

**EVALUATING THE EFFECTIVENESS OF FINANCIAL RISK MANAGEMENT
TOOLS IN IRAQI COMPANIES: A CASE STUDY OF THE GENERAL COMPANY
FOR ELECTRICAL INDUSTRIES**

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ABSTRACT

This research aims to evaluate the effectiveness of financial risk management tools in Iraqi companies, specifically in the General Company for Electrical Industries. The study adopted a descriptive-analytical approach, utilizing a questionnaire as the main data collection tool, distributed to a sample of 50 employees. The research concluded that the effectiveness of risk management tools in the targeted company was at a moderate-to-weak level, attributed to the absence of a clear institutional framework, weak training and qualification, limited financial resources, and reliance on traditional methods. The study recommends establishing a specialized risk management unit, adopting modern scientific methods for risk assessment, enhancing risk culture, and allocating sufficient resources to develop risk management systems.

Keywords: Financial Risk Management, Risk Management Tools, Financial Performance, Iraqi Companies, General Company for Electrical Industries.

1. INTRODUCTION

The contemporary world is witnessing rapid developments across all fields, particularly in the financial domain, where the global economy has become increasingly interconnected and complex. These developments have led to the emergence of new and diverse financial risks, prompting financial institutions, especially banks, to place paramount importance on risk management.

The significance of financial risk management lies in its contribution to protecting corporate financial resources, enhancing their capacity to withstand crises and reduce potential losses, in addition to its role in supporting sound financial decision-making. Economic institutions have developed a set of tools and methods for managing financial risks, such as hedging tools, diversification, financial analysis, and internal control systems. However, the effectiveness of these tools varies depending on the economic and administrative environment in which they are applied.

In the Iraqi context, companies face particular challenges including economic fluctuations, instability of financial policies, and weak institutional infrastructure in some sectors. This elevates the level of financial risks and makes evaluating the effectiveness of their management tools critically important. Indeed, the weakness or inefficiency in using financial risk management tools can lead to significant financial losses and negatively impact the financial and investment performance of companies.

Financial risk management is a systematic process for identifying, assessing, monitoring, and controlling the financial risks that an organization may face, aiming to ensure the achievement of

its strategic objectives. This process gains special importance in the banking sector due to its pivotal role in the economy and its sensitivity to financial and economic fluctuations. This research comes to evaluate the role of financial risk management in improving the effectiveness of the financial performance of Iraqi companies, in light of the increasing challenges facing the banking sector in Iraq and the world.

Consequently, this research aims to evaluate the effectiveness of financial risk management tools in Iraqi companies by analyzing their usage extent, their efficiency in mitigating financial risks, and their role in improving financial performance. This contributes to providing scientific and practical recommendations to help company managements and decision-makers develop risk management systems suitable for the Iraqi economic reality.

2. RESEARCH METHODOLOGY

First: Research Problem

The main research problem is defined by the question regarding the effectiveness of financial risk management in Iraqi companies and its impact on improving financial performance. This problem stems from the urgent need to mitigate the severity of financial and operational risks facing Iraqi companies by adopting a Risk and Control Self-Assessment (RCSA) system. This system involves analyzing the performance of various organizational units, identifying risks associated with each unit, establishing control procedures, and measuring them quantitatively and scientifically. Implementing this system requires the units themselves to verify the soundness of operational procedures, which contributes to enhancing the efficiency of the internal control environment, keeping risk levels within acceptable limits, and mitigating their impacts and repercussions, thereby positively reflecting on the achievement of long-term organizational goals.

Second: Research Importance

The importance of this research is evident on both theoretical and applied levels as follows:

Theoretical Importance:

- The research enriches theoretical knowledge in the field of financial risk management and its relationship with improving financial performance within the Iraqi context.
- It highlights prominent international practices in financial risk management and the feasibility of employing them in the Iraqi environment.

Applied Importance:

- It presents results and recommendations that can contribute to developing financial risk management practices in Iraqi companies.
- It helps enhance the effectiveness level of the financial performance of these companies.
- It provides guiding evidence for key stakeholders in the Iraqi banking and financial sector.

Third: Research Objectives

This research aims to achieve the following:

1. Evaluate the financial risk management system implemented in Iraqi companies.
2. Measure the effectiveness level of financial risk management in Iraqi companies.
3. Determine the impact of applying financial risk management on the effectiveness of financial performance in Iraqi companies.
4. Identify the most prominent challenges hindering the application of financial risk management in those companies.

