

# A Proposed Model For Financial Risk Management For Cooperative Insurance Companies

**Mohamednour Eltahir Ahmed Abdelgadir<sup>1</sup>, Ahmed Osman Ibrahim Ahmed<sup>2</sup>, Khalid Yousif Ibrahim Salih<sup>3</sup>, Anas Satti Satti Mohammed<sup>4</sup>, Hasnaa Attia Hamed Mohamed<sup>5</sup>, Houda Chamakhi<sup>6</sup>, Amal Essam Zaki<sup>7</sup>, Karima Hassan Mohamed Soliman<sup>8</sup>, Saoussen Kouki<sup>9</sup>, Nadia Selmi<sup>10</sup>**

*1, 2, 3, 4, 5 College of Applied Studies and Community Service, Imam Abdulrahman Bin Faisal University, P.O. Box 1982, Dammam 31441, Saudi Arabia.*

*6, 7 College of Business Administration, Imam Abdulrahman Bin Faisal University, P.O. Box 1982, Dammam 31441, Saudi Arabia.*

*8 Applied College, Imam Abdulrahman Bin Faisal University, P.O. Box 1982, Dammam 31441, Saudi Arabia.*

*9, 10 Deanship of Preparatory Year and Supporting Studies, Imam Abdulrahman Bin Faisal University, P.O. Box 1982, Dammam 31441, Saudi Arabia.*

## **Abstract**

*This research aims to develop effective models to ensure the financial soundness of insurance companies in the Kingdom of Saudi Arabia, relying on financial risk management strategies as a financial tool to protect assets and capital from potential risks. This study emphasizes the need to improve financial performance evaluation mechanisms to avoid undesirable deviations. The research reviews the range of financial risks facing insurance companies, including actuarial risks, liquidity risks, and credit risks. It also addresses the importance of proposed risk management strategies, such as advance planning, continuous evaluation, and the use of advanced analytical techniques. The research also includes an analysis of the financial performance of cooperative insurance companies in Saudi Arabia, identifying the strengths and weaknesses of these companies' financial performance through a set of financial indicators. The research also presents various risk management models, such as early warning systems and financial analysis monitoring systems, with a focus on the importance of developing effective risk distribution and reinsurance strategies. The research concludes that improving financial risk management can enhance the efficiency of insurance companies and increase their financial stability, contributing to building confidence in this vital sector.*

**Keywords** *Financial risk management, performance evaluation, financial analysis, financial indicators, financial solvency, cooperative insurance companies.*

## **1- Introduction**

Risk management is one of the most important tools for protecting economic activity. It has developed significantly in recent years as a result of increased awareness among institutions of the importance of this activity in protecting assets and capital against anticipated risks. To ensure the stability and continuity of cooperative insurance companies' operations, it is necessary to develop additional risk management mechanisms aimed at ensuring the soundness of the financial position of the entities engaged in this activity on a regular basis, and to anticipate any undesirable deviations in the financial performance practices of these institutions. Given that insurance institutions provide deferred financial services, it is essential to continuously ensure the soundness of their financial position, their ability to meet their obligations on time, and the preservation of shareholders' rights (Landi & Rey, 2022; Liu & Huang, 2022).

Perhaps one of the most important tools used to achieve this goal is financial risk management models, which rely on performance evaluation tools and management competency assessments. This has prompted insurance company oversight bodies and many researchers to develop these methods to verify insurance companies' performance efficiency and their ability to meet obligations, which we call "financial solvency." The performance evaluation process represents the first stage of the risk management model, which aims to improve performance. This process provides a reliable basis for identifying the most significant strengths and weaknesses in a company's financial performance by identifying deviations between actual and expected results (Blessing & Sakouvogui, 2023).

This enables management to develop a mechanism to address negative deviations and support positive ones. The importance of corporate risk management, particularly financial risk, has increased in recent years as a result of many insurance companies facing the risk of insolvency or bankruptcy, resulting in their inability to meet their obligations. Furthermore, given that the Kingdom of Saudi Arabia is a relatively new insurance market, this calls for the development of more financial risk management models aimed at ensuring the soundness of these companies' financial positions. Many cooperative insurance companies operating in the Kingdom of Saudi Arabia have experienced financial crises over the past few years resulting from deficits in insurance activity, which could result in their exit from the market (Dahiyat & Aldahiyat, 2021).

