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**The Relationship Between Financial Capacity And Investment
Decisions In The Insurance Industry
An Applied Study On The Iraqi Insurance Company**

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Abstract. The study aims to identify the nature of the relationship between the financial capacity of the National Insurance Company and its impact on the company's investment decisions. The researcher conducted the study in the Iraqi Insurance Company, as it is a leading and fundamental model in the government insurance sector in Iraq. This study is essential for analyzing the researcher's hypothesis regarding the existence of a statistical relationship between financial capacity and investment decisions. The study relied on the company's financial data and reports for the period 2014-2023. The most prominent conclusion reached by the researcher is the low levels of investment returns for the company, despite the substantial funds it spent on investments. The realized return on investment did not exceed 10%. This percentage indicates that the investment decisions made by the insurance company during the study period were inefficient. Consequently, it is observed that the National Insurance Company relied heavily on insurance premiums obtained from underwriting to generate the majority of its revenue. This could lead to financial hardship when there is a significant decline in insurance activities. In light of the above findings, the researcher offers recommendations, the most important of which is the actual adoption of the indicators identified in the study to assess the financial capacity of the company in the study sample and all other companies to support the insurance industry in Iraq.

Keywords: Financial Capacity, Investment Decisions, Insurance Sector.

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**العلاقة بين القدرة المالية وقرارات الاستثمار في قطاع التأمين
دراسة تطبيقية في شركة التأمين العراقية**

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المستخلص. تهدف الدراسة الى التعرف على طبيعة العلاقة بين القدرة المالية لشركة التأمين الوطنية وبيان اثرها على قرارات الشركة الاستثمارية، وقام الباحث بإجراء الدراسة في شركة التأمين العراقية كونها نموذجاً رائداً وأساسياً في قطاع التأمين الحكومي في العراق. وتعد دراستها ضرورية لتحليل افتراض الباحث بوجود الاثر والعلاقة الاحصائية بين القدرة المالية وقرارات الاستثمار ، وقد تم الاعتماد على البيانات والتقارير المالية للشركة للفترة من ٢٠١٤ - ٢٠٢٣ ، وان ابرز الاستنتاجات التي توصل لها الباحث هي تدني مستويات العوائد الاستثمارية للشركة

بالرغم من الاموال الكبيرة التي قامت الشركة بصرفها على الاستثمارات ، وقد كانت النسبة المتحققة من العائد الاستثماري لا تتجاوز 10% ، وهذه النسبة تبين ان القرارات الاستثمارية التي اتخذتها شركة التأمين خلال فترة الدراسة كانت تنصف بعدم الكفاءة ، وبالنتيجة نلاحظ ان شركة التأمين الوطنية كانت تعتمد بشكل كبير على الاقساط التأمينية التي تحصل عليها من عملية الاكتتاب في تحقيق اغلب ايراداتها ، مما قد يسبب هذا الامر العسر المالي عندما يكون هناك انخفاض ملحوظ في الانشطة التأمينية ، وفي ضوء النتائج الواردة اعلاه قدم الباحث توصياته ومن اهمها هي ان يكون هناك اعتماد فعلي للمؤشرات التي توصل اليها في الدراسة لتقييم القدرة المالية للشركة عينة الدراسة وكافة الشركات الاخرى لدعم صناعة التأمين في العراق

الكلمات المفتاحية: القدرة المالية ، قرارات الاستثمار ، قطاع التأمين

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Introduction

Insurance companies strive to maintain the trust of policyholders and increase their profits by investing their financial resources in investment activities, which represent the second main activity for these companies, alongside insurance activities. Financial capacity is the fundamental pillar upon which the future of the insurance industry rests in all countries of the world, as it is the guarantor of the survival and continuity of insurance companies. The importance of financial capacity lies in the fact that it provides protection for the rights of policyholders by fulfilling their entitlements when the insured risk occurs. Financial capability also refers to the availability of resources, liquidity, and the knowledge necessary to manage money effectively and meet current and future financial obligations without jeopardizing economic stability. It encompasses the ability to repay, make sound investment decisions, and manage risk, and reflects competence in accessing and using financial services, as well as financial literacy.