Fourth: Research Hypotheses

This research seeks to test the validity of the following hypotheses:

- **First Hypothesis (H1):** There is a statistically significant relationship between the use of financial risk management tools and the improvement of financial performance in Iraqi companies.
- **Second Hypothesis (H2):** There is a statistically significant relationship between the use of financial hedging tools and the reduction of financial risk levels in Iraqi companies.
- **Third Hypothesis (H3):** There is a statistically significant relationship between the effectiveness of internal financial risk management policies and the enhancement of financial stability in Iraqi companies.
- **Fourth Hypothesis (H4):** There is a statistically significant relationship between the use of financial risk measurement tools (sensitivity analysis, debt ratios) and the quality of managerial decisions in Iraqi companies.
- **Fifth Hypothesis (H5):** There is a statistically significant relationship between the efficiency of administrative staff and the effective application of financial risk management tools in Iraqi companies.
- **Sixth Hypothesis (H6):** There are statistically significant differences in the effectiveness level of financial risk management tools attributable to differences in company size or the economic sector to which it belongs.

Fifth: Research Limitations

This study faced a set of limitations that defined its scope, the most notable being:

- **Subject Limitations:** The study was limited to the impact of applying the Risk and Control Self-Assessment (RCSA) system on the financial and operational performance of the bank, without addressing other implications of its application. It also addressed the reality of application without proposing solutions for developing and improving the system.
- **Spatial Limitations:** These were represented by the management and branches of a leading Iraqi company, with the research confined to companies listed on the Iraq Stock Exchange.
- **Temporal Limitations:** The study was conducted during the academic year (2025-2026).

3. THEORETICAL FRAMEWORK

First: Concept of Financial Risk

Risk management is a comprehensive methodology based on identifying, assessing, and analyzing risk, then developing an appropriate plan to deal with it, aiming to reduce its negative effects on the organization using the best means and at the lowest possible cost. The concept of risk management rests on a set of scientific methods that should be considered when making decisions to face any risk, in order to prevent or reduce potential losses, thus limiting the phenomenon of uncertainty. Risks can arise from multiple sources, including uncertainty in stock markets and trading markets, threats resulting from project failure at any stage of its development, natural disasters that may threaten inventory, or even wars (Hindi, 2008: 21).

In financial and business markets, the concepts of profit and loss correspond to the concepts of return and risk, meaning that investors' undertaking of investments involves an expected return and a potential risk. In other words, the terms investment, return, and risk are intertwined; wherever investment exists, return and risk exist. The investor aims through their investments to achieve high returns and reduce the costs or risks associated with these investments to the lowest possible level, which requires them to measure the expected returns from their investments and the degree

of risk they may face. There are multiple methods for measuring this, and it can be said that the investor, through the available investment opportunities, makes the appropriate investment decision and determines whether to pursue investments that achieve their sought-after goals (Hindi, 2008: 21).

Second: Concept of Return on Investment

Investment is defined as the purchase or lease of an asset, the operation or sale of which generates incoming cash flows exceeding the outflows spent to operate or acquire the asset, enabling the recovery of capital during the planned investment period, and achieving a required rate of return appropriate for the degree of risk associated with this investment (Hindi, 2008: 21).

Return is considered one of the most important variables and pillars of the investment process, and one of the foundations upon which the investment decision is based, as this return determines the rate of increase and growth in wealth that the investor aspires to and seeks to achieve. Additionally, return is considered the most important outcome and result of the investment undertaken by the investor. Multiple definitions of return have been presented, including that it is "the reward the investor receives in compensation for the waiting period and potential risks of the invested capital." It is also defined as "the cash flows realized by the investor for employing capital in the investment project over a specific period" (Hindi, 2008: 21). The expected return on a financial security is also defined as the yield or profit obtained by the investor when employing their funds in various investments; it is also the amount of increase or growth in the invested capital (Hindi, 2008: 222).

