent necessity to face the competition imposed by financial technology companies (Murinde et al., 2022). This impact has led to a clear transformation in the banking sector, as banks have transformed into digital banks (Wewege et al., 2020). With the emergence of cloud accounting, which is considered one of the technologies of the era of digital transformation and the most prominent product of financial technology, institutions are striving to benefit from its use in the field of their renewable services as much as possible. This revolution has greatly affected financial technology, as most institutions are now able to perform their activities more efficiently and effectively than before. As a result of all of this, a new term emerged: cloud accounting, which is a virtual store of data that can be retrieved from anywhere and at any time (Tawfik et al., 2023). Cloud accounting simplifies and facilitates work procedures and saves effort by reducing the use of

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equipment, avoiding device failure, and accessing databases without the need to have experience, only using a computer connected to the Internet (Sunyaev & Sunyaev, 2020).

The biggest challenge facing banks also lies in maintaining and continuing their profits and employing them in the most appropriate manner that ensures that they remain within the framework of competition and challenge with other banks (Akpanuko & Umoren, 2018). Therefore, it may be possible for management to manipulate the financial statements with the aim of beautifying the image that the numbers in the financial statements reflect on the results of the banks' operations and their financial position (Jarrah et al., 2022). This is done through what is called the practice of creative accounting methods, including earnings management, profit continuity, and income smoothing. During an audit engagement, the auditor encounters multiple risks, including the possibility of failing to identify the deceptive accounting methods employed by the audited organization to manipulate its financial position and performance (Aldahiyat et al., 2021). Moreover, it is necessary to give the issue great importance to determine the extent to which commercial bank departments practice fraudulent accounting operations and to reveal the risks related to them (Qasaimeh & Jaradeh, 2022). Therefore, this study attempts to study the impact of the moderating role of internal audit between cloud accounting and limiting creative accounting practices in commercial banks.

2. Literature Review

2.1 Cloud Accounting

Cloud accounting software employs Cloud technology to store accounting data (Khanom, 2017). It provides owners and employees with remote access to financial information through an Internet connection. Cloud computing is increasingly being adopted by businesses on a daily basis. Cloud accounting is online accounting or software as a service (SaaS) is all the terms used to describe accounting software that is hosted on remote servers and accessed over the Internet (Achar, 2018). Cloud accounting enhances the realization of many benefits, as accounting programs are taken to a whole new dimension through cloud computing (Vasiljeva et al., 2017). Having accounting in the cloud generally means that everyone in the client's organization can access the same financial data, at the same time, from different locations, with a specific set of applications provided through an Internet connection (Achar, 2018). Cloud accounting is a great option for many organizations, thanks to the range of benefits it offers (Benlian et al., 2018). First, there is the financial aspect, as organizations can significantly reduce their operational costs, as payment is made only for the services that are used (Attaran & Woods, 2019). Second, cloud accounting provides ease of implementation, as organizations can adopt and deploy cloud computing applications without the need to purchase special software (Tawfik et al., 2023). In addition, cloud accounting is scalable, as organizations can evolve and expand simply by clicking on the appropriate options on the service provider's website. Finally, cloud accounting is measurable, meaning that the use of cloud accounting resources can be measured on a time basis.

2.2 Creative Accounting Practices

Many researchers, writers, and specialists have provided definitions of the concept of creative accounting, due to their different points of view, which made the concept of creative accounting differ from one party to another (Al Rawashdeh, 2015; Shomo et al., 2023). Creative accounting is defined as the procedures practiced by business organizations with the aim of reducing or increasing their profits, through their accounts that are secretly formed and secretly manipulated to cover up violations and crimes, and it is considered a major deception (Al-Qadi & Al-Dmour, 2022). On the other hand, creative accounting is the process of manipulating accounting numbers by exploiting loopholes in accounting rules and principles (Wafinzida et al., 2021), or by taking advantage of choosing measurement and disclosure methods to change the financial statements to what the preparers of the financial statements desire (Akpanuko & Umoren, 2018), or with the aim of transforming the financial statements from what they should be (Abueid et al., 2022). Typically, the manipulation of financial reporting is attributed to company management, as their directives are adhered to by the employees in charge of financial reporting. The primary incentives for engaging in creative accounting are: The motives behind these actions include: • pursuing personal profit; • engaging in competition; • attracting potential investors; • increasing or preserving capital; • delaying the repayment of debts; • surpassing analysts' predictions regarding future company performance (Remenarić et al., 2018).

