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The Relationship Between Financial Distress, Resilience and Audit Quality: Emphasizing the Role of Cost Management

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ABSTRACT

This study aimed to evaluate the correlation between audit quality, financial distress, and financial resilience, emphasizing the role of cost management in Iraqi companies. In other words, the moderating effect of cost management on audit quality, financial distress, and financial resilience in Iraqi companies was examined. A multiple regression model was employed to test the hypotheses using a sample of 21 companies listed on the Iraq Stock Exchange from 2014 to 2023, and a multiple regression model based on panel data techniques and a fixed effects model was employed. The results indicated a significant negative relationship between audit quality and financial distress as well as a significant positive relationship between audit quality and financial resilience. Furthermore, cost management strengthened the relationship between audit quality and financial resilience while weakening the relationship between audit quality and financial distress. This study first investigated the relationship between cost management, audit quality, financial distress, and financial resilience in companies listed on the Iraq Stock Exchange. With its unique characteristics, the emerging Iraqi market provided a distinctive setting for this research. Another innovative aspect of this study was examining the moderating role of cost management in the relationship between audit quality, financial distress, and financial resilience. This approach provided a new perspective on corporate financial management in critical conditions. The results offered valuable and practical insights for managers, analysts, and regulatory bodies in Iraq, contributing to the development of available literature.

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1. Introduction

In the current challenging circumstances, organizations encounter several financial risks that may result in financial distress and potential insolvency. Audit quality, a critical component affecting the transparency and reliability of financial information, significantly contributes to risk mitigation (Glover et al, 2022). Audit quality offers reasonable assurance regarding the accuracy and fairness of financial accounts, aiding stakeholders in making more informed decisions. High-quality auditing assists managers in recognizing and reporting financial risks, enabling them to implement preventive and corrective measures, thereby diminishing the probability of financial difficulty (Samagaio et al., 2024). Conversely, financial resilience, characterized as a company's capacity to endure financial shocks and revert to a positive state, is more significant. Organizations exhibiting substantial financial resilience can avert significant issues in critical circumstances through adept resource management and strategic decision-making (Kyriakou, 2022). Cost management, a crucial instrument of financial management, is essential for bolstering financial resilience and mitigating the risk of financial distress (Le & Moore, 2023). Organizations proficiently controlling their expenditures might avert significant financial difficulties in crucial circumstances by minimizing superfluous charges and enhancing operational procedures (Kyriakou, 2022). Recent research has investigated the correlation between audit quality, financial resilience, and financial distress. These studies employ diverse methodologies to investigate whether audit quality is a significant element in improving financial resilience and mitigating the risk of financial crisis for corporations. Several studies have investigated the influence of auditor attributes, including audit firm size, industry specialization, and tenure, on audit quality and, subsequently, on financial resilience and distress (Kyriakou, 2022; Salehi et al., 2019; Thu et al., 2018). These research results indicate that larger audit firms and those possessing industry experience deliver superior audit quality, resulting in enhanced financial resilience and a diminished probability of financial distress for enterprises (Thu et al., 2018; Widyaningsih et al., 2019). Besides auditor qualities, several studies have examined how cost control affects the relationship between audit quality and financial resilience and hardship. These results show that companies good at cost control can improve audit quality, strengthen their financial resilience, and reduce the likelihood of financial problems.

Nonetheless, substantial research deficiencies persist in this domain. Few studies have investigated the influence of environmental factors, including economic conditions and legal rules, on the interplay between audit quality, financial resilience, and financial distress. Furthermore, additional study is required to find suitable indicators for assessing financial resilience and cost management. This study seeks to address existing research gaps by examining the influence of audit quality on financial resilience and financial hardship, highlighting the significance of cost management in firms listed on the Tehran Stock Exchange. This research employed several indices to assess audit quality, financial resilience, financial distress, and cost management while accounting for the influence of environmental factors. The findings of this study may enhance the corpus of accounting and financial knowledge, aiding managers, investors, and other stakeholders in making more informed decisions. This research may assist regulatory agencies in developing suitable laws and regulations to increase audit quality, bolster financial resilience, and optimize cost management in corporations. This study may offer advice for enhancing cost management in organizations and augmenting their capacity to address financial difficulties. The document aims to assess the correlation between audit quality and companies' financial resilience and distress, its influence, and the moderate role of environmental factors. The findings of this study could help develop accounting and financial knowledge in Iran and improve financial reporting quality, financial resilience, and cost management in companies. The structure of the rest of the research is as follows: In the second section, the theoretical foundations and research hypotheses are presented. The third section describes the research methodology, including the population, sample, data collection method, and research model. In the fourth section, the findings from data analysis and hypothesis testing are reported. Finally, the fifth section is dedicated to discussion and conclusion, and the theoretical and practical implications of the research are presented, as well as suggestions for future research.