Third: Concept of Risk in Investment

Risk is defined as a relative measure of the volatility of future returns or cash flows to be obtained (Hindi, 2008: 222). It is known that when undertaking investments, investors primarily aim to achieve profit and capital growth, estimating these profits in advance. However, after some time passes, not all expected profits may be fully and accurately realized, and here the concept of risk arises. The concept of risk involves the possibility that the profit or expected return is not precisely achieved, and that the actual realized return after the investment deviates from the pre-estimated expected return. To determine the degree of risk, both returns (expected and realized) are compared, and risk is absent when these two returns are equal (Hindi, 2008: 222).

Definitions of risk in financial literature are numerous. Some defined it as "non-realization of return," others as "irregularity of returns, which is due to uncertainty related to future forecasts," while others defined it as "the probability of the investor failing to achieve the expected return on the investment; it is also the amount of change in expected future returns due to the project's internal circumstances or conditions beyond its control and capabilities." Risk has also been defined as "the change in expected future returns due to the project's internal circumstances or conditions beyond its control and capabilities" (Saleh, 2000: 230). Project risk is defined as "the degree of variation in its cash flow from an estimated or expected cash flow; the greater the range of these variations, the greater the risk. Risk is associated with situations where it is possible to estimate the probability distribution for a specific project" (Saleh, 2000: 230).

Fourth: Types of Risks

By reviewing scientific literature concerning risks that an organization may face, it becomes evident that these risks can be classified according to three main bases: classification based on the source of risk, classification based on the relation to the organization, and classification based on informational competitive advantage.

1. Types of Risks by Source of Risk

Literature concerned with financial risk management indicates that contemporary organizations face a diverse set of financial risks in their various functional activities and throughout the organization. Among the most prominent of these risks are (Hindi, 2008: 249):

- **Business Risk:** Risks associated with the industry and the primary field in which the organization operates.
- **Operational Risk:** Risks associated with internal systems or individuals working within these systems in the organization.
- **Management Risk:** Risks associated with the managerial functions and practices carried out by the organization's management.
- **Legal Risks:** Risks arising from entering into contractual agreements with other parties with uncertainty about fulfilling obligations towards these parties.
- **Credit Risks:** Risks associated with the failure of the counterparty to fulfill the obligations they committed to.
- **Price Risks:** Risks associated with undesirable movements (up or down) in market prices, divided into: Interest Rate Risk, Currency Exchange Rate Risk, Commodity Price Risk, and Equity Risk.
- **Funding Risk:** Risks resulting from the organization's failure to meet debt obligations according to the terms agreed upon with financiers or lenders.
- **Concentration Risk:** Risks resulting from concentrating investments in one sector or several small sectors, also called "non-diversification risk."
- **Hedging Risk:** Risks resulting from errors in hedging or failure to achieve adequate coverage for the risks the organization faces.
- **Political and Country Risk:** Risks resulting from government decisions such as taxes, pricing, customs, and nationalization.

2. Types of Risks by Relation to the Organization

According to this classification, adopted by modern models in finance theory, the risks faced by an organization are divided into two main groups (Hindi, 2008: 250):

- **Systematic Risks:** These are the "general" risks faced by all organizations in the market, regardless of the organization's characteristics in terms of type, size, or ownership structure. These risks arise from variables of a general nature, such as economic or political conditions, and are therefore difficult to eliminate through diversification. They are also called Undiversifiable Risks or Market Risks. Francis (1986) indicates that organizations characterized by high systematic risk in their stock returns are those operating in core sectors such as equipment manufacturing companies, road and bridge construction contracting companies, and companies whose financial structure is characterized by a high debt ratio along with seasonality in sales, or those producing goods subject to rapid obsolescence, in addition to relatively small organizations. In such organizations, sales, profits, and stock prices parallel the general level of economic activity, raising the systematic risk ratio (Hindi, 2008: 249).
- **Unsystematic Risks:** These are the "specific" risks faced by a particular organization due to its characteristics and circumstances. They can be reduced or avoided by relying on a diversification strategy, and are therefore also called Diversifiable Risks or Unique Risks. Francis (1986) indicates that organizations characterized by a low systematic risk ratio and a high unsystematic risk ratio are those producing non-durable goods, where the correlation is

weak between sales, profits, stock prices, and the general level of economic activity (Hindi, 2008: 250).

Fifth: Financial Risk Management Tools

Financial risk management tools are considered fundamental means that companies rely on to mitigate the negative effects of financial risks, aiming to reduce the degree of uncertainty associated with financial activities and achieve greater stability in financial performance. These tools vary according to the nature of the risks companies face and the economic environment in which they operate (Hull, 2018: 45).