Although the insurance market in the Kingdom consists of 33 cooperative insurance and reinsurance companies, a large number of these companies have suffered from a deficit in their insurance activity. This deficit represents a risk indicator and an early warning sign of financial distress. The severity of this phenomenon is exacerbated by the instability associated with the value of surpluses achieved at the individual company level. This underscores the lack of risk management systems that utilize effective financial analysis and aim to evaluate the financial performance of insurance companies, enabling them to predict the risk of financial distress.

The aim of this research is to present a model for financial risk management in insurance companies. This model examines the financial solvency margin of companies operating in the Saudi Arabian insurance market, relying on a set of financial indicators used to measure financial performance efficiency. This leads to the most appropriate indicators consistent with the nature of this market. It also measures the financial solvency of insurance companies as a risk monitoring tool, which helps predict the financial difficulties they may face in the future. The importance of this research stems from its role as a risk management tool that predicts the soundness of the financial position of cooperative insurance companies, thus protecting them from the risks of insolvency and bankruptcy. This helps regulatory authorities achieve their objectives and provides information useful to various parties dealing with this important economic sector. This supports continued trust in dealing with insurance companies and leads to achieving a distinguished level of financial solvency. The research relied on the descriptive approach to present the foundations of financial risk management for insurance companies. A quantitative approach was also applied to develop financial risk management tools using financial indicators in insurance companies.

## **2- Financial Risks for Insurance Companies**

The insurance sector relies primarily on managing financial volatility. Therefore, insurance companies must assess a wide range of potential risks and their implications, which could negatively impact their current and future financial stability. These risks include actuarial risk, credit risk, market risk, liquidity risk, interest rate risk, operational risk, foreign exchange risk, legal and regulatory risk, technology risk, environmental risk, reputational risk, country risk, asset and liability management risk, and others. This risk group also includes investment management risk, underwriting risk, and catastrophe risk (Mutua & Theuri, 2023).

The core activities of insurance companies are underwriting and investment. Underwriting is the core of a company's business, playing a vital role in its development and success. This activity relies on two key components: investment and financing. The risks associated with these two activities can threaten a company's stability; when combined with the other risks mentioned above, they can accelerate a company's decline and ultimately lead to its demise (Kiptoo & Ocharo, 2021).

### **2-1 Liquidity Risk**

Liquidity represents the ability to obtain sufficient cash and liquid assets, both currently and in the future. Although liquidity is assumed to be unaffected by the time lag between premium receipts and claims payments, catastrophes can lead to unexpected claims. In life insurance, liquidity risk arises from the surrender of a large number of policies, while in general insurance, it arises from the non-renewal of policies or large claims. Liquidity risk can result in losses in asset value due to forced sales, especially in declining markets. Although loans are available, they may be difficult or costly to obtain. Smaller insurers and institutions with lower credit ratings are particularly affected by liquidity risk, due to their difficulty accessing cash quickly. These risks result from a lack of diversification of assets and liabilities, as well as reputational losses, economic challenges, and volatile market conditions (Ahamed, 2021).

## **2-2 Actuarial Risk**

Actuarial risk arises in the pricing process (premium rate) as a result of the discrepancy between expected mortality rates and other factors relative to reality, such as early termination of policies or catastrophes. Actuarial work is based on a careful analysis of risks and losses to determine the appropriate premium for insurance products. These calculations rely on statistics, past experience, and future probabilities. However, many unknown and unquantifiable factors exist, increasing actuarial risk (Hamedani & Yousof, 2023).

## **2-3 Asset Liability Management (ALM) Risk**

ALM focuses on efficiently managing the mismatch between assets and liabilities, rather than achieving an exact match. The strategy should include off-balance sheet exposures, and it is preferable to manage assets and liabilities as a whole. Some liabilities are long-term, which can lead to reinvestment risk if long-term assets are not available. It is essential that total investment income exceeds total liabilities. In non-life long-term insurance, underwriting risk aspects, such as the timing and amount of future claim payments, must be addressed. Aspects such as risk retention, risk transfer and cost control are important, and reinsurance arrangements must be adequate and recoverable (Maggioni & Turchetti, 2024).