2.3 Internal Audit

An audit is a prominent area of study and application in the realms of economic and financial theory. It serves as an intermediary between information producers and users (Knechel et al., 2020). The purpose of a financial audit is to provide an assessment of the annual accounts, offering a reasonable level of confidence that the entity's financial statements accurately represent its financial position and performance (Jerry & Saidu, 2018). The primary objective of the auditor, in their capacity as a professional accountant, is to safeguard the welfare of the general public by bolstering user trust in financial data (Griffith, 2020). Within this framework, the auditor is expected to conduct the audit engagement in compliance with established professional standards and norms, as well as relevant legal requirements, while upholding the fundamental ethical principles that govern the accounting profession (Bik & Hooghiemstra, 2018). A lot of controversy and discussion arose with the advent of the twenty-first century about the quality of audit cycles regarding the role and objective of auditing to move towards total quality management. There is a great debate about audit quality, where auditing is used to determine the extent to which

management and environmental systems comply with ISO standards (Earnhart & Harrington, 2021). Questions have arisen about the usefulness of auditing in relation to improving quality and the need for an external evaluation of quality systems using a third-party audit (review). This is in addition to the integration of quality with environmental, health, financial, and security audits, provided that the audit is applied as a continuous improvement tool (Briem & Wald, 2018; Del Giudice & Rigamonti, 2020).

3. Hypothesis Development

According to Arnis et al. (2019), creative accounting is usually done by manipulating the accounts of fixed assets, liabilities, sales - revenues, and expenses, but also by changing methods and accounting policies. The prevailing business climate and ongoing economic downturn have compelled senior executives of several organizations to prioritize enhancing the appearance of their financial statements through the utilization of aggressive or innovative accounting practices. Siano (2016) suggests implementing intricate measures that prioritize the organizational and managerial framework to restrict the occurrence of creative accounting practices. Therefore, if creative accounting is employed, there is enough opportunity to manipulate and maneuver accounting information, which raises concerns about the accuracy and fairness of the financial statements and ultimately jeopardizes the existence of the companies. Abdulmunim (2018) states that internal auditors in Jordanian organizations must confront the obstacles posed by cloud computing when it becomes an integral part of the company's operations, necessitating them to offer assurances. Given the autonomy of cloud service providers, it is imperative for internal auditors to either conduct audits on the cloud computing aspects of the service provider or have access to reports detailing the controls implemented by the service provider. To take a proactive approach, internal auditors should collaborate with the IT department and other departments utilizing cloud apps to ensure that their agreements with service providers have an audit requirement or encompass reporting on the used controls. In their study, Ma et al. (2021) observed favorable outcomes specifically for individuals who initiated cloud accounting. The findings have ramifications for small and medium-sized enterprise (SME) owners, their SME clients, and accounting professional organizations. According to the above, the following hypotheses can be reached:

H₁: *There is a positive impact of cloud accounting on reducing creative accounting practices in commercial banks.*

H_{1.1}: *There is a positive impact of cloud accounting on reducing revenues manipulation in commercial banks.*

H_{1.2}: *There is a positive impact of cloud accounting on reducing misclassification of expenses in commercial banks.*

H_{1.3}: *There is a positive impact of cloud accounting on reducing the valuation of assets and liabilities in commercial banks.*