1. Financial Hedging Tools

Financial hedging refers to using financial instruments and procedures aimed at reducing potential losses resulting from price fluctuations, especially exchange rates, interest rates, and commodity prices. Hedging is one of the most common tools in financial risk management, helping companies stabilize future costs or revenues (Al-Shammari, 2018: 112). Prominent financial hedging tools include: hedging against exchange rate risk, hedging against interest rate risk, and hedging against commodity price fluctuations. The importance of hedging lies in its ability to protect profits and cash flows from unexpected fluctuations; however, its use requires financial expertise and certain costs that may limit its spread in some Iraqi companies (Al-Shammari, 2018: 115).

2. Futures Contracts

Futures contracts are derivative financial instruments used for risk management, where an agreement is made to buy or sell a specific asset at a predetermined price on a future date. These contracts are widely used to hedge against exchange rate and commodity price fluctuations (Hull, 2017: 78). Advantages of futures contracts include reducing uncertainty about future prices and providing protection against sharp market fluctuations. Disadvantages include the possibility of incurring losses if prices move favorably contrary to expectations, and the need for organized and developed financial markets (Hull, 2017: 82).

3. Options Contracts

Options contracts grant the company the right, but not the obligation, to buy or sell a specific asset at a predetermined price within a specified period. This tool is considered flexible in financial risk management as it allows the company to benefit from price improvements while limiting potential losses (Hull, 2017: 156). Options contracts are particularly used in managing exchange rate risk and stock price risk; however, their use requires paying a premium, which may reduce their adoption by some companies (Hull, 2017: 160).

4. Insurance

Insurance is considered a traditional and important tool in financial risk management, where risk is transferred from the company to the insurance company in exchange for a specified financial premium. Insurance is used to cover potential losses resulting from unforeseen risks (Abdul Karim, 2016: 88). The importance of insurance lies in reducing major financial losses, ensuring the company's financial stability, and protecting assets and property. However, insurance does not cover all types of financial risks and is often limited to specific risks (Abdul Karim, 2016: 92).

5. Financial Diversification

Financial diversification means distributing investments and financial resources across multiple areas to reduce risk. It is considered one of the most effective methods for reducing unsystematic risks (Brigham & Ehrhardt, 2017: 312). Diversification includes: diversifying funding sources, diversifying investments, and diversifying markets and currencies. Diversification helps reduce

the impact of losses in one area on the company's overall financial performance (Brigham & Ehrhardt, 2017: 315).

6. Accounting and Control Tools

Accounting and control tools play an important role in financial risk management by providing accurate financial information that helps management make appropriate decisions (Al-Hallaq, 2015: 134). Among the most prominent of these tools are: preparing planning budgets, analyzing financial statements, internal control, and financial reporting systems. These tools contribute to the early detection of financial risks and evaluating the efficiency of financial performance (Al-Hallaq, 2015: 138).

7. Quantitative Financial Analysis Tools

Companies rely on a set of quantitative methods to measure and manage financial risks (Jorion, 2011: 204). The most prominent include: sensitivity analysis, scenario analysis, measuring the standard deviation of cash flows, and risk measurement models such as Value at Risk (VaR). These tools help estimate the magnitude of potential risks and take appropriate preventive measures (Jorion, 2011: 210).

8. Evaluating the Effectiveness of Financial Risk Management Tools

The effectiveness of financial risk management tools is measured by their ability to reduce losses and profit volatility and achieve financial stability. This evaluation relies on financial indicators such as: reduced profit volatility, stable cash flows, and improved liquidity and solvency ratios (Jorion, 2011: 215).

Sixth: Previous Studies

Presenting previous studies is an important part of scientific research, aiming to review prior scientific efforts addressing the topic of financial risk management, benefit from their results and methodologies, and define the current study's position and distinction from them.

1. Study by Al-Hallaq (2015)

This study aimed to demonstrate the role of financial risk management in improving corporate financial performance, focusing on the tools used to mitigate risk. The study adopted the descriptive-analytical method and concluded that using financial risk management tools significantly contributes to reducing financial losses and achieving financial stability. The study recommended developing clear risk management policies in companies (Al-Hallaq, 2015: 145).