## **2-4 Risk and Capital**

Insurance companies should reduce reliance on external ratings and develop their own models for assessing quantitative and qualitative risks. The board of directors is responsible for determining how to respond to changes and new risks. Periodic risk and solvency assessments (ORSAs) should be conducted, focusing on credit, market, operational, and liquidity risks. Economic and regulatory capital adequacy are the foundation for risk management, with capital requirements being integrated to determine the necessary financial resources (Yaghoubi, 2024).

## **3- The Importance of Financial Risk Management in Insurance Companies and Their Control Procedures**

Insurance companies are institutions that provide protection to individuals and companies from potential financial risks such as accidents, illnesses, and potential compensation in the event of death or loss. With this vital role, companies themselves are exposed to numerous financial risks that may affect their ability to meet their clients' financial obligations.

3-1 Identifying Risks: Financial risk management helps identify risks related to liquidity, investment, and economic fluctuations that may affect a company's stability (Dong & Ma, 2024).

3-2 Minimizing the Impact: Through preventive strategies such as diversifying investments and maintaining financial reserves, the impact of financial risks on a company can be reduced (Aleskerova, Y., Kolomiets & Karpinskyi, 2024).

3-3 Control Procedures: Financial control includes analyzing financial statements, monitoring expected liabilities, and ensuring compliance with local and international regulations through

measures such as continuous auditing and financial performance evaluation (Klychova & Gimadiev, 2021).

#### **4- Financial Control Procedures in Insurance Companies**

Financial control procedures consist of a set of systems and policies aimed at ensuring a company's ability to efficiently manage financial risks. They include several aspects, such as (Polyakov & Polyakova, 2024):

- 4-1 **Internal Audit:** Internal audit is a vital tool in monitoring a company's financial activities. By conducting regular reviews of financial operations, potential errors or manipulations can be identified and addressed before they become a major problem (Al-Hashimy & Jamal, 2022).
- 4-2 **Using Actuarial Models:** Insurance companies rely on actuarial models to determine the probability of financial risks and estimate the size of expected claims. These models are an essential tool in financial decision-making within the company (Kiptoo & Ocharo, 2021).
- 4-3 **Diversification of Investment Portfolio:** To reduce investment risk, insurance companies are committed to distributing their investments across a variety of financial assets rather than relying on just one type of investment.
- 4-4 **Continuous Monitoring of Financial Liquidity:** To ensure a company's ability to meet its financial obligations on time, financial liquidity levels are continuously monitored. This helps avoid any liquidity crisis that could affect the company's ability to pay compensation to customers (Morara & Sibindi, 2021).
- 4-5 **Collaborating with specialized consulting firms:** such as USC, which provides specialized financial consulting to help insurance companies identify potential risks and develop strategies to address them.

#### **5- Financial Risk Management in Insurance Companies**

- 5-1 **Underwriting Risk Management:** The underwriting process must focus on careful risk selection. It is essential to cover a large number of individuals, expand operations, and diversify products. Key steps include targeting a large number of potential customers, expanding the company's geographic reach, and diversifying products to reduce risk. The larger the customer base, the lower the probability of everyone losing money at the same time. Spreading geographic coverage reduces the impact of large-scale risks such as natural disasters. Diversifying products also helps spread risk, reducing the likelihood of all risks occurring simultaneously. When individual risks are significant, the insured's risk profile and management procedures should be periodically reviewed (Kiptoo & Ocharo, 2021).
- 5-2 **Reinsurance and Risk Distribution:** Reinsurance is an effective tool for distributing risk among insurance companies, as no one company can bear all the risks alone. Insurance companies partner with major reinsurance companies to distribute risk and increase their capacity. Risk pooling is another option, where companies collaborate to provide insurance such as aviation and terrorism insurance. To combat fraudulent claims, insurance companies must conduct periodic investigations and evaluate the effectiveness of their underwriting and claims handling methods (Mishchenko & Dorofeiev, 2021).
- 5-3 **Actuarial Risk:** The actuary department plays a vital role in determining rates (premiums) for the insurance company and the insured. The actuary analyzes data to determine appropriate premiums and evaluate assets and liabilities. Their primary responsibilities include setting premiums and calculating rates to cover claims and expenses with profit margins, evaluating assets, and conducting periodic assessments to determine reserves. They also meet regulatory requirements and ensure the necessary data is submitted to regulatory bodies. Laws require the

appointment of a certified actuary in life insurance companies. Mortality tables must be reviewed based on actual experience. To address these challenges, companies need trained staff and an effective information system (Landi & Rey, 2022).