1. Research Methodology

1.1. Research Problem: Investment decisions in insurance companies play a crucial role in determining the company's performance, as investment represents the second pillar of insurance activity. The absence of an efficient investment policy is a problem that must be addressed, since the returns generated from investments are a primary source of revenue for these companies. This revenue is sometimes used to cover losses incurred in insurance operations when premiums received are insufficient to meet the insurance company's obligations. This research aims to understand the relationship between financial capacity and investment decisions made in an Iraqi insurance company. Therefore, the research problem is addressed through two questions:

❖ **First: Main Question:**

- ✓ What is the nature of the relationship between the acceptable financial capacity of insurance companies and their investment decisions?

❖ **Second: Sub-questions:**

- ✓ To what extent does acceptable financial capacity influence the size and direction of investments by insurance companies?
- ✓ Does acceptable financial capacity contribute to improving the efficiency of investment decisions by insurance companies?
- ✓ What is the direction and strength of the impact of acceptable financial capacity on the performance of investment portfolios in insurance companies?

1.2. Importance of research: The importance of the research is embodied in studying and explaining the impact of financial capacity on investment decisions made by the Iraqi Insurance Company, given the significant role that investment returns play for the benefit of insurance companies in general and policyholders in particular, as well as the impact of employing insurance companies' funds in stimulating the wheel of economic development and creating job opportunities in society.

1.3. Research Aim:

❖ **First: Main Aim:**

- ✓ To analyze and define the nature of the relationship between the acceptable financial capacity of insurance companies and their investment decisions.

❖ **Second: Sub- Aim:**

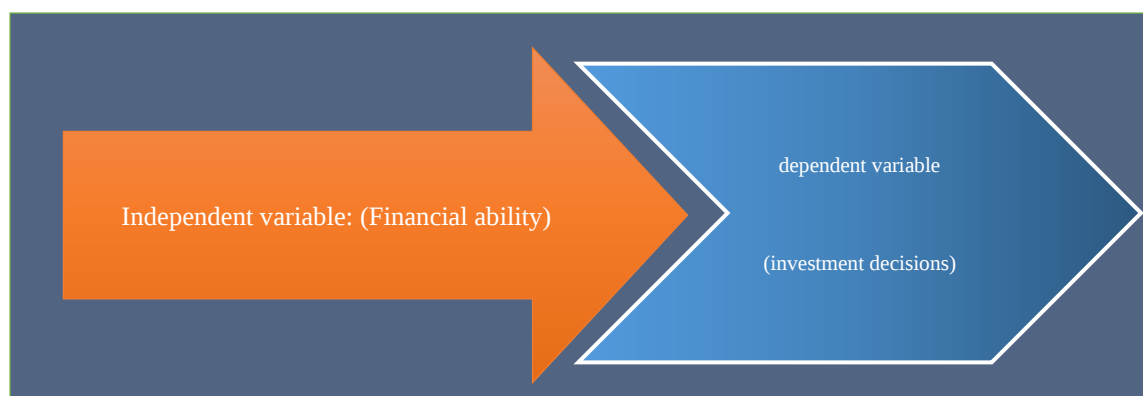
- ✓ To measure the impact of acceptable financial capacity on the size and direction of investments by insurance companies.
- ✓ To evaluate the role of acceptable financial capacity in improving the efficiency of investment decisions by insurance companies.
- ✓ To analyze the direction and strength of the impact of acceptable financial capacity on the performance of investment portfolios in insurance companies.
- ✓ To test the statistical significance of the relationship between acceptable financial capacity and investment decisions in insurance companies.

1.4. Research Hypotheses: This research is based on the following hypotheses:

1. There is a statistically significant correlation between acceptable financial capacity and the investment growth index.
2. There is a statistically significant correlation between acceptable financial capacity and the return on investment index.
3. Acceptable financial capacity has a statistically significant effect on the investment growth index.
4. Acceptable financial capacity has a statistically significant effect on the return on investment index.