2. Study by Al-Shammari (2018)

This study addressed the concept of financial risk management and its modern tools, with practical applications in Arab companies. The study concluded that weak financial expertise and low awareness of hedging tools are among the most prominent obstacles to efficiently applying financial risk management. The study recommended qualifying financial staff and adopting advanced financial analysis methods (Al-Shammari, 2018: 156).

3. Study by Abdul Karim (2016)

The study aimed to clarify the role of financial derivatives in risk management, especially exchange rate and interest rate risks. The study's results showed that using financial derivatives helps reduce profit volatility; however, their application requires the existence of developed financial markets. The study recommended preparing the financial environment to encourage the use of these tools (Abdul Karim, 2016: 120).

4. Study by Hull (2018)

This study aimed to analyze the role of financial risk management tools in financial and non-

financial institutions. The study adopted an analytical method and concluded that applying hedging and risk management tools contributes to reducing financial volatility and improving institutional stability. The study emphasized the importance of having effective control systems for risk management (Hull, 2018: 312).

5. Study by Jorion (2011)

This study addressed methods for measuring financial risk using quantitative models, such as the Value at Risk (VaR) model. The study's results showed that using quantitative models contributes to improving the accuracy of risk measurement and supporting financial decisions. The study recommended integrating quantitative methods with traditional methods in risk management (Jorion, 2011: 356).

6. Study by Brigham & Ehrhardt (2017)

This study aimed to explain the relationship between financial risk management and corporate financial performance. It concluded that companies adopting clear risk management policies achieve better financial performance compared to companies that do not adopt these policies. The study recommended integrating risk management into the corporate financial strategy (Brigham & Ehrhardt, 2017: 489).

Seventh: Position of the Current Study Relative to Previous Studies

The current study distinguishes itself from previous studies by focusing on evaluating the effectiveness of financial risk management tools specifically in Iraqi companies, within an economic environment characterized by instability. This study also seeks to link the theoretical and applied aspects by analyzing the reality of using risk management tools and evaluating their impact on financial performance, which previous studies have not adequately addressed within the Iraqi context.

4. PRACTICAL FRAMEWORK

Research Methodology and Procedures

The research adopted the descriptive-analytical method, suitable for the nature of the research topic, which aims to evaluate the effectiveness of risk management tools in Iraqi companies, specifically in the **General Company for Electrical Industries**. This method focuses on describing the actual reality of risk management methods and tools within the company, analyzing their efficiency in dealing with various risks—whether operational, financial, administrative, or organizational—and then deriving scientific results that contribute to developing the risk management reality in the studied company.

Research Problem from the Practical Side

Iraqi companies, especially industrial ones, face multiple challenges resulting from work environment fluctuations, economic instability, and weak long-term planning, which increases the volume of risks that may affect business continuity. The research problem from the practical side emerges in the extent to which the risk management tools applied in the General Company for Electrical Industries can mitigate these risks, and their efficiency in supporting decision-making and achieving the company's strategic objectives.

Research Population

The research population consists of all employees in the General Company for Electrical Industries, one of the companies affiliated with the Iraqi Ministry of Industry and Minerals. It is considered an important industrial company that contributes to supporting the electrical energy sector by producing various electrical supplies and devices. The research population includes

employees in:

- Top Management
- Middle Management
- Financial Management
- Audit and Internal Control Department
- Technical and Production Departments
- Administrative and Service Departments

This is because they represent various managerial and organizational levels within the company.

Research Sample

The research sample was selected using a simple random sampling method to ensure fair representation of the various employee categories within the General Company for Electrical Industries. The sample included a number of employees and administrators who have direct or indirect knowledge of work procedures and risks facing the company, contributing to obtaining accurate and objective data reflecting the actual reality of applying risk management tools.

Introduction to the Studied Company

Historical Overview of the Company

The General Company for Electrical Industries is one of the industrial companies affiliated with the Iraqi Ministry of Industry and Minerals. It was established to support the national electrical sector by manufacturing, assembling, and maintaining electrical equipment and devices. Since its establishment, the company has contributed to meeting part of the local market needs, as well as providing job opportunities for national expertise and supporting the national economy.

Organizational Structure of the Company

The General Company for Electrical Industries adopts a traditional organizational structure consisting of:

- Top Management
 - Middle Management
 - Production and Administrative Departments and Units
- This structure aims to organize work and distribute authorities and responsibilities. However, the nature of this structure may sometimes affect the speed of decision-making, especially in matters related to risk management.