2. Theoretical Foundations and Hypothesis Development

Financial distress, as a serious threat to the survival of companies, can lead to bankruptcy, a decrease in stock value, and the loss of investment opportunities (Gul et al., 2018). In contrast, by providing

reasonable assurance regarding the accuracy and fairness of financial information, audit quality can significantly reduce the likelihood of financial distress.

High-quality auditing helps managers make more informed decisions by identifying and assessing financial risks. Experienced and specialized auditors can pinpoint weaknesses in internal controls and the likelihood of fraud and misconduct, assisting management in addressing these issues. Additionally, efficient cost management, by reducing unnecessary expenses and optimizing processes, maintains a company's profitability and financial stability. Companies facing financial difficulties may manipulate financial information to conceal their unfavorable position. High-quality auditing can detect such manipulations and prevent the dissemination of inaccurate information to the market. Additionally, improper cost management may indicate financial problems that auditors can identify (Nazaripour & Mirzaee, 2018). Audit firm size and industry expertise are factors that influence audit quality. Larger audit firms and those with specialized industry knowledge typically have more resources and experience, allowing them to provide higher-quality audits. Moreover, companies with more effective cost management generally have stronger information systems and internal controls, which can improve audit quality. The tenure of auditors may also impact audit quality. Some studies suggest that auditors who work with a company for an extended period may lose their independence, reducing the quality of their audits (Gul et al., 2018). According to agency theory, auditors play a monitoring role that reduces information asymmetry between managers and stakeholders, thereby improving decision-making and reducing the likelihood of financial distress (Fossung et al., 2022). Similarly, the resource-based view (RBV) emphasizes that effective cost management enhances the internal capabilities of firms and enables them to strengthen their resilience in the face of external shocks. Previous studies (e.g., Gul et al., 2018; Kyriakou, 2022; Le & Moore, 2023) confirm that firms with high audit quality and strong cost control mechanisms are more likely to remain stable during crises. Based on these arguments, the hypotheses put forward in this study are not only based on empirical findings but are also supported by established theoretical frameworks, thereby providing a solid foundation for testing the proposed relationships. In companies with weak cost management, managers may seek to retain auditors with long-standing relationships to hide financial problems. Environmental factors, such as economic conditions and regulations, can also influence the relationship between audit quality, cost management, and financial distress. During economic crises, the probability of financial difficulties within organizations escalates, amplifying the importance of rigorous auditing and effective cost management in alleviating these challenges (Choi & Kim, 2020). The relationship between audit quality, cost management, and financial difficulty is intricate and varied, shaped by numerous factors. Evidence indicates that high-quality auditing and efficient cost management significantly mitigate the financial difficulty risk within firms. In this regard, the following studies have been conducted:

Habib et al. (2020) review the literature on the determinants and consequences of financial distress. They categorize the determinants of financial distress into firm-level fundamental factors, macroeconomic factors, and corporate governance factors. Campbell et al. (2008) measure financial distress using a logit model, while Avramov et al. (2009) use credit ratings to indicate financial distress. Both studies provide evidence similar to prior research, indicating a significant negative relationship between financial distress and stock returns. Altman et al. (2017) assess the performance of the Z-score model developed by Altman in predicting financial distress. Altman et al. (2017) prove that most countries' overall Z-score model works well. Griffin and Lemmon (2002) examine the relationship between financial distress, the book-to-market ratio, and stock returns, providing evidence of a significant negative relationship between financial distress and stock returns. On the other hand, in contrast to many existing studies reporting anomalies in financial distress, Vassalou and Xing (2004) provide evidence that stock returns have a positive relationship with the risk of financial distress. Lamont et al. (2001) analyze whether financial distress is a risk factor that explains stock returns. Their analysis shows that firms with high financial distress tend to record lower average returns. Using financial distress as a moderating variable, Gul et al. (2018) test the relationship between managerial ability and audit fees. Gul et al. (2018) provide evidence of a significant positive relationship between managerial ability and audit fees in firms experiencing financial distress. However, consistent with previous studies, there is a significant negative relationship between managerial ability and audit fees in firms without financial distress (Jung & Lee, 2017; Krishnan & Wang, 2015). They argue that firms with financial distress have a stronger incentive to meet market

expectations and maximize short-term rewards through earnings management or accounting violations. Managers with high managerial ability also can better conceal weaknesses in internal controls. Choi and Kim (2020) examine the relationship between financial distress and audit fees using a sample of Korean companies. Their analysis shows that financial distress significantly increases audit fees. Based on the above discussion, the first and second hypotheses are as follows:

H1: There is a significant positive relationship between audit quality and financial distress.
H2: Cost management moderates the relationship between audit quality and financial distress.