1.5. Research model: It includes the independent variable and the dependent variable:

Figure 1: Study variables model



Source: Prepared by the researcher based on the study's hypotheses

1.6. Temporal and spatial boundaries: The Iraqi Insurance Company (General Company) was chosen as the site for this research, with the researcher focusing on its financial capacity due to its status as one of the largest insurance companies operating in the Iraqi insurance sector. Financial data from 2014 to 2023 was used, a sufficient period to determine the nature and impact of the relationship between acceptable solvency and the Iraqi Insurance Company's investments.

1.7. Research Sources: The data required to complete this research, both theoretical and practical, was obtained from the following sources:

1. Arabic and foreign books and research papers available in university libraries, as well as research published on the internet.
2. Financial statements, records, and annual reports published by the company.
3. Personal interviews with department managers in the company sample, who are specialists in the field.

1.8. Research Methodology: In conducting this study, the researcher adopted an integrated scientific methodology combining inductive and deductive approaches. The theoretical aspect employed the inductive method through a review and analysis of previous literature and related studies to construct a comprehensive knowledge framework regarding the concept of financial solvency and investment decisions in insurance companies. The applied aspect utilized the deductive method, based on hypothesis testing, by employing a descriptive-analytical approach to describe the study variables, analyze the financial data of the Iraqi Insurance Company for the period (2014-2023), and verify the hypotheses using appropriate statistical methods.

1.9. Literature review:

Mohammed, & Al-Atabi (2012) aimed to measure the efficiency of investments in insurance companies. The research compared the National Insurance Company and the Iraqi Insurance Company in terms of investment activity and returns for each company. The researcher relied on annual reports and final accounts, specifically the balance sheet issued by each company, as data collection tools. The study reached several conclusions, most notably that neither company possesses sufficient flexibility to expand investment activities, given their affiliation with the public sector and their dependence on centralized decisions issued by the Ministry of Finance, to which these companies are owned.

Mirza & Al-Baldawi (2017) This study came to identify cancellations and liquidations in life insurance policies and their impact on the financial capacity of insurance companies. It aimed to clarify the risks that insurance companies are exposed to due to cancellations and liquidations of life insurance policies, and their impact on the solvency of those companies. The Iraqi Insurance Company was the research sample as it specializes in life insurance. The researcher used financial data and a questionnaire as tools to collect the data required to complete the research according to the descriptive analytical approach. One of the most prominent results of the research was that cancellations and liquidations are among the risks that threaten the financial solvency of life insurance companies. These studies agreed on a common goal, which is the importance of financial solvency in the growth of insurance companies' investments.

Bouchlouch et al (2020) achieved its objective of analyzing and diagnosing the financial capacity and verifying the company's efficiency in fulfilling its obligations. The National Insurance Company

was used as a case study. The researcher relied on financial data, records, and annual reports as data collection tools, employing a financial analysis methodology. The research concluded that the National Insurance Company enjoys significant financial solvency and a moderate investment policy. Kiboi & Bosire (2022) This study aimed to determine whether the management style of companies in Kenya, and specifically their investment choices, influence their financial performance. The study focused on four selected investment options: government securities, real estate, listed common stocks, and money market securities. These options were modeled as predictors of the financial performance of the companies under study. Data were collected from 37 general insurance companies operating in Kenya during the period 2013–2019. Secondary data on financial performance and investment choices for each portfolio were extracted from the annual reports of the Insurance Regulatory Authority of Kenya (AKI), publications and reports of the Insurance Regulatory Authority of Kenya (IRA), and company websites. Return on equity (ROE) was used as a measure of financial performance. Correlation and simple linear regression were used to analyze the data and test the hypotheses. The results showed that all four selected investment options had a significant positive impact on the ROE of the companies under study.