Abdulmunim (2018) demonstrated that, in light of the information economy and the advent of the concept of cloud accounting, Jordanian enterprises seeking leadership must expand their regulatory instruments. These internal audit tools required the internal auditor to have the unique element of intellectual capital in order to keep up with the development of the knowledge economy and the data of cloud accounting. The internal auditor must have the leading qualities that allow him to keep up with these developments and data while also doing his job efficiently. In their study, Jarah et al. (2022) employed survey methodology to investigate how internal audit, encompassing factors such as independence and objectivity, verifiability, professional care, and neutrality, can mitigate the impact of creative accounting on the trustworthiness of financial statements in Jordanian Islamic Banks. The population comprises all auditors actively practicing within Jordanian Islamic Banks. The findings demonstrated that IA, encompassing attributes such as independence, objectivity, verifiability, professional care, and impartiality, played a significant role in mitigating the impact of creative accounting on the trustworthiness of financial statements in Islamic banks in Jordan. Abdulmunim (2018) demonstrated that in the context of the knowledge economy and the introduction of cloud accounting, it was imperative for aiming for leadership to enhance their regulatory mechanisms. The internal auditor must possess intellectual capital in order to effectively utilize internal audit tools and keep pace with the knowledge economy and cloud accounting data. It is essential for the internal auditor to possess exceptional qualities that enable them to stay updated with these developments and efficiently perform their work. Ogoun & Atagboro (2020) assert that the internal audit function influences the occurrence of creative accounting practices. Therefore, it can be inferred that an efficient internal audit serves as the primary safeguard against financial fraud within the framework of internal control, effectively mitigating the manipulation of accounting information. However, Abed et al. (2022) found that manipulation processes in creative accounting have negative effects. The data provided theoretical conceptualization and practical validation of the audit committee's moderation effects on creative accounting determinants and bank financial reporting quality regarding designed benefits. Additionally, the audit committee strongly moderates creative accounting's impact on commercial banking financial reporting quality. The study found that the utilization of creative accounting techniques, specifically income smoothing and earnings management, had a direct impact on financial performance as measured by the return on assets and the return on equity. Consequently, the researchers advise managers to carefully consider the extent of earnings management and income smoothing practices when assessing the financial performance.

According to the above, the following hypothesis can be reached:

H₂: *There is a positive effect of the moderating role of internal audit on the effect of cloud accounting on reducing creative accounting practices in commercial banks.*

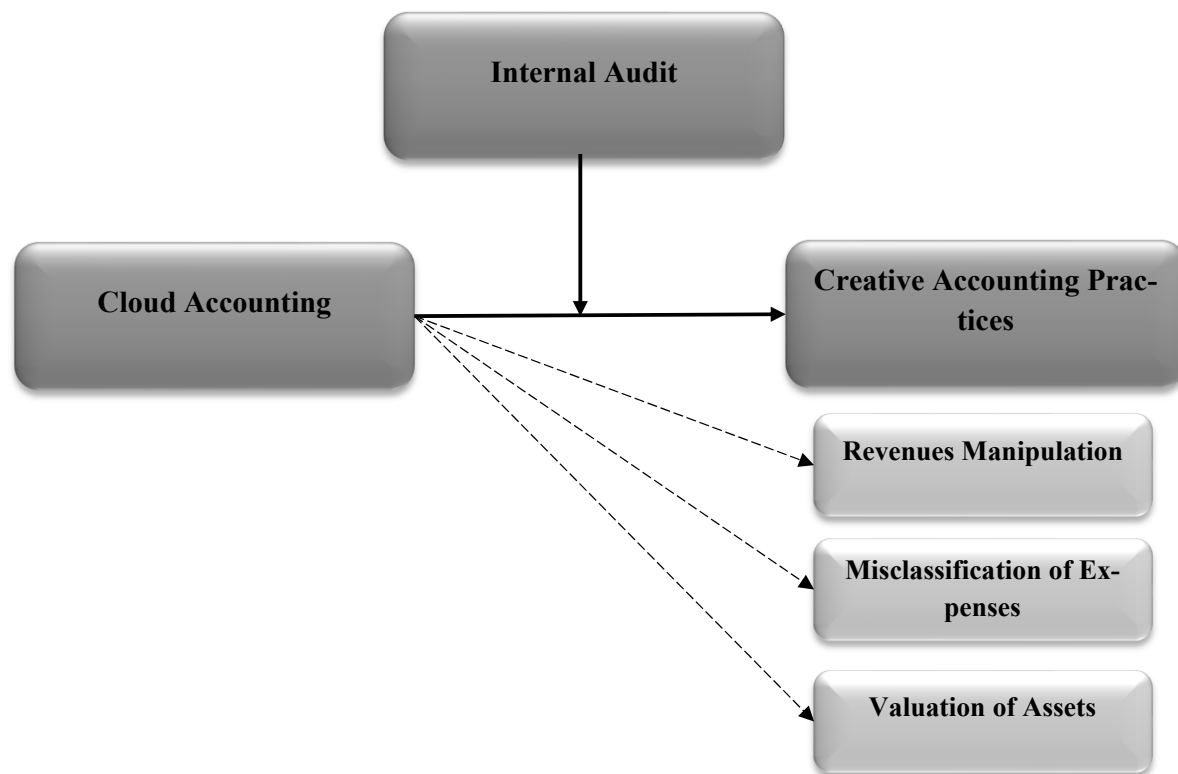


Fig. 1. Research Model Source: Siany (2016)