## **6- Measuring and Managing Catastrophe Risk**

Catastrophe risk refers to insurance claims resulting from losses incurred by policyholders due to natural disasters, such as floods, hurricanes, earthquakes, and tsunamis. The value of claims in these cases is significant, placing pressure on insurance companies. Therefore, measuring and managing these risks is vital to ensuring the sustainability of companies and their ability to cover losses. Catastrophe risk is a priority for reinsurance companies, which face significant challenges due to the concentration of their exposure to these risks. Many companies ignore these concentrations of risk, resulting in large losses (Joginipalli, 2022).

Reinsurance companies have responded to these huge losses by raising rates and imposing limits. With the advancement of computer technology, modern simulation tools are able to more accurately estimate losses by simulating disaster characteristics and identifying potential damages. Managing catastrophe exposure requires accurate risk data, with the need to distinguish between personal and commercial property, as commercial property can present greater challenges. Despite the challenges, advances in technology enable insurance companies to effectively estimate damages, helping them minimize losses. Therefore, companies must be fully equipped to meet these challenges. Investment Risks in Insurance Companies (Manoj & Narendra, 2022).

Investment risk is a vital aspect for insurance companies, as investments constitute a significant portion of their premium income. Companies must adopt a prudent investment policy that focuses on safety and income, while adhering to regulations. This policy includes guidelines for financial instruments with inherent risks, such as derivatives and private equity. Particular attention must be given to investments in unregulated markets, where risks are more complex. While local risks are easy to predict, complex investments require expertise and competence at all levels, as well as stress testing and contingency planning. A derivatives policy must be clear to effectively assess counterparty risk (Hochrainer-Stigler & Gottardo, 2023).

## **7- Financial Risk Management Tools in Insurance Companies**

Evaluating the financial performance of insurance companies is one of the most important financial risk management tools. This tool relies on a set of criteria, which may be external or internal. External criteria reflect factors of interest to policyholders, including good customer service, insurance costs, and the company's overall financial reputation. Internal criteria for evaluating financial performance reflect the various administrative elements within the company, how they perform their functions, and their level of development. Financial ratios are also among the most important financial risk management tools, which are used to evaluate the financial performance of insurance companies. Financial indicators are divided into indicators that measure activity ratios, which are based on figures generated from the use of assets, referred to as revenues (Kiptoo & Ocharo, 2021).

These ratios increase as insurance companies' management efficiency in utilizing their assets increases. There are also indicators that measure profitability ratios, which are used to gauge the efficiency and effectiveness of insurance companies in achieving the highest possible profitability, which enhances the company's presence in a competitive market. These ratios also reflect a company's ability to manage and manage insurance operations and achieve desired results. Financial solvency indicators also reflect a company's ability to meet its financial obligations when due. Financial solvency indicators also aim to verify a company's ability to withstand any adverse fluctuations in its issuances, known as the financial comfort margin (Akash & Alam, 2024).

7-1 Early Warning System: Given the importance of financial risk management tools for insurance companies, many financial institutions have developed systems that enable insurance companies to predict financial distress. Perhaps the most important of these systems is the Early Warning System (IRIS), which has been in use since the mid-1970s. This system relies on a set of 11 financial indicators for property and liability insurance, and 12 indicators for life and

health insurance. The actual values of these indicators are compared to a specific acceptable range for each indicator or standard rates. If the ratio is not acceptable, this serves as an early warning sign of potential financial distress. This system classifies financial indicators into four main groups that address the financial structure of insurance companies. The implementation of this system was accompanied by a number of shortcomings, perhaps the most significant of which is that it is a univariate system. This prompted the development and introduction of the Financial Analysis Control (FAST) system, as well as the Risk Capital (RBC) system (Esposito & Pierleoni, 2022).

7-2 The Financial Analysis Control (FAST) System: A financial risk management tool, known as the Financial Analysis Control (FAST) system, emerged. This system relies on determining an acceptable range for a company's financial performance, which is calculated using eleven indicators during the statistical review phase. During the analytical phase, the insurance company evaluates the financial results in more detail. The company is considered to be in a financial position that warrants review when four or more indicators fall outside the acceptable range. This system is an extension of the IRIS system, as the FAST system includes a larger set of indicators, reaching 25. This system is based on a points method that relies on the arbitrator's experience, the control systems, and the applied statistical analysis method. The FAST system also uses a different financial analysis system for property, liability, life, and health insurance. In addition to these systems, there are also indicators approved by the international rating agency Standard & Poor's, which test the company's financial performance. The company's ability to meet its obligations (Samaricheva & Khaidari, 2024).