Samirat (2024) This study aimed to identify the relationship between the financial performance of publicly listed companies on the Palestine Exchange, as measured by trading volume and closing price (2017-2023), and investment decisions, specifically return on assets, return on equity, return on investment, earnings per share, and dividend payout ratio. The study considered the control variables of the COVID-19 pandemic, corporate governance, and the sector to which the company belongs. The study population consisted of publicly listed companies, while the sample comprised 20 companies from five different sectors (industry, investment, insurance, banking, and services), with four companies from each sector. The quantitative approach was used, employing descriptive statistical analysis of the variables, in addition to inferential analysis.

2. Theoretical framework

- 2.1. **Financial capability** : is the availability of resources, liquidity, and knowledge necessary to manage money effectively and meet current and future financial obligations without jeopardizing economic stability. It encompasses the ability to repay, make sound investment decisions, and manage risk, and reflects competence in accessing and using financial services, as well as financial literacy.(Xiao et al, 2022: p1685)
- 2.2. **Financial Solvency in the insurance industry**: Financial solvency is one of the most important pillars supporting insurance companies, as the strength and solidity of the company's financial position represents its last resort in the event of incurring unexpected losses. In recent years, supervisory and regulatory bodies that oversee the insurance sector, at the level of all countries of the world, have focused their attention on setting standards that help in verifying the levels of financial solvency of companies that carry out various insurance activities, whether they are life insurance companies, property insurance companies, and also reinsurance companies, with the aim of protecting the interests of all policyholders, shareholders, and other parties dealing with them, and for the benefit of those companies as well. Financial solvency, in its general sense, means that revenues, including investment returns, are sufficient to meet the company's obligations on their due dates. Solvency also refers to the company's financial soundness and long-term profitability, as well as its projected business growth (Kryvoshlyk et al, 2024: 62). In the insurance industry, the future of insurance companies depends on solvency, which is represented by the company's ability to fully meet its obligations when claimed, as well as its readiness to pay substantial

compensation to policyholders immediately upon the occurrence of insured losses, regardless of their size, without the payment process leading to default, cessation, or even bankruptcy (Azarenkova et al, 2017:7) The Oxford English Dictionary defines financial solvency as having sufficient funds to meet potential claims, meaning assets exceeding liabilities (Lodewijk, 2015: 11). Financial solvency is one of the most important indicators used in evaluating the financial performance of insurance companies, due to the collapse and bankruptcy of many insurance companies as a result of intense competition. And the excessive use of technical reserves (Vellinga, et al, 2001: 453).

2.3. The importance of financial capacity in the insurance industry: The importance of financial solvency is demonstrated by the following points:

1. Protecting the interests of policyholders by fulfilling their entitlements when due.
2. Ensuring the survival and continued success of insurance companies, given their economic and social importance, as financial capacity is a major factor influencing the insurance industry.
3. Strengthening the company's financial structure by attracting investor capital and loans on favorable terms through demonstrating financial strength in reports and financial statements, which positively impacts investment returns.
4. Increasing the company's growth and profitability by creating greater financial value and capitalizing on suitable opportunities to increase returns and reduce costs of all kinds
5. The nature of insurance as an intangible service linked to a potential future event that may or may not occur; therefore, the insurer seeks to understand the company's financial position and capacity before entering into an insurance contract (Wani et al, 2015:1563).
6. Mitigating risks, as familiarity with financial capacity management methods helps in adopting strategies that reduce exposure to solvency risks. (Nissim,2010;38)

2.4. Risks affecting the financial capacity of insurance companies: The risk-based capital theory shows that risks affecting financial capacity are divided into four groups: underwriting risks, investment risks, credit risks, and miscellaneous risks. Underwriting risks and investment risks are among the most important risks affecting the financial capacity of insurance companies, as the method by which risks are underwritten is considered the first factor affecting the strength and stability of the financial position of insurance companies, followed by investment risks (Sisay, 2017: 48). We explain the concept of these risks as follows:

1. **Underwriting risks:** is a technical risk, as some insurance industry specialists call it) is represented by the possibility of the average value of actual claims submitted by policyholders exceeding the expected value of compensation at the time the insurance policies are issued. To avoid this risk, the underwriter must carefully hedge against adverse selection against the insurance company. This is practiced by policyholders with a higher-than-average probability of loss who seek insurance at average standard rates, leading to higher-than-expected loss levels. This risk can be controlled through prudent underwriting by classifying insurance applicants into two categories: those who meet the underwriting criteria are accepted for insurance at the standard rates, while those who do not are refused insurance or charged an additional premium (Zou, 2012: 36). The importance of underwriting lies in its being a cornerstone of the continuity and growth of insurance companies. The quality of underwriting results is a crucial factor in enhancing their

survival and reducing the likelihood of bankruptcy. Generally, the literature indicates a strong correlation between the volume of written premiums and the solvency of insurance companies. Furthermore, according to the global rating agency A.M. Best, underwriting risks are among the leading causes of financial distress for insurance companies, particularly in the US market. (Toshmurzaevich, 20204)

2. **Investment risk:** Risk is an important element that investment decisions depend on, given the close relationship between return and risk. Investment risk is defined as the possibility of not achieving a return or the possibility of incurring capital losses (Alwan, 2009: 61), and as the uncertainty of the return, whether in terms of its size, regularity, timing of obtaining it, or all of these matters. It is also defined as the degree of variation and difference between actual returns and expected returns, as the greater the variation, the greater the risk (Sachse et al, 2012: 456).
- 2.4. **Solvency Margin in the Iraqi Insurance Sector:** The acceptable solvency margin for insurance companies operating in Iraq was determined according to Article (1/First-B) of the Instructions for Implementing the Law Regulating Insurance Business issued by Order No. (20) of 2005, published in the Iraqi Gazette, Issue No. 4027 of 2006, according to the following equation:

$$\text{Acceptable Solvency} = \text{Available Solvency} / \text{Required Solvency} * 100\%$$

Taking into consideration the following:

1. *Available solvency = Assets - Liabilities, excluding owners' equity, which represents (capital, general reserves, and contingency reserve).*

2. Required solvency is calculated as follows:

First: In the individual life insurance branch, it is calculated by adding 0.3% of the total sum insured for current contracts and 4% of the accounting reserve.

Second: In all insurance branches except individual life insurance, it is calculated as 20% of retained premiums, including incoming reinsurance premiums, or 25% of net overdrafts (total claims paid, including incoming reinsurance claims and the withheld claims reserve), whichever is greater.

2.5. Investment

- 2.5.1. **Concept and Definition of Investment:** The word "investment" in Arabic is derived from the verb "istathmara," meaning "to invest" or "to seek," and its root is related to fruit. It has several meanings, including what a tree bears and what it produces, i.e., its use in production. In economic terms, it refers to the direct use of funds in production through the purchase of machinery and equipment, or indirectly through the purchase of stocks and bonds (Hodgson, et al 2000: 512). Investment is a deliberate economic process undertaken by individuals, organizations, and governments. It is based on scientific principles and accumulated experience, directing financial, informational, and human resources to achieve future returns through continuous flows that generate value exceeding the initial investment, under acceptable conditions of risk and uncertainty (MacNeil, 2012: 57). Most economic theories agree on the importance of investment in achieving economic development. According to the economic concept, investment is defined as the productive deployment of capital by directing savings towards uses that lead to the production of goods and services that satisfy the economic needs of society and increase its well-being, or it is "that part of income that is not consumed that is reinvested in production processes with the aim of increasing and expanding production, thus achieving a real addition to the country's economy and is called total investment" (Brusov, 2025: 32). From the perspective of financial management,

investment is represented by the set of expenditures that, over time, generate returns that enable the covering of the initial expenditures required by the project. In the financial sense, investment is linked to the balance of cash flows resulting from the project. As an accounting definition, investment means any tangible or intangible product that the organization has purchased or produced, which aims to remain with the organization in the same form and without change during its lifetime (Hsiao, 2015: 68).