4. Research Methodology

The study utilized a descriptive and analytical approach to gather data, test hypotheses, and address research questions pertaining to the current state of the study subject. The analytical descriptive method was employed to evaluate the target population, encompassing attitudes, opinions, demographic information, conditions, and procedures. The target population of this research consists of all employees of the 13 Jordanian commercial banks listed on the Amman Stock Exchange, while the number of employees in commercial banks is (22,407) employees, as the size of the target population is relatively large, which makes it difficult to reach all people within the limited time available for data collection. This led to the use of a simple random sample of (400) employees. To achieve the goal of this study, an electronic questionnaire was sent to all commercial banks listed on the Amman Stock Exchange through the website and e-mail. The researcher was able to collect (332) questionnaires that were agreed to be filled out by the study sample members, all of which are valid for the purposes of statistical analysis. Most of the employees were male, middle-aged, held a bachelor's degree, and had moderate experience.

4.1 Reliability Test

To ensure that the questionnaire's items were adequate and consistent, the Cronbach's Alpha value was determined. The value is statistically acceptable if the result is more than 0.70, and the closer it is to one (or 100%), the more reliable the search tool will be (Sekaran and Bougie, 2016). Cronbach Alpha ranges from 0.921 to 0.951, as seen in Table (1). To put it another way, the study tool is reliable, and the data it generates is accurate and trustworthy for assessing variables. Since all independent and validated variable dimensions are greater than 70%, reliability has been taken into account.

Table 1

Cronbach's Alpha Coefficient

	Number of items	alpha Cronbach
Cloud Accounting	10	0.942
Reducing Revenues Manipulation	5	0.951
Reducing Misclassification of Expenses	5	0.940
Reducing The Valuation of Assets and Liabilities	5	0.933
Reducing Creative Accounting Practices	15	0.921
Internal Audit	10	0.931

4.2 Descriptive Statistical Analysis

According to Table 2, the mean for the variable "Cloud Accounting" was calculated to be 3.68. This indicates a high level of agreement among the respondents regarding this variable. Upon examining the individual item responses, it is evident that

“Cloud accounting fulfills the bank's desires to take advantage of technological developments”, received the highest average rating of 4.08. On the other hand, Paragraph “The bank develops everything new regarding new software”, which lower average rating of 3.39.

Table 2
Descriptive Statistics mean and standard deviation of Cloud Accounting

NO.	Items	Mean	SD	Rank	Importance
1	Cloud accounting directly contributes to supporting the bank's activity.	3.99	0.741	2	High
2	Cloud accounting fulfills the bank's desires to take advantage of technological developments.	4.08	0.767	1	High
3	The bank works on the use of Internet-based transactions.	3.54	1.080	6	Medium
4	Cloud accounting is used to exchange data between workers.	3.53	1.081	7	Medium
5	Computers and the Internet are compatible with the requirements and requirements of cloud accounting at the bank.	3.90	0.856	4	High
6	The programs linked to the bank's computers are compatible with the nature of cloud accounting	3.59	0.923	5	Medium
7	The bank attracts a specialized department that works on developing and finding solutions to problems associated with improving cloud accounting requirements.	3.43	0.875	9	Medium
8	The bank provides protection systems for its data.	3.47	0.884	8	Medium
9	The bank develops everything new regarding new software.	3.39	0.941	10	Medium
10	The bank periodically develops the database associated with cloud accounting.	3.94	0.790	3	High
Cloud Accounting		3.68	0.534		High

The mean of Reducing Creative Accounting Practices is 3.74, According to Table 3, the mean for the variable “**Reducing Revenues Manipulation**” was calculated to be 3.76. This indicates a high level of agreement among the respondents regarding this variable. Upon examining the individual item responses, it is evident that Paragraph “Increasing tax penalties and fines are experienced despite increasing service delivery”, received the highest average rating of 3.84. On the other hand, Paragraph “The bank is keen to record the financial revenues of subsequent periods within the periods that relate to them and not transfer them to the current period in order to amplify its profits”, which lower average rating of 3.58.