7-3 The Minimum Risk Capital (RBC) System: The Solvency II Accord also introduced a set of principles and standards aimed at managing financial risks and regulating insurance practices in Europe. These are based on the RBC system, which aims to ensure capital adequacy through the use of quantitative and descriptive methods for risk assessment. A standardized capital adequacy model is used, which all companies are obligated to use. The agreement requires that reinsurance be undertaken with reinsurers whose solvency exceeds 100%. Risk capital requirements aim to ensure a minimum level of capital sufficient to address both the risk of a decline in the market value of assets, as well as the credit risk resulting from reinsurance transactions, and the risk of underwriting and pricing. Points are assigned for each level of these risks, and regulatory authorities intervene when a company's total capital falls below the RBC level (Park & Shin, 2022).

## **8- The Proposed Model for Financial Risk Management for Insurance Companies**

The financial risk management model for insurance companies relies on a set of tools that monitor the level of risk in the financial system. Perhaps the most important of these are performance efficiency assessment tools, which aim to evaluate the performance of companies operating in the Saudi cooperative insurance market and listed on the Saudi Stock Exchange. The following is a presentation of the most important financial risk indicators used (Kiptoo & Ocharo, 2021; Mishchenko & Dorofeiev, 2021):

8-1 Surplus-to-Assets Ratio: This reflects the efficiency of assets in generating surplus. The typical rate for this indicator is greater than 2%.

8-2 Expense Ratio: This measures the effectiveness of using expenses to generate premiums. The typical rate is 15% or more.

8-3 Expense-to-Commissions Ratio: This indicator reflects the efficiency of the company's marketing apparatus in attracting additional premiums. The typical rate is 30% or more.

8-4 Surplus-to-Equity Ratio: This indicator reflects the efficiency of equity as a source of financing assets in generating surplus. This indicates the efficiency of the company's underwriting and investment policy. The typical rate for this indicator is greater than 5%. Net Written Premiums

- to Shareholders' Equity Ratio: This ratio measures the efficiency of shareholders' equity as a source of internal financing for premium-generating assets. It is an indicator of whether companies are operating at full capacity. The acceptable range is between 200% and 330%.
- 8-5 Technical Provisions to Liquid Assets Ratio: This ratio reflects the efficiency of assets as inputs for providing the funds needed to meet liabilities. This indicates that each of these companies prioritizes liquidity to enable them to meet their financial obligations as they fall due, such as paying claims and obligations to policyholders. The standard ratio is a maximum of 100%.
- 8-6 Shareholders' Equity to Total Assets Ratio: This ratio measures the degree of security required for policyholders and the balance between shareholders' equity and total assets, which supports reinsurers' confidence in insurance companies in the external market. The standard ratio is a minimum of 10%.
- 8-7 Total Premiums Written to Shareholders' Equity Ratio: This ratio reflects a company's efficiency at operating at full capacity, regardless of its financial position. The standard ratio is at least 400%. Retention Ratio: This indicator reflects the company's reliance on reinsurers and its ability to retain risks. It is calculated as the ratio of net written premiums to total written premiums. The typical ratio is greater than 50%.
- 8-8 Rate of Change in Shareholders' Equity: This indicator reflects the soundness of the company's financial position. A ratio above the acceptable range reflects difficulties that have led to a significant increase in shareholders' equity. A significantly lower ratio reflects a deficient company performance. The typical ratio is less than 20%.
- 8-9 Ratio of Technical Provisions and Shareholders' Equity to Net Written Premiums: This ratio reflects the extent to which collected premiums cover the risks to which the company is exposed through the premiums it retains. The appropriate range for this ratio is at least 150%.
- 8-10 Ratio of Liabilities to Liquid Assets: This ratio represents an indicator of the company's responsiveness to any financial claims and provides a general indication of the company's ability to settle its obligations to policyholders in the event of liquidation. The typical ratio is at most 105%. Financial leverage: This indicator reflects the risk of a company's inability to repay, which could lead to bankruptcy as a result of the company using external financing sources to increase profits. It represents a type of unsystematic risk. This indicator is calculated based on the value of debt and equity relative to total assets.
- 8-11 Underwriting Risk (Loss Rate): These risks arise as a result of the ineffectiveness of the insurance risk management system, which includes the methods and means employed by the company to mitigate the adverse impact of financial losses resulting from imbalances in premium pricing and compensation estimation.
- 8-12 Growth Rate (Rate of Change in Net Premiums): This indicator reflects the growth in the company's premium volume, reflecting the stability of insurance and investment activity. This enables the company to control and monitor the risk level to which it is exposed, as well as the company's underwriting capacity. The acceptable range for this ratio is (-10 – 30).
- 8-13 Company Size: Company size refers to the company's total assets. Many studies have proven that there is a direct relationship between size and performance efficiency. This is achieved by achieving economies of scale, which leads to greater effectiveness in reducing operating costs, increasing output, improving company performance, and reducing risks. Small-sized companies, on the other hand, seek to remain in the market and merge with larger companies.