2.5.2. The Importance of Investment: The importance of investment stems from its characteristics (MacNeil, 2012: 59):

1. Investment decisions entail substantial financial burdens over a long period, such as building a factory or adding a new production line.
2. Investment expenditures are subject to a high degree of risk, as they do not yield returns within a short timeframe.
3. Investment requires monitoring, evaluating, and forecasting future events, a complex process due to its connection with uncontrollable variables such as political, economic, and social conditions.
4. It necessitates conducting economic feasibility studies to compare it with alternative investments.
5. Investments are difficult to reverse or replace due to the large sums of money involved, leading to significant losses if a wrong or poorly calculated decision is made.

2.5.3. Investment Instruments: Investment tools are defined as the means and mechanisms that investors resort to in order to direct their capital towards financial or real markets, whether in the form of financial or physical assets, with the aim of achieving the highest possible return while diversifying risks and maximizing the efficiency of investing funds. (Arioua, 2016: 17) It is also defined The framework or means by which investors employ their capital in financial or real markets, whether in the form of financial or physical assets, with the aim of achieving the maximum possible return on their investments under efficient management of available resources. (Mapracoba, 2020:125) Investment instruments are numerous and varied, but the most important and widely traded are:

1. **Securities:** These include stocks of all types, financial bonds, treasury bills, commercial papers, and certificates of deposit.
2. **Real Estate:** Investors seek profit and security for their invested capital, which can be achieved through real estate investment to varying degrees. Investment can be done in two ways: directly by purchasing a physical property (buildings, for example), or indirectly by purchasing a mortgage issued by a mortgage bank or participating in a real estate investment fund portfolio (Aalbers, 2019:382).
3. **Commodities:** Commodities are an important investment tool with significant economic advantages, such as the Ceylon tea market in Sri Lanka and the gold market in London. Certain conditions must be met for a commodity to be traded, including homogeneity and the ability to be classified and graded according to its type. For example, cotton is classified as first and second grade, and oil as Brent, Oman, and Gulf. Finally, it must be traded by a large number of buyers and sellers (Hsiao, 2015: 70).

4. **Economic Projects:** Investors are turning to economic projects as one of the most important investment tools with potential returns, which vary in nature according to the type and sector of the project. These sectors include various commercial, service, and industrial fields, primarily aimed at achieving continuous income streams, as well as enhancing levels of security and investment stability. (Platon, et al 2014: 206).
5. **Loans:** Loans can be defined as the trust that a financial institution places in a specific individual, making a sum of money available to them for a specific period of time agreed upon by both parties, in exchange for a return that the institution receives, which is the loan interest (Sachse et al, 2012: 458).

2.5.4. **Investment Planning:** Before initiating any investment, the company's financial manager must develop an economic plan that serves as the foundation for translating investment objectives. Given the importance and sensitivity of setting investment goals, several key considerations must be taken into account, the most important of which are: (Zou, 2012: 36)

1. **Risk and Capital Safety:** This means considering the level of risk we are willing to accept. Therefore, investors who prefer low risk will allocate a high percentage of their investments to short-term debt instruments, while risk-seeking investors may consider long-term debt instruments as a target for their investments.
2. **Current Income vs. Capital Gains:** An investor seeking current income might choose to invest in fully grown companies that generate regular returns, such as public utilities. An investor looking for capital appreciation, however, might focus on technology companies, for example, which may not distribute dividends, but the investor hopes for capital appreciation.
3. **Liquidity:** Investors must carefully assess their investment position to determine their liquidity needs. Liquidity is measured by an investor's ability to cover a specific investment with cash within a relatively short time. Undoubtedly, most financial assets offer a high degree of liquidity, but this is not always the case with real estate.
4. **Legislative and Regulatory Factors:** Investment and financial markets in general are highly regulated and operate within a framework of laws and regulations. However, sometimes these laws can hinder the implementation of investment strategies. Therefore, it is essential to consider these laws and regulations when setting investment objectives.