The mean for the variable “**Reducing Misclassification of Expenses**” was calculated to be 3.72. This indicates a high level of agreement among the respondents regarding this variable. Upon examining the individual item responses, it is evident that “Information is available on the principles used in determining and estimating all types of allocations, as well as bad debts and their effects on the profits and financial position of the facility”, received the highest average rating of 3.85. On the other hand, Paragraph “Repair and maintenance expenses have increased whereas the replacement costs of new fixed assets have increased”, which lower average rating of 3.56.

The mean for the variable “**Reducing the Valuation of Assets and Liabilities**” was calculated to be 3.74. This indicates a high level of agreement among the respondents regarding this variable. Upon examining the individual item responses, “There is objectivity in estimating the lifespan of productive assets”, received the highest average rating of 3.84. On the other hand, Paragraph “Regular and extraordinary items are disclosed in the financial statements fairly”, which lower average rating of 3.65.

Table 3
Descriptive Statistics mean and standard deviation of Reducing Creative Accounting Practices Dimensions

NO.	Items	Mean	SD	Rank	Importance
1.	The bank is keen to record the financial revenues of subsequent periods within the periods that relate to them and not transfer them to the current period in order to amplify its profits.	3.58	0.870	5	Medium
2.	Increasing stock prices have resulted into increase in profits.	3.74	0.765	4	High
3.	Decreasing cash flow is reported despite increasing revenue.	3.82	0.809	3	High
4.	Increasing tax penalties and fines are experienced despite increasing service delivery.	3.84	0.820	1	High
5.	Additional annual depreciation charge is carried out only in the years of high profits.	3.83	0.854	2	High
Reducing Revenues Manipulation		3.76	0.566		Medium
6.	Information is available on the principles used in determining and estimating all types of allocations, as well as bad debts and their effects on the profits and financial position of the facility.	3.85	0.848	1	High
7.	Accrued expenses have been carried to the next period instead of being expensed off in the current period.	3.84	0.822	2	High
8.	Provision for employee retirement compensation has increased despite the higher rate of employee turnover.	3.69	0.966	3	High
9.	Repair and maintenance expenses have increased whereas the replacement costs of new fixed assets have increased.	3.56	1.028	5	Medium
10.	Increased sales and advertising costs have lead to increased reported earnings.	3.67	0.957	4	Medium
Reducing Misclassification of Expenses		3.72	0.730		High
11.	The bank is careful not to overvalue its assets or any of its assets in order to better reflect the financial situation.	3.83	0.923	2	High
12.	There is objectivity in estimating the lifespan of productive assets.	3.84	0.838	1	High
13.	Regular and extraordinary items are disclosed in the financial statements fairly.	3.65	0.957	5	Medium
14.	Assets have increased due to internal revaluation of existing assets carried out by management.	3.69	1.047	4	High
15.	Increased sale of fixed assets has been experienced despite the increasing depreciation charges.	3.74	0.855	3	High
Reducing The Valuation of Assets and Liabilities		3.74	0.692		High
Reducing Creative Accounting Practices		3.74	0.590		

According to Table 4, the mean for the variable “Internal Audit” was calculated to be 3.68. This indicates a high level of agreement among the respondents regarding this variable. Upon examining the individual item responses, it is evident that “Internal audit has designed an audit manual that guides audit operations such as planning, monitoring, and evaluation”,

received the highest average rating of 3.90. On the other hand, Paragraph “The internal audit provides timely completed of work and ensure that internal audit findings are reported directly to top management.”, which lower average rating of 3.43.