**Table 1:** Financial risk analysis of Saudi cooperative insurance market companies

Indicator	Companis whose results are consistent with the acceptable range		Companis whose results do not meet the acceptable range		Indicator	Companis whose results are consistent with the acceptable range		Companis whose results do not meet the acceptable range	
	Numb er	%	Numb er	%		Numb er	%	Numb er	%
<b>Expense and Commission Ratio</b>	25	75.8 %	8	24.2 %	<b>Ratio of Surplus to Equity</b>	18	54.5 %	15	45.5 %
<b>Retention Ratio</b>	29	87.9 %	4	12.1 %	<b>Growth Rate</b>	17	51.5 %	16	48.5 %
<b>Financial Leverage</b>	26	78.8 %	7	21.2 %	<b>Ratio of Surplus to Assets</b>	14	42.4 %	19	57.6 %
<b>Liabilities to Liquid Assets</b>	30	90.9 %	3	9.1 %	<b>Rate of Change in Shareholders' Equity</b>	22	66.7 %	11	33.3 %
<b>Loss Ratio</b>	24	72.7 %	9	27.3 %	<b>Technical Provisions and Shareholders' Equity to Net Written Premiums</b>	15	45.5 %	18	54.5 %
<b>Shareholders' Equity to Total Assets Ratio</b>	22	66.7 %	11	33.3 %	<b>Total Written Premiums to Shareholders' Equity</b>	12	36.4 %	21	63.6 %
<b>Expense Ratio</b>	25	75.8 %	8	24.2 %	<b>Ratio of Net Written Premiums to Shareholders' Equity</b>	14	42.4 %	19	57.6 %
<b>Company Size</b>	28	84.8 %	5	15.2 %	<b>Ratio of Technical Provisions to Liquid Assets</b>	10	30.3 %	23	69.7 %

The cooperative insurance market in the Kingdom of Saudi Arabia reflects a set of strengths that distinguish the financial performance of the companies comprising this sector. These strengths include the "expenses and commissions ratio" indicator, with 75.8% of companies achieving an acceptable rate. This reflects the efficiency of their marketing apparatus. This result is further confirmed by the increasing number of companies that achieved an acceptable range for the expense ratio indicator, indicating management's efficiency in utilizing expenses to generate premiums. Furthermore, 87.9% of companies achieved appropriate rates for the "retention ratio" indicator, confirming their ability to retain risks and not rely heavily on reinsurers. The Saudi insurance market also excels in terms of financial leverage, with 78.8% of companies not relying heavily on debt to finance their assets, which protects them from the risk of bankruptcy. It is also evident that 90.9% of companies achieved appropriate rates

for the liabilities-to-liquid assets indicator, indicating their ability to meet their obligations. The Saudi insurance market excels in the shareholders' equity-to-total assets ratio, which increases the degree of security required for policyholders. The size of Saudi insurance companies also plays a significant role in attracting more premiums, thus improving financial performance. This is achieved through the advantages of economies of scale, which reduce costs when premiums increase. 72.7% of companies achieved acceptable rates for the loss ratio, indicating that premiums collected are sufficient to cover claims. Only 54.5% of companies achieved adequate rates for the surplus-to-equity ratio, confirming the effectiveness of these companies' marketing efforts in attracting more premiums.