3. Applied study:

- 1.1 **Measuring financial capacity and investment decision indicators in the Iraqi Insurance Company:** In this section of the research, we explain the method of calculating the acceptable financial capacity of the Iraqi Insurance Company, as one of the companies operating within the Iraqi insurance sector, and the indicators of investment activity in it. Based on Instruction No. (5) of 2006 issued pursuant to the Insurance Business Regulation Law No. (10) of 2005, acceptable solvency is determined using the following equation:

$$\text{Acceptable Solvency} = \text{Available Solvency} / \text{Required Solvency} * 100$$

The acceptable capacity must not be less than 100%. To determine the acceptable financial capacity of the Iraqi Insurance Company, we must calculate the available and required capacity through the following steps:

First: Available Solvency: The available financial capacity reflects the insurance company's ability to meet its obligations to policyholders and is calculated according to the following equation:

$$\text{Available Solvency} = \text{Assets} - \text{Liabilities (excluding equity)}$$

Here, equity represents (paid-up capital, general reserves, and contingency reserves). Table (1) shows the calculation of the company's available financial capacity during the years included in the research sample.

Table (1) Available Financial Solvency

Year	Assets(1)	Liabilities(2)	Available Solvency (1-2)
2014	48122855000	30828440889	17.294.414.111
2015	54511647000	35538032889	18.973.614.111
2016	40222104000	19027952889	21.194.151.111
2017	43221344000	21444927889	21.776.416.111
2018	86631695000	54953133889	31.678.561.111
2019	111447559000	77535805000	33.911.754.000
2020	115869111000	77518923000	38.350.188.000
2021	169340678000	99700000000	69.640.678.000
2022	123927805000	44173536000	79.754.269.000
2023	183810492000	51619824000	132.190.668.000

Source: Prepared by the researcher based on the company's financial statements

From Table No. (1), we note that the availability of significant financial capacity at the Iraqi Insurance Company during the last years from 2021-2023 witnessed a significant and remarkable development in its financial solvency, as the company achieved its highest financial capacity in 2023, amounting to (132,190,668,000), unlike the previous years from 2014-2020, where the increase was gradual and slight.

Second: Required Solvency: The required financial capacity reflects the company's actual operating activity, either as 20% of retained premiums or 25% of net overdrafts, provided that the acceptable solvency is not less than 100%. Otherwise, the company will take appropriate measures to increase its assets.

Third: Acceptable Solvency: This reflects the company's ability to meet its obligations to policyholders in terms of equity. The acceptable solvency margin is calculated using the following formula:

$$\text{Acceptable Solvency} = (\text{Available Solvency} / \text{Required Solvency}) * 100\%.$$

Table (2) the development of the acceptable solvency of the Iraqi Insurance Company

Year	Available Solvency	Required Solvency	Acceptable Solvency	% change
2014	17.294.414.111	10140623000	171%	-
2015	18.973.614.111	11265076000	168%	11%
2016	21.194.151.111	9552848000	222%	32%
2017	21.776.416.111	8336529000	261%	18%
2018	31.678.561.111	1492131000	206%	21%
2019	33.911.754.000	13287067000	255%	24%
2020	38.350.188.000	11560132000	332%	30%
2021	69.640.678.000	18933801000	367%	10%
2022	79.754.269.000	18650679000	427%	16
2023	132.190.668.000	29485781000	448%	5%

Source: Prepared by the researcher based on the company's financial statements

Table No. (2) shows that the solvency ratio for the year 2023 reached (448%), which is a good ratio that indicates the high financial capacity of the Iraqi Insurance Company. The growth of reserves has had an effective impact on the growth of the solvency ratio for the last five years, This is an indicator of the company's strong financial position and therefore supports its investment policy, This development indicates that insurance companies have strengthened their ability to meet their obligations, improved their capital structure, and enhanced their financial security, thus becoming less vulnerable to financial distress. This gradual and noticeable improvement in the financial capacity of insurance companies during the study period can be attributed to a range of economic and administrative factors well-established in insurance literature. Growth in written premiums is a key determinant of improved solvency, as it provides a continuous flow of cash