Table 4
Descriptive Statistics mean and standard deviation of the Internal Audit

NO.	Items	Mean	SD	Rank	Importance
1	The internal auditor has an appropriate educational level to perform his tasks.	3.81	0.631	3	High
2	Professional experience of internal audit and knowledge of processes, procedures which operate.	3.79	0.668	4	High
3	production of accurate, comprehensive, temporariness financial reports.	3.60	0.670	7	Medium
4	Management support for the internal auditor.	3.66	0.584	6	Medium
5	Accuracy and adequacy of internal audit programs.	3.83	0.577	2	High
6	The internal audit plays a vital role in detecting fraud in the banks.	3.73	0.648	5	High
7	Internal audit has designed an audit manual that guides audit operations such as planning, monitoring, and evaluation.	3.90	0.856	1	High
8	Internal audit encompasses a set of rules, policies, and procedures an organization implements to provide reasonable assurance that its financial reports are reliable.	3.56	0.923	8	Medium
9	The internal audit provides timely completed of work and ensure that internal audit findings are reported directly to top management.	3.43	0.875	10	Medium
10	Internal audit ensures that employees of the bank demonstrate professionalism and an objective approach.	3.47	0.884	9	Medium
Internal Audit		3.68	0.541		High

4.3 The First Main Hypothesis

To test the first main hypothesis, Multi linear regression analysis was performed.

The first main hypothesis of the study was as follows: There is a positive impact of cloud accounting on reducing creative accounting practices in commercial bank.

Table 5
Results of Testing the Impact main hypothesis

I.V	Model Summery		ANOVA		Coefficients				
	R	R ²	F	Sig F*	variable	B	standard error	T	Sig T*
Cloud Accounting	0.756	0.572	146.082	0.000	reducing revenues manipulation	0.172	0.049	2.468	0.003
					reducing misclassification of expenses	0.374	0.043	8.780	0.000
					reducing the valuation of assets and liabilities	0.178	0.054	3.286	0.001

*The effect is statistically significant at the level ($\alpha \leq 0.05$)

The correlation coefficient ($R = 0.756$) shows that cloud accounting has an impact on reducing creative accounting practices in commercial banks. Table 5 shows that the effect of the independent variable (cloud accounting) on reducing creative accounting practices is statistically significant, with a calculated value of F (146.082) and a level of significance (sig = 0.000) less than 0.05. The coefficient of determination ($R^2 = 0.572$) shows that variation in quantitative methods can account for 57.2% of the variation in (reducing creative accounting practices).

The values of the regression coefficients for the variable's sub-dimensions (reducing creative accounting practices) are displayed in Table 5. The table makes it evident that reducing revenues manipulation dimension's B value was (0.172) and that its computed T value was (2.468) at a significant level (0.003). It is less than 0.05, meaning that at the significance level ($\alpha \leq 0.05$), there is a substantial positive effect.

The table makes it evident that reducing misclassification of expenses dimension's B value was (0.374) and that its computed T value was (8.780) at a significant level (0.000). It is less than 0.05, meaning that at the significance level ($\alpha \leq 0.05$), there is a substantial positive effect.

Additionally, the data makes it evident that there was a significant positive influence, with the B value in the reducing the valuation of assets and liabilities dimension being 0.178 and the T value being 3.286 at a significance level of (0.001), less than 0.05. when ($\alpha \leq 0.05$).

To test the sub-hypotheses, simple linear regression analysis was performed.

H_{1.1}: *There is a positive impact of cloud accounting on reducing revenues manipulation in commercial banks.*

H_{1.2}: *There is a positive impact of cloud accounting on reducing misclassification of expenses in commercial banks.*

H1.3: *There is a positive impact of cloud accounting on reducing the valuation of assets and liabilities in commercial banks.*

Table 6

Impact test results H1.1, H1.2, and H1.3

D.V	Model Summary		ANOVA		Coefficients			
	R	R ²	F	Sig F*	B	standard error	T	Sig T*
Reducing revenues manipulation	0.517	0.267	120.165	0.000	0.487	0.044	10.962	0.000
Reducing misclassification of expenses	0.733	0.537	383.205	0.000	0.536	0.027	19.576	0.000
Reducing the valuation of assets and liabilities	0.685	0.470	292.448	0.000	0.529	0.031	17.101	0.000

*The effect is statistically significant at the level ($\alpha \leq 0.05$)

A positive association was found between (cloud accounting) and (reducing revenues manipulation), as indicated by Table 6's R-value of (0.517). When all other factors stay constant, the coefficient of determination results show that ($R^2 = 0.267$), which indicates that, when it comes to reducing revenues manipulation, the (cloud accounting) domain accounted (26.7%) of the variation. At the significance level ($\alpha \leq 0.05$), it was demonstrated that the regression's significance was supported by the value of (F) reaching 120.165 at the confidence level (sig = 0.000).