While there are a number of financial indicators that represent shortcomings in the financial performance of the Saudi cooperative insurance market, the "technical provisions to liquid assets" indicator is at the forefront of these negative indicators. Only 30.3% of companies achieved the acceptable ratio, indicating the inadequacy of current assets to meet liabilities. 57.5% of companies did not achieve the appropriate ratio for the "net written premiums to shareholders' equity" indicator, confirming the inefficiency of shareholders' equity as a source of financing assets and generating surpluses. 63.6% of companies failed to reach the acceptable ratio for the total written premiums to shareholders' equity indicator, indicating inefficient underwriting activity. Furthermore, 63% of companies did not achieve the acceptable range for the technical provisions and shareholders' equity to net written premiums indicator, confirming the inability of collected premiums to cover the risks to which these companies are exposed. Regarding the surplus-to-assets ratio, 57.6% of companies failed to achieve the appropriate ratio, indicating the ineffectiveness of assets in generating a surplus. 48.5% of companies did not achieve the appropriate ratio for the "growth rate" indicator, reflecting instability in insurance and investment activity.

## **9- Proposed Strategies for Financial Risk Management in Insurance Companies and Their Control Procedures**

The proposed strategies include, first, pre-planning for risk. Risk management in insurance companies begins with strategic planning that encompasses all potential types of risks. This includes creating action plans to address risks and developing strategies to improve financial performance should these risks occur. Second, continuous risk assessment. Through continuous risk assessment, companies can identify new risks that may arise over time and update their risk management strategies to address these challenges. Third, using reinsurance. One method used in risk management is reinsurance, whereby an insurance company distributes some of its risks to other insurance companies to help spread the financial burden. Fourth, employing advanced analytical techniques. Insurance companies rely on advanced data analysis and actuarial models to predict risks and identify optimal solutions. This helps improve the accuracy of estimates and reduce the likelihood of capital loss. Fifth, identifying and assessing financial risks. Risk identification is one of the most important steps and tools in the financial risk management process, as it forms the basis for the other stages. It relies on early detection of risk, along with understanding the causes of these risks and the expected losses (Mishchenko & Dorofeiev, 2021).

There are several ways to identify risks, such as preparing and identifying financial statements, consulting insurance companies, and using risk indexes. Then comes the risk assessment stage, which depends on the type of risk itself. There are critical risks that could result in the collapse and bankruptcy of the institution. There are significant but non-critical risks, whose impact does not reach bankruptcy, but would require the institution to borrow to cover costs and continue its operations. There are also insignificant risks, whose losses can be recovered within a short period. The next stage relies on searching for alternatives, which involves searching for the best way to deal with the expected risks. Sometimes, a decision is made regarding the most appropriate methods for dealing with risks according to a previously established plan, or according to specific criteria that determine the most appropriate methods for dealing with risks. The next stage includes evaluation and review. The evaluation and review steps help uncover some errors, which leads to correcting some decisions (Akash & Alam, 2024).

One of the most popular methods proposed for financial risk management in insurance companies in the Kingdom of Saudi Arabia is the method of covering all risks. This means avoiding all

activities that result in financial risks, or transferring the losses resulting from financial risks to a second party through insurance contracts, for example. The open-ended approach refers to not addressing risks if the level of risk is not so significant that it warrants the cost of addressing it. The calculated risk approach refers to determining the maximum level of risk that the organization can tolerate, and then taking all appropriate measures to address this risk (Dana & RafalKuc, 2021).

## 10- Conclusion

Through the research, it is clear that financial risk management is a vital component of ensuring the stability and efficiency of insurance companies, especially in the changing business environment facing institutions in the Kingdom of Saudi Arabia. The challenges faced by some insurance companies have highlighted the importance of developing effective risk management models, which contribute to enhancing financial solvency and the ability to meet obligations. The research results revealed that adopting comprehensive strategies that include advance planning, continuous assessment, and the use of advanced analytical techniques enables companies to anticipate potential risks and take appropriate measures to mitigate negative impacts. The use of early warning systems and financial monitoring also contributes to enhancing companies' ability to effectively address financial challenges. Insurance companies in the Kingdom of Saudi Arabia must work to improve their risk management tools, which enhances confidence among investors and customers and ensures the sustainability of this vital sector. Companies' commitment to implementing best practices in risk management will have a positive impact on the performance of the market as a whole, contributing to sustainable growth and development.

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