Nature of the Company's Activity

The main activities of the General Company for Electrical Industries are:

- Manufacturing and assembling electrical devices and equipment
 - Maintaining electrical equipment
 - Supporting public sector projects in the electricity field
 - Contributing to reducing imports through local production
- These activities require a complex industrial work environment, making the company susceptible to a variety of risks.

Risk Management Reality in the Company

Types of Risks Facing the Company

The General Company for Electrical Industries is exposed to several types of risks, the most prominent of which are:

1. **Operational Risks:** Such as equipment breakdown, poor maintenance, and shortage of raw materials.

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2. **Financial Risks:** Such as limited financial allocations and delayed payment of dues.
 3. **Administrative Risks:** Weak planning and unclear policies.
 4. **Human Risks:** Lack of expertise and insufficient training.
 5. **Environmental and Regulatory Risks:** Resulting from changing laws and instructions.

Risk Management Tools Applied in the Company

The General Company for Electrical Industries relies on a set of traditional tools in risk management, including:

- Relying on managerial experience in risk estimation
- Making immediate decisions to address problems
- Avoiding some high-risk activities
- Mitigating the impact of risks when they occur
- However, these tools are often applied in an unwritten and non-systematic manner.

Role of Top Management in Risk Management

Top management plays an important role in supporting risk management within the company by:

- Directing departments to address urgent problems
- Issuing decisions that reduce the volume of losses
- Monitoring some major risks

However, this role often does not rise to the level of long-term strategic planning for risk management.

Analysis of Questionnaire Results

Table (1): Distribution of Sample Members by Job Level

Job Level	Number
Top Management	6
Middle Management	14
Executive Management	22
Technical Staff	8
Total	50

Analysis of the Risk Identification Axis

The questionnaire results showed that the risk identification process in the company is carried out irregularly and relies heavily on the personal experience and expertise of employees, with weak documentation of potential risks.

Table (2): Distribution of Sample Members by Years of Service

Years of Service	Number	Percentage %
Less than 5 years	10	20%

Years of Service	Number	Percentage %
5 – Less than 10 years	18	36%
10 – Less than 15 years	12	24%
15 years and more	10	20%
Total	50	100%

Analysis of the Risk Assessment Axis

The results indicated a weakness in using scientific and quantitative methods in risk assessment, as the company often relies on personal estimation without relying on specialized analysis models.

Table (3): Arithmetic Means and Standard Deviations for the Risk Identification Axis

Statement	Arithmetic Mean	Standard Deviation	Assessment Level
Identifying operational risks	3.4	0.88	Medium
Identifying financial risks	3.1	0.92	Medium
Documenting risks	2.8	1.01	Weak
Periodically updating risks	2.6	1.05	Weak
Overall Average	2.97	-	Medium

Analysis of the Risk Treatment Axis

The results indicated that the company tends to mitigate or avoid risks, while the use of risk transfer tools, such as insurance, is low due to financial and administrative constraints.

Table (4): Arithmetic Means and Standard Deviations for the Risk Assessment and Analysis Axis

Statement	Arithmetic Mean	Standard Deviation	Assessment Level
Using scientific methods	2.5	1.02	Weak
Relying on personal experience	3.8	0.77	Good
Analyzing the probability of risk occurrence	2.9	0.95	Medium

Statement	Arithmetic Mean	Standard Deviation	Assessment Level
Measuring the impact magnitude	2.7	0.98	Weak
Overall Average	2.97	-	Medium

Analysis of the Monitoring and Control Axis

The results showed deficiencies in periodic risk monitoring mechanisms and the absence of an integrated system for continuously reviewing and updating risks.