Financial resilience—a company's capacity to meet financial problems and return to a favorable condition—is of growing relevance in today's chaotic and dynamic environment. Businesses run a broad spectrum of financial risks that might compromise sustainability and stability. In this regard, efficient cost control and audit quality, one of the most significant elements affecting the reliability and openness of financial information, can significantly help to strengthen financial resilience (Agoglia et al., 2015). By giving stakeholders reasonable comfort about the integrity and fairness of financial accounts, high-quality auditing helps them make better judgments. By spotting and disclosing financial risks, audit quality allows managers to implement preventative and remedial actions. This enables the business to keep financial stability and increase resilience. In this sense, cost control concentrates on lowering unneeded expenses and allocating resources and investment in valuable prospects best, raising financial flexibility, and helping to build a competitive advantage. Effective cost control helps businesses to keep liquidity and increase production by focusing on critical expenses and investing in creative technologies and processes. By evaluating operational and strategic risks, audit quality enables managers to spot areas of strength and weakness of the business in handling approaching difficulties, helping the business to develop resilience against possible shocks and engaging in preventive actions. By closely reviewing operational procedures and spotting internal control flaws, auditors can help managers enhance processes and lower running risks.

By evaluating the long-term risks and sustainability of the business model, audit quality assists the organization in maintaining financial stability over time. Examining financial patterns and spotting long-term threats let auditors help managers decide strategically to preserve long-term stability (Mangion et al., 2021). Financial resilience should be conceptualized not only as a short-term capacity to overcome financial shocks but also as a long-term ability to maintain performance and adapt to changing environments. From the perspective of dynamic capability theory, resilience reflects a firm’s ability to integrate, build, and reconfigure resources to address rapidly changing circumstances. Furthermore, stakeholder theory suggests that resilient firms maintain stakeholder trust by ensuring transparency and adopting sustainable financial practices. Therefore, audit quality contributes to long-term sustainability by enhancing credibility and ensuring the integrity of financial reporting, while cost management enhances resilience by enhancing efficiency and allowing for reinvestment in innovation and strategic initiatives. Agency theory also emphasizes the importance of high-quality auditing in reducing information asymmetry and ensuring that managers act in the interests of shareholders (Panda & Leepsa, 2017). Reliable audit reports help stakeholders assess the true financial condition of companies, thereby reducing uncertainty in decision-making. In addition, the resource-based view (RBV) suggests that cost management is a strategic resource that enhances a company's internal capabilities and resilience. Companies with strong cost control mechanisms can allocate resources more effectively, maintain liquidity, and adapt more effectively to changing market conditions.

Cost control emphasizes investing in creative technologies and methods to raise production and lower long-term expenses. This method strengthens resilience against environmental changes and helps businesses create a sustainable competitive advantage. By concentrating on investment in research and development and streamlining manufacturing processes, effective cost control helps the business to raise productivity and lower long-term expenses. By assessing these elements and offering pertinent data, audit quality helps managers make wise decisions and increase resistance against these difficulties (Le & Moore, 2023). Through industry trend analysis and risk identification resulting from environmental changes, auditors may help management make strategic decisions to keep competitiveness (Yan & Xie, 2016). More broadly, the interaction and dynamic link exists between audit quality, cost control, and financial resilience. High-quality auditing helps managers make wise decisions about cost control and resilience, strengthened by offering open and trustworthy financial

data. Conversely, reasonable cost control can assist the business in improving resilience against obstacles by raising profitability and financial freedom. Businesses that keep liquidity using effective cost control and offer precise, trustworthy financial data via excellent auditing show more resistance to financial difficulties. Lustrilanang et al. (2023) found that internal control and audit quality play an important role in improving the financial resilience of the organization, but their effects occur in different ways. Specifically, internal control affects financial resilience both directly and through improving information quality, while audit quality can only strengthen financial resilience through improving information quality and has no significant direct effect. Chafai (2024) found that the combination of appropriate financial inclusion and high quality auditing, both internal and external, is essential to reduce agency costs and optimize the level of financial inclusion. Samagaio et al. (2024) showed that the tendency to engage in audit quality-reducing practices increases when auditors are under job stressors, but decreases when individuals possess resilience and time management skills. Mwangi (2024) showed that high-quality audits lead to improved financial reporting, fraud detection, and reduced capital costs. The market reaction is positive when reputable audit firms are involved.

Previous studies and theoretical arguments suggest that firms with higher audit quality benefit from more reliable financial reporting, earlier identification of risks, and stronger corporate governance mechanisms, all of which contribute to long-term financial resilience. Cost management, as a key component of strategic financial management, is also expected to enhance the impact of audit quality on resilience by improving efficiency, maintaining liquidity, and creating space for strategic reinvestments. Therefore, the third and fourth hypotheses are proposed as follows:

H3: Audit quality and financial resilience have a significant positive relationship.
H4: Cost management moderates the relationship between audit quality and financial resilience.

3. Methodology

This research is of a causal-correlational type with a quasi-experimental post-event approach. This study aims to investigate the relationships between variables in empirical accounting research using actual data. In terms of nature and objectives, this is considered an applied research. The primary goal is to develop practical knowledge in a specific field.

3.1. Population

The study population consists of all companies listed on the Iraq Stock Exchange from 2014 to 2023.

3.2. Sampling Method

A systematic exclusion method is used for sampling. Finally, after applying the following criteria, the study sample is selected:

1. Companies listed on the Iraq Stock Exchange by the end of 2014.
2. Companies that have provided the necessary financial data for this research during the study period.
3. Companies not classified as investment firms, banks, insurance companies, or financial intermediaries.

Based on the data collected till the end of 2023, the final sample was determined, as presented in Table 1.

Table 1. The Number of Companies in the Statistical Population and the Application of Selection Criteria for Sample Selection

Iraq Stock Exchange Member Companies	Number of Companies	Selected Companies
The Total Number of Listed Companies in Iraq		123
Banks and Financial Institutions		
The Number of Banking Companies 39		
The Number of Insurance Companies 5		
The Number of Investment Companies 9	72	
The Money Transfer Companies 17		
The Telecommunications Companies 2		
The Non-Disclosure of Information	30	
Total Sample Companies		21

3.3. Data Collection Method and Tools

The required information for the research was collected from various sources based on their type. Data related to the literature and theoretical discussions were gathered from library sources, such as books, English academic journals, and internet websites. The research tool used company information (balance sheets and income statements). The raw and primary data for testing the hypotheses were collected using the Iraq Stock Exchange database and other relevant sources.

3.4. Data Analysis Method

The data were analyzed cross-sectionally and year by year (panel data). The multiple linear regression method was used to test the hypotheses, and descriptive and inferential statistical procedures were employed to analyze the obtained data. In this context, frequency distribution tables were used for data description and hypothesis testing at the inferential level, and the following tests were employed: the F-Limer test, Hausman test, normality test, and multiple linear regression test.

3.5. Research Model

Model 1, as described below, was used to test the first hypothesis of the study:

Mode1 (1)

$$FR_{it} = a_0 + a_1 AQ + a_2 Cost\_M_{i,t} + a_3 \mathrm{AUDCHG}_{i,t} + a_4 \mathrm{BIG1}_{i,t} + a_5 \mathrm{DUALITY}_{i,t} + a_6 \mathrm{LEV}_{i,t} + a_7 \mathrm{LOSS}_{i,t} + a_8 \mathrm{SIZE}_{i,t} + a_9 \mathrm{SIZEB} + a_{10} year_{i,t} + a_{11} industry_{i,t} + \varepsilon_{i,t}$$

The following model was used to test the second hypothesis:

Model (2)

$$FR_{it} = a_0 + a_1 \mathrm{AQ}_{i,t} + a_2 \mathrm{COST\_M}_{i,t} + a_3 \mathrm{COST_M}^{*}\mathrm{AQ}_{i,t} + a_4 \mathrm{AUDCHG}_{i,t} + a_5 \mathrm{BIG1}_{i,t} + a_6 \mathrm{DUALITY}_{i,t} + a_7 \mathrm{LEV}_{i,t} + a_8 \mathrm{LOSS}_{i,t} + a_9 \mathrm{SIZE}_{i,t} + a_{10} \mathrm{SIZEB} + a_{11} year_{i,t} + a_{12} industry_{i,t} + \varepsilon_{i,t}$$

Model 3 was used to test the third hypothesis:

Model (3)

$$FR_{it} = a_0 + a_1 AQ + a_2 Cost\_M_{i,t} + a_3 \mathrm{AUDCHG}_{i,t} + a_4 \mathrm{BIG1}_{i,t} + a_5 \mathrm{DUALITY}_{i,t} + a_6 \mathrm{LEV}_{i,t} + a_7 \mathrm{LOSS}_{i,t} + a_8 \mathrm{SIZE}_{i,t} + a_9 \mathrm{SIZEB} + a_{10} year_{i,t} + a_{11} industry_{i,t} + \varepsilon_{i,t}$$

The following model was used to check the fourth hypothesis:

Model (4)

$$FR_{it} = a_0 + a_1 \mathrm{AQ}_{i,t} + a_2 \mathrm{COST\_M}_{i,t} + a_3 \mathrm{COST_M}^{*}\mathrm{AQ}_{i,t} + a_4 \mathrm{AUDCHG}_{i,t} + a_5 \mathrm{BIG1}_{i,t} + a_6 \mathrm{DUALITY}_{i,t} + a_7 \mathrm{LEV}_{i,t} + a_8 \mathrm{LOSS}_{i,t} + a_9 \mathrm{SIZE}_{i,t} + a_{10} \mathrm{SIZEB} + a_{11} year_{i,t} + a_{12} industry_{i,t} + \varepsilon_{i,t}$$

The variables measurement are presented in Table 2.