There is a positive association between the cloud accounting on reducing misclassification of expenses, as indicated by the second dimension's R-value of 0.733. After adjusting for all other factors, the coefficient of determination results in ($R^2 = 0.537$), which indicates that the (cloud accounting) domain accounted for (53.7%) of the variance in (reducing misclassification of expenses). Furthermore, the value of (F) reached (383.205) at the level of confidence (sig = 0.000), demonstrating the significance of the regression at the level of significance ($\alpha \leq 0.05$), was demonstrated.

There is a positive impact between cloud accounting on reducing the valuation of assets and liabilities, as indicated by the R-value of 0.685. Assuming all other variables stay constant, the coefficient of determination results show that the (cloud accounting) domain accounted for 47% of the variance in (reducing the valuation of assets and liabilities). This is equivalent to a coefficient of determination of 0.470. The value of (F) achieved (292.448) at the level of confidence (sig = 0.000), demonstrating the significance of the regression at the ($\alpha \leq 0.05$), significance level, was also demonstrated.

H2: *There is a positive effect of the moderating role of internal audit on the effect of cloud accounting on reducing creative accounting practices in commercial banks.*

Table 7

Hierarchical multiple regression analysis of the modified role statement

DV	IV	First model			second model		
		B	T	Sig*	β	T	Sig*
Creative Accounting Practices	cloud accounting	0.666	19.738	0.000	-	-	-
	Internal Audit × cloud accounting		-		0.945	39.810	0.000
	R		0.736			0.960	
	R ²		0.541			0.921	
	ΔR^2		0.540			0.921	
	ΔF		389.572			922.065	
	Sig. ΔF		0.000			0.000	

Table 7 presents the results of the hierarchical multiple regression analysis based on two models, as the results of the first model showed that the correlation value was ($R = 0.736$), and this indicates a positive correlation between cloud accounting and Creative Accounting Practices. The results also showed that there is a statistically significant effect of the Internal Audit variable on Creative Accounting Practices, where the value was ($F = 389.572$) and the significance level (Sig = 0.000), which is less than (0.05).

The value of the determination coefficient was ($R^2 = 0.541$), meaning that the value of (0.541) changes in Creative Accounting Practices results from the change in cloud accounting. The impact score value was ($B=0.666$), which means that an increase of one degree in the level of interest in cloud accounting leads to an increase in Creative Accounting Practices with a value of (0.666), which indicates that cloud accounting explains (66.6%) of the variation. In Creative Accounting Practices.

In the second model, the modified variable (Internal Audit) was introduced to the regression model, as the value of the correlation coefficient increased to become ($R = 0.960$), as well as the value of the determination coefficient R^2 , which increased by (96%), and this percentage is statistically significant, as the change in the value of F (922.065) and the level of significance (Sig = 0.000), which is less than (0.05).

The effect score value β was (0.945) for the modified variable (Internal Audit), and the calculated T value was ($T = 39.810$) with a significance level (Sig = 0.000), and this confirms the significant role of the modified variable (Internal Audit) in

improving the impact of cloud accounting in Creative Accounting Practices, as the rate of interpretation of the discrepancy in Creative Accounting Practices improved by (54.1%), rising from (54 %) to (92.1%).

5. Discussion

The results show that cloud accounting has an impact on reducing creative accounting practices in commercial banks. The variation in quantitative methods can account for 57.2% of the variation in (reducing creative accounting practices). A positive association was found between (cloud accounting) and (reducing revenues manipulation), which indicates that, when it comes to reducing revenues manipulation, the (cloud accounting) domain accounted (26.7%) of the variation. Cloud accounting provides increased transparency and control over financial data and operations. This would make it more difficult for businesses to alter their income illegally. Furthermore, cloud accounting's quick access to financial data makes long-term revenue manipulation harder. Access and permissions control in cloud accounting ensures that only authorized parties can edit financial data, decreasing the possibility of manipulation. There is a positive association between the cloud accounting on reducing misclassification of expenses, which indicates that the (cloud accounting) domain accounted for (53.7%) of the variance in (reducing misclassification of expenses). Cloud accounting can reduce misclassification of expenses due to enhanced transparency, improved integration and coordination, advanced analytics, ease of modification and updating, and real-time access to data. These factors contribute to accurate classification of expenses, reduce errors, and maintain classification accuracy. Cloud accounting platforms also offer advanced analytical tools for detecting and correcting abnormal classification patterns. In addition, there is a positive impact between cloud accounting on reducing the valuation of assets and liabilities, the coefficient of determination results shows that the (cloud accounting) domain accounted for 47% of the variance in (reducing the valuation of assets and liabilities). Cloud accounting positively impacts asset and liability valuation due to security, privacy, accessibility, compatibility, training, and compliance. Security measures may be required for sensitive financial data, while connectivity may be affected by outages or poor quality. Integration between cloud and on-premises systems can be challenging, and new employee training and competencies may be required. Compliance with new regulations is also crucial for accurate expense classification and reduced errors. This finding has been supported by a number of studies such as Sianyó (2016), Abdulmunim (2018), Ma et al. (2021). One of the many ways in which cloud accounting can help commercial banks curb creative accounting is by making accounting and financial operations more transparent and controllable. This is because officials and auditors can access data and reports whenever and wherever they need them. Cloud accounting not only speeds up the process of updating, matching, and being compatible with international accounting standards, but it also improves the quality and accuracy of accounting information while reducing human input mistake.

The results found that there is a positive effect of the moderating role of internal audit on the impact of cloud accounting on reducing creative accounting practices in commercial banks. Accounting and financial operations can benefit from internal audits since they increase transparency, control, and compliance while also assuring and advising shareholders, board members, and senior management. Data privacy and security, service continuity, and reliance on service providers are some of the hazards linked with cloud accounting, and this helps assess and lessen those risks. As a result, commercial banks' accounting and financial performance can benefit from internal audit's moderating role, which also decreases the likelihood of creative accounting methods that could hurt shareholders, investors, and regulators.

6. Conclusion

This study attempts to study the impact of the moderating role of internal audit between cloud accounting and limiting creative accounting practices in commercial banks. Adopting Cloud Computing can bring significant advantages to accounting firms by enabling instant analysis of large amounts of data and potentially reducing the workload of preparing semi-annual or annual reports. The potential of this technology for businesses and accounting firms is limitless in an economy that requires improved services that are more efficient and cost-effective. Data security and privacy, service continuity, and reliance on service providers are a few of the risks and obstacles that cloud accounting must overcome. For this reason, commercial banks need to take precautions to safeguard their cloud accounting systems and make sure they follow all the rules.

This study is important because it shows how creative accounting practices spread and are harmful in commercial banks, which reduce the quality and credibility of accounting and financial information, and affect the decisions of investors, regulators, and shareholders. The study also evaluates the extent of the use and effectiveness of cloud accounting and internal auditing as means to reduce these practices. The study suggests that future studies should give recommendations and proposals to improve and develop cloud accounting and internal auditing in commercial banks, increase transparency, monitoring and compliance in accounting and financial operations, and reduce the risks associated with cloud accounting and creative accounting practices.

The study recommends that banks attract a specialized department that works to develop and find solutions to the problems associated with improving cloud accounting requirements, in addition to developing everything new with regard to new software so that cloud accounting is used to exchange data between workers. On the other hand, the bank must be careful to record the financial revenues of subsequent periods within the relevant periods and not transfer them to the current period in order to inflate its profits. It was noted that repair and maintenance expenses increased, while the costs of replacing new fixed assets

increased. Misclassification of expenses must also be reduced. Regular and extraordinary items should be disclosed in the financial statements fairly with the aim of reducing the valuation of assets and liabilities. Internal auditors must also produce accurate, comprehensive and interim financial reports with the administrative support of the internal auditor. Internal audit must also provide timely completion of work and ensure that internal audit results are communicated directly to senior management. Internal audit must ensure that bank employees demonstrate professionalism and an objective approach.

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