Table (5): Arithmetic Means and Standard Deviations for the Risk Treatment Tools Axis

Statement	Arithmetic Mean	Standard Deviation	Assessment Level
Risk avoidance	3.6	0.84	Good
Risk mitigation	3.4	0.88	Medium
Risk transfer (Insurance)	2.4	1.06	Weak
Risk acceptance	3.1	0.91	Medium
Overall Average	3.12	-	Medium

Evaluation of Risk Management Tools Effectiveness

Table (6): Arithmetic Means and Standard Deviations for the Monitoring and Control Axis

Statement	Arithmetic Mean	Standard Deviation	Assessment Level
Existence of periodic control	2.9	0.94	Medium
Updating risk procedures	2.7	0.99	Weak
Existence of risk reports	2.5	1.04	Weak
Overall Average	2.7	-	Weak

Through data analysis, it is evident that the effectiveness of risk management tools in the General Company for Electrical Industries was at a medium-to-weak level. This is attributed to:

- Absence of a clear institutional framework for risk management
- Weak training and qualification
- Limited financial resources

- Reliance on traditional methods

5. PRESENTATION AND ANALYSIS OF RESULTS

First: Presentation of Demographic Characteristics Results of the Research Sample

The questionnaire results, as shown in the tables on the demographic characteristics of the research sample, revealed that most sample members belong to executive and middle management levels. These are the categories most engaged with daily operations within the General Company for Electrical Industries, granting the research results a high degree of realism and accuracy. The results also showed that the majority of the sample members have medium to long years of service, reflecting sufficient practical experience in dealing with the various risks facing the company.

Second: Presentation and Analysis of Results for the Risk Identification Axis

It is evident from the results in Table (3) that the risk identification process in the General Company for Electrical Industries was at a medium level, with an overall arithmetic mean of (2.97). This reflects that the company relies on irregular risk identification, often depending on the personal experience of employees and management, with a clear weakness in documenting and periodically updating risks, which may lead to difficulty in controlling them in the future.

Third: Presentation and Analysis of Results for the Risk Assessment and Analysis Axis

The results in Table (4) showed that the risk assessment and analysis axis achieved an overall average of (2.97), indicating a medium-to-weak level. It became clear that the company relies heavily on personal estimation in risk assessment, against a clear weakness in using modern scientific and quantitative methods, such as risk analysis models and measuring the probability of occurrence and impact magnitude.

Fourth: Presentation and Analysis of Results for the Risk Treatment Tools Axis

The results in Table (5) indicate that the risk treatment tools used in the General Company for Electrical Industries were at a medium level, with an overall average of (3.12). The results clarify that the company tends to use risk avoidance and mitigation methods, while there is a clear weakness in using risk transfer tools, such as insurance, largely due to the financial and administrative constraints the company faces.

Fifth: Presentation and Analysis of Results for the Monitoring and Control Axis

Table (6) shows that the monitoring and control axis obtained an overall average of (2.70), reflecting a weak level. These results indicate deficiencies in periodic risk monitoring mechanisms, and the unavailability of regular reports for reviewing and updating risks, which reduces the effectiveness of the risk management system within the company.

Discussion of Results

First: Discussion of Risk Identification Results

The research results indicate that weak documentation of risks and failure to update them periodically may lead to the exacerbation of risk impacts when they occur. This necessitates the adoption of formal and organized mechanisms for risk identification within the company.

Second: Discussion of Risk Assessment Results

The company's reliance on personal experience in risk assessment, without basing it on modern scientific methods, reflects the need to develop employee skills and adopt quantitative analysis models that contribute to improving the accuracy of the assessment process.

Third: Discussion of Risk Treatment Results

The results showed that limited financial resources play a significant role in reducing the use of risk transfer tools, making the company more vulnerable to bearing losses when risks materialize.

Fourth: Discussion of Monitoring and Control Results

Weak monitoring and control indicate the absence of an integrated risk management system, which negatively affects the company's ability to predict and effectively deal with future risks.

Fifth: Discussion of Overall Results

Overall, the research results confirm that the effectiveness of risk management tools in the General Company for Electrical Industries is still below the required level. This is due to:

- Absence of a clear institutional framework for risk management
- Weak training and qualification
- Limited financial resources
- Reliance on traditional methods

6. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Through the analysis of data presented in Chapter Four, the research arrived at a set of conclusions, the most important of which are:

1. The risk identification process in the company is carried out irregularly and heavily relies on personal experience and individual estimation, with weak documentation of potential risks.
2. The results of risk assessment and analysis showed a clear deficiency in the use of scientific and quantitative methods, as the company often relies on descriptive evaluation without utilizing specialized analysis models.
3. Risk treatment in the company focuses on traditional procedures such as risk mitigation or avoidance, with weak use of modern tools like insurance or risk transfer.
4. The results indicated weak continuous monitoring and control of risks, and the absence of an integrated system for periodically reviewing and updating risks.
5. The results of evaluating the effectiveness of risk management tools showed that the overall effectiveness level was medium-to-weak, indicating the immaturity of the risk management system in the company.
6. The weak effectiveness of risk management tools is attributed to the lack of specialized training programs, weak administrative support, in addition to limited financial and technical resources.
7. The reality of risk management in the company reflects the state of most Iraqi public companies that still rely on traditional management methods.