Financial Resilience (FR):

Exploratory Factor Analysis (EFA) developed by Zahedi et al. (2023) was employed in this study to calculate the financial resilience variable using the principal component method. Factor analysis is a multivariate statistical method used to categorize and identify the structures among the research data. This statistical method is used for two main reasons: First, the EFA method allows for the combination of a wide range of company characteristics variables to create a resilience proxy; however, in the previous studies, resilience was examined using a limited set of characteristics, and the issue of multicollinearity—arising from the inclusion of multiple relevant company characteristic variables as both control and independent variables in empirical models—was often overlooked. Moreover, controlling for potential interactions between variables is an essential and challenging task. Second, one of the key features of the EFA method is that it assigns a weight to each variable involved in resilience based on the output of correlation coefficient matrix. This approach differs from previous studies where the impact of each factor related to resilience was assumed to be the same. The process of calculating the resilience variable begins with collecting data on the 21 factors influencing company characteristics that impact the motivation and ability of managers to build resilience for each company year. Then, the correlation coefficient matrix for the 21 factors is extracted by year, and finally,

exploratory factor analysis is conducted to obtain the weights for each of the 24 variables. The resilience variable is then calculated as the sum of the weighted products of each factor and its corresponding numerical value.

Table 3 presents 21 indices calculated to measure financial resilience through exploratory analysis.

Table 2. The Variables Measurement

Variables		Measurement
FR	**Financial Resilience**	This variable is assessed using specific indicators, as outlined in the study.
AQ	Audit quality	Auditor specialization has been used to measure audit quality, where a value of 1 indicates the auditor is specialized, and 0 otherwise. Auditor specialization in the industry i in year t is calculated using market share, as an indicator of auditor specialization. The relationship (1) is as follows: $\text{The Market Share of the Auditor in Industry I} = \frac{\sum \text{Assets of Clients Audited by the Firm in Industry i}}{\sum \textit{Assets of All Clients in Industry i}}$ In this study, firms are considered specialized in an industry if their market share, as indicated by the ratio above, is more significant than 1.2×(The Number of Companies in Industry I). After calculating the market share of an auditing firm, if the resulting value from the above equation is higher, the auditing firm is specialized in that industry. Therefore, if the auditing firm is specialized in the industry, it is assigned a value of 1; otherwise, it is assigned a value of 0.
COST_ M	Cost management	This is measured by the company's total expenses ratio to its total revenues for the year under consideration.
COST_ M* AQ	Interaction variable	This is calculated as the product of the cost management variable and company risk.
LEV	Financial leverage	This is calculated as the ratio of total debt to total assets.
SIZE	Company size	This is measured by the natural logarithm of the company's total assets.
AUDCHG	Change of auditor	If the auditor has changed in the year under review, the number is 1; otherwise, the number is 0.
LOSS	Loss indicator	If the company incurs a loss in the year under consideration, the value is set to 1; otherwise, it is 0.
SIZEB	Board size	It is equal to the logarithm of the number of board members in the year under review.
BIG1	Audit firm size	If the court of auditors audited the unit, the number is 1; otherwise, it is 0.
DUALITY	Auditor tenure	It is equal to the number of years that the auditor has continuously audited the audited unit up to the year under review.
year	Years	Year dummy variable
industry	Industry	Industry dummy variable

Table 3. The Indices of Financial Resilience

Row	Indicator	Description
1	Company Age (Age)	The time gap between the company's establishment date and the year under review.
2	Exports (Foreign)	If the business unit has exports in the year under review, the value is one; otherwise, it is zero.
3	Subsidiary (SEG)	If the company has a subsidiary, the value is one; otherwise, it is zero.
4	Company Size (Size)	The natural logarithm of the company's assets.
5	Research and Development and Advertising Expenses	The research and development expenses for the year under review were divided by the company's total assets.
6	Sales Amount (Sales)	The company's sales amount is divided by its total assets.
7	Profitability (PROF)	If the company is profitable in the year under review, the value is one; otherwise, it is zero.
8	Return on Assets (ROA)	The operating profit ratio to the company's total assets.
9	Company Leverage (LEV)	The ratio of total liabilities to total assets.
10	Inverse Operating Expense Growth (EX)	The current year's operating expenses minus the previous year's expenses are divided by last year's operating costs.
11	Tangible Assets (TAN)	The company's tangible assets are divided by its total assets.
12	Market Share of Company (FCON)	Herfindahl-Hirschman Index (HHI): $HHI_{it} = \sum_{i=1}^{k} (\frac{Sales_{it}}{Sales_{jt}})^2$
13	Auditor's Opinion Type	If the auditor's opinion is favorable, it is one; otherwise, it is zero.
14	Retained Earnings	The ratio of retained earnings to total assets.
15	Positive Free Cash Flows	-

4. Data Analysis

4.1. Descriptive Statistics

This study uses a multiple regression model to examine the role of cost management in the relationship between audit quality, financial distress, and financial resilience in Iraqi companies. The data for this research pertains to 21 companies from 2014 to 2023. Table 4 presents information related to the study's variables, including the number of observations, mean, standard deviation, as well as minimum and maximum values.

Table 4. Descriptive Statistics

	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
FD	0.110	0.000	1.000	0.000	0.310	2.500	7.250
AQ	0.380	0.000	1.000	0.000	0.490	0.510	1.260
COST_M	-1.670	-0.980	-0.110	-20.160	2.560	-5.320	34.510
AUDCHG	0.070	0.000	1.000	0.000	0.260	3.330	12.080
BIG1	0.450	0.000	1.000	0.000	0.500	0.210	1.040
DUALITY	0.760	1.000	1.000	0.000	0.430	-1.230	2.510
FR	4.040	0.230	88.970	-4.430	12.040	4.020	20.980
LEV	0.700	1.000	1.870	0.000	0.380	-0.410	1.850
LOSS	0.380	0.000	1.000	0.000	0.490	0.510	1.260
SIZE	23.010	22.380	29.170	16.630	2.600	0.960	3.470
SIZEB	6.710	7.000	9.000	4.000	1.240	0.160	2.550

4.2. The Results of hausman, F, and Breusch-Pagan Tests

According to Table 5, the F-test for the cross-section assesses the null hypothesis of pooled (common) effects across cross-sectional units, versus the alternative hypothesis of fixed effects in the cross-section. Based on the statistic and the associated p-value (0.00, below 0.1), the null hypothesis was rejected in favor of the alternative, signifying the existence of fixed effects in the cross-section. The F-Test (Cross-section and Time) evaluates the null hypothesis of pooled cross-sectional and temporal effects versus the alternative hypothesis of a panel model incorporating fixed effects in both dimensions. The null hypothesis was rejected based on the statistic and the associated p-value (0.00, below 0.1), signifying that the model exhibits fixed effects in cross-section and time. The Breusch-Pagan Test (Cross-section) evaluates the null hypothesis of pooled cross-sections versus the alternative hypothesis of a panel exhibiting random effects. The null hypothesis was rejected based on the statistic and the associated p-value (0.00, below 0.1), signifying that the model exhibits random effects in the cross-section. The Breusch-Pagan Test (Cross-section and Time) evaluates the null hypothesis of pooled cross-sectional and temporal effects against the alternative hypothesis of a panel exhibiting random effects in both dimensions. The null hypothesis was rejected based on the statistic and the associated p-value (0.00, below 0.1), affirming that the panel model exhibits random effects in both cross-section and time. The rejection of the pooled effects hypothesis in both tests, together with the Hausman test's role in distinguishing between fixed and random effects—as indicated by the F-Limer Test signaling fixed effects and the Breusch-Pagan Test signaling random effects—necessitates the application of the Hausman test to determine the appropriate final model. This test evaluates the null hypothesis of random effects compared to the alternative hypothesis of fixed effects. Based on the statistic and the associated p-value (0.00, below 0.1), the null hypothesis was rejected, and it determined that the final model incorporates fixed effects across cross-sections and time.

Table 5. The Results of Hausman, F, and Breusch-Pagan Tests

Result	Hausman Test		Breusch-Pagan		Breusch-Pagan		Breusch-Pagan		Limer's F-test		Limer's F-test		Limer's F-test	
	P-value	Statistic	P-value	Statistic	P-value	Statistic	P-value	Statistic	P-value	Statistic	P-value	Statistic	P-value	Statistic
Panel with fixed effects of section and time	0.000	201.720	0.000	152.320	0.000	121.960	0.000	146.960	0.000	14.250	0.000	108.830	0.000	15.700

4.3. The Results of Testing Research Hypotheses

Based on the test results, the first hypothesis in Table 6 indicates a significant positive relationship between audit quality and company financial distress. The higher the audit quality, the greater the financial distress in Iraqi companies. According to the test results, the significance level is 0.00, less than the 5% error level, and the coefficient is -0.0181, indicating a negative relationship between the two variables. Since the significance level of the above model is 0.00, it demonstrates that the model is statistically significant.

Table 6. The Results of Testing the First Hypothesis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AQ	-0.018	0.002	-9.140	0.000
COST_M	-0.064	0.031	-2.060	0.020
AUDCHG	-0.104	0.009	-10.640	0.000
BIG1	-0.077	0.026	-2.930	0.000
DUALITY	0.126	0.068	1.840	0.060
LEV	0.070	0.321	0.220	0.750
LOSS	-0.006	0.065	-0.100	0.870
SIZE	-0.003	0.001	-2.480	0.030
SIZEB	-0.023	0.029	-0.820	0.490
C	0.141	0.850	0.170	0.670
R-squared	0.510	Mean dependent var		0.100
Adjusted R-squared	0.480	S.D. dependent var		0.310
S.E. of regression	0.290	Akaike info criterion		0.410
Sum squared resid	3.710	Schwarz criterion		0.690
Log-likelihood	0.1800	Hannan-Quinn criter.		0.490
F-statistic	75.230	Durbin-Watson stat		1.870
Prob (F-statistic)	0.000			

Table 7. The Results of Testing the Second Hypothesis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AQ	0.017	0.002	9.397	0.000
COST_M	-0.061	0.025	-2.409	0.020
AQ*COST_M	0.010	0.002	5.281	0.000
AUDCHG	-0.098	0.019	-5.217	0.000
BIG1	-0.073	0.095	-0.774	0.440
DUALITY	0.116	0.043	2.726	0.000
LEV	0.065	0.101	0.643	0.5200
LOSS	-0.006	0.118	-0.048	0.960
SIZE	-0.003	0.001	-2.426	0.010
SIZEB	-0.023	0.036	-0.645	0.520
C	0.137	0.490	0.279	0.780
R-squared	0.500	Mean dependent var		0.080
Adjusted R-squared	0.470	S.D. dependent var		0.270
S.E. of regression	0.270	Akaike info criterion		0.380
Sum squared resid	3.670	Schwarz criterion		0.780
Log-likelihood	0.180	Hannan-Quinn criter.		0.540
F-statistic	91.180	Durbin-Watson stat		1.670
Prob (F-statistic)	0.000			

The independent variable and moderator are statistically significant according to the t-statistic and the associated p-value. The null hypothesis posits that the coefficients lack significance; nevertheless, with a p-value of 0.00 below 0.1, the null hypothesis is rejected, affirming the coefficient's significance. The R^2 value of the model is 0.47, indicating that the independent variables account for 47% of the variation in the dependent variable. The F-statistic and its associated p-value demonstrate the rejection of the null hypothesis regarding the model's overall insignificance, indicating that the model is significant.

Table 7 indicates that the cost management variable moderates the association between corporate risk and financial resilience. The influence of firm risk on financial resilience is amplified by the cost management variable, indicated by a positive coefficient of 0.010 and a significance level of 0.00, below 5%. Consequently, the cost management variable moderates the association between audit

quality and financial distress in Iraqi firms, strengthening the link and amplifying the impact of audit quality on financial distress.

Table 8. The Results of Testing the Third Hypothesis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AQ	1.110	0.498	2.220	0.030
COST_M	-1.180	0.533	-2.210	0.030
AUDCHG	-3.790	1.590	-2.380	0.010
BIG1	-7.050	2.790	-2.530	0.000
DUALITY	-6.110	3.015	-2.020	0.070
LEV	12.950	3.344	3.870	0.000
LOSS	-6.070	1.487	-4.080	0.000
SIZE	-0.780	0.553	-1.410	0.190
SIZEB	-1.9700	0.133	-14.750	0.000
C	32.95	16.371	2.010	0.090
R-squared	0.6100	Mean dependent var		4.280
Adjusted R-squared	0.560	S.D. dependent var		12.310
S.E. of regression	13.430	Akaike info criterion		6.960
Sum squared resid	16992.300	Schwarz criterion		7.220
Log-likelihood	-470.810	Hannan-Quinn criter.		9.070
F-statistic	3.690	Durbin-Watson stat		1.680
Prob(F-statistic)	0.000			

Based on the test results, the first hypothesis in Table 8 indicates a significant positive relationship between audit quality and the resilience of companies. The higher the audit quality, the greater the resilience of Iraqi companies because, according to the test results, the significance level is 0.03, less than the 5% error level, and the coefficient is -1.11, indicating a negative relationship between these two variables. Since the significance level of the above model is 0.00, it demonstrates that the model is statistically significant and has the necessary and sufficient significance.

Table 9. The Results of Testing the Fourth Hypothesis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AQ	1.080	0.460	2.350	0.010
COST_M	-1.150	0.520	-2.200	0.030
AQ*COST_M	0.790	0.320	2.500	0.000
AUDCHG	-3.370	1.550	-2.180	0.050
BIG1	-4.950	2.720	-1.820	0.070
DUALITY	-6.090	2.940	-2.070	0.040
LEV	7.510	3.260	2.300	0.020
LOSS	-3.980	1.450	-2.740	0.000
SIZE	-0.480	0.540	-0.890	0.380
SIZEB	-1.380	0.130	-10.910	0.000
C	26.900	15.960	1.690	0.090
R-squared	0.650	Mean dependent var		4.390
Adjusted R-squared	0.580	S.D. dependent var		12.930
S.E. of regression	12.430	Akaike info criterion		7.960
Sum squared resid	16982.300	Schwarz criterion		8.220
Log-likelihood	-470.810	Hannan-Quinn criter.		8.070
F-statistic	2.000	Durbin-Watson stat		1.860
Prob (F-statistic)	0.040			

The independent variable and moderator are significant based on the t-statistic and the corresponding p-value. The test's null hypothesis, stating that the coefficients are not significant, is rejected because the p-values (0.00 and 0.03) are both less than 0.1, confirming the significance of the coefficients. The R^2 value of the model is 0.61, implying that the independent variables explain 61% of the variation in the dependent variable. The F-statistic and its corresponding p-value indicate that the null hypothesis of the model's overall insignificance is rejected, suggesting that the model is significant.

Table 9 indicates that the cost management variable moderates the relationship between audit quality and financial resilience. In other words, the cost management variable strengthens the relationship between audit quality and financial resilience. The coefficient for this variable is positive (0.79), and its significance level is 0.00, which is less than 5%. Therefore, the cost management variable strongly moderates the relationship between audit quality and financial resilience in Iraqi companies, enhancing the strength of this relationship and the effect of audit quality on financial resilience.

5. Discussion and Conclusion

The present study aimed to investigate the complex relationship between audit quality, financial distress, and financial resilience, focusing on the moderating role of cost management in companies listed on the Iraq Stock Exchange. This study also aimed to offer fresh perspectives on corporate financial management, considering the growing relevance of financial resilience and the difficulties businesses encounter in developing markets. According to the research results, one of the main components of corporate governance, audit quality, plays a significant part in lowering the probability of financial crisis and increasing the financial resilience of businesses. Higher audit quality organizations seem more resilient when confronting financial difficulties and less likely to suffer financially. These results complement Kyriakou's (2022) and Salehi et al.'s (2019) studies. Particularly, in developing nations, such as Iraq, the study adds to the mounting corpus of research on the value of audit quality in improving organizational resilience and controlling financial risks. Moreover, the moderating influence of cost control is essential in strengthening the link between audit quality and financial resilience, offering significant consequences for businesses trying to increase their financial stability in demanding surroundings.

This study investigated the moderating effect of cost management on the link between audit quality and the financial situation of organizations. The findings indicated that cost management, as a crucial instrument in financial management, can substantially influence this relationship. Cost management specifically enhanced the correlation between audit quality and financial resilience while diminishing the association between audit quality and financial distress. This discovery corresponds with the studies conducted by Le and Moore (2023). These findings affirm the significance of cost management as a crucial technique for bolstering financial resilience and mitigating the risk of financial hardship in Iraqi enterprises. Organizations that control their expenditures are more likely to capitalize on superior audit quality and demonstrate enhanced adaptability in financial emergencies. Another innovation of this study is investigating the moderating role of cost management in the relationship between audit quality, financial distress, and financial resilience. This approach provides a new perspective on corporate financial management in times of crisis. The findings suggest that cost management, not only as an independent tool but also as a moderating factor, can significantly influence the financial condition of companies.

This study provides a unique context for future research in Iraq's burgeoning market, as it is the first to examine the relationships among cost control, audit quality, financial distress, and financial resilience in firms listed on the Iraq Stock Exchange. Iraq's political and economic climate has provided unique challenges for Iraqi companies, yet learning about these problems will enable the country to develop accounting and financial capabilities. The findings of this research offer insightful and helpful information to Iraq's managers, analysts, and regulatory authorities. The results help company managers create suitable plans for raising cost control and audit quality. The results show that maintaining high audit quality can significantly strengthen the financial resilience of companies and reduce exposure to financial crises. Therefore, it is recommended that managers use expert and reputable auditors and, along with that, prioritize cost management as a key tool to increase organizational flexibility and efficiency. For policymakers and regulators, the results highlight the importance of raising audit quality standards and supporting effective cost management practices, especially in emerging markets, such as Iraq, where firms face high levels of uncertainty and financial instability. Strengthening auditor independence and financial transparency by regulators can help improve corporate resilience. For investors and stakeholders, the findings indicate that companies with high audit quality and effective cost management are more financially stable, which can reduce investment risk and increase long-term value creation. For researchers, this study contributes to the

richness of the research literature by integrating the variables of audit quality, financial crisis, financial resilience, and cost management. These results help analysts evaluate the corporate financial situation and possible dangers of the project. By offering the evidence for the effects of cost control and audit quality on a company's financial condition, this study contributes to the existing body of knowledge in this field. The results of this study can provide the basis for the subsequent investigations on corporate finance management in developing economies. Finally, this research has revealed that two main elements, cost control and audit quality, significantly influence lowering the probability of a financial crisis and enhancing corporate financial resilience. These results underline the need for proper financial management and robust corporate governance systems to preserve the stability and sustainability of businesses during a crisis.

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