Recommendations

In light of the conclusions reached by the research, the researchers recommend the following:

1. The necessity of establishing a specialized unit or department for risk management within the company's organizational structure, responsible for identifying, assessing, and monitoring risks.
2. Adopting modern scientific methods in risk assessment and analysis, such as risk matrices and quantitative models.
3. Creating a risk database that includes risk types, causes, effects, and treatment methods.
4. Enhancing the risk management culture among employees by holding specialized training courses and workshops.
5. Paying attention to activating periodic risk monitoring and control tools, with preparing periodic reports submitted to top management.

6. Allocating sufficient financial and technical resources to support the application of modern risk management systems.
7. Benefiting from the experiences of successful companies locally and internationally in the field of risk management and adapting them to the Iraqi work environment.

Future Research Avenues

The researchers suggest conducting future studies that address:

- Comparing the effectiveness of risk management tools between public and private companies.
- Studying the impact of risk management on improving the financial and operational performance of Iraqi companies.
- Evaluating the role of digital transformation in developing risk management systems.

REFERENCE

1. Abdul Karim, Mohamed Mahmoud. (2016). *Financial Derivatives and Risk Management*. Cairo: Dar Al-Fikr.
2. Al-Azzawi, Qassim Nayef. (2012). *Scientific Research Methodology*. Amman: Dar Al-Thaqafa for Publishing and Distribution.
3. Al-Hallaq, Khaled Abdul Rahman. (2015). *Financial Risk Management*. Amman: Dar Al-Maseera for Publishing and Distribution.
4. Al-Obaidi, Falah Hassan. (2017). *Financial Management and Financial Statement Analysis*. Amman: Dar Al-Manahij for Publishing and Distribution.
5. Al-Shammari, Abdullah Hussein. (2018). *Advanced Financial Management*. Amman: Dar Al-Yazouri Scientific for Publishing and Distribution.
6. Al-Zubaidi, Ali Hussein. (2016). *Financial Control and its Role in Improving Financial Performance*. Amman: Dar Al-Maseera for Publishing and Distribution.
11. Basel Committee on Banking Supervision. (2010). *Principles for Financial Risk Management*. Basel: Bank for International Settlements.
12. Brigham, E. F., & Ehrhardt, M. C. (2017). *Financial Management: Theory and Practice* (15th ed.). Boston: Cengage Learning.
13. Fraser, J. R. S., & Simkins, B. J. (Eds.). (2016). *Enterprise Risk Management: Today's Leading Research and Best Practices*. Hoboken: Wiley.
7. Hassan, Abdul Rahman Hassan. (2014). *Risk Management: Concepts and Applications*. Alexandria: Dar Al-Jami'a Al-Jadida.
8. Hindi, Muneer Ibrahim. (2008). *Investment Fundamentals and Securities Analysis*. Alexandria: Mansha'at Al-Ma'arif.
14. Hull, J. C. (2017). *Options, Futures, and Other Derivatives* (9th ed.). London: Pearson Education.
15. Hull, J. C. (2018). *Risk Management and Financial Institutions* (5th ed.). Hoboken: Wiley.
16. Jorion, P. (2011a). *Financial Risk Manager Handbook* (6th ed.). Hoboken: Wiley.
17. Jorion, P. (2011b). *Value at Risk: The New Benchmark for Managing Financial Risk* (3rd ed.). New York: McGraw-Hill.
9. Mahmoud, Ahmed Abdullah. (2013). *Financial Risks and Methods of Managing Them in Companies*. Cairo: Dar Al-Fikr Al-Arabi.
10. Saleh Al-Hanawi, Mohamed. (2000). *Financial Management and Financing*. Alexandria: Al-Dar Al-Jami'iyah for Publishing.

-
18. Saunders, A., & Cornett, M. M. (2014). *Financial Institutions Management: A Risk Management Approach* (8th ed.). New York: McGraw-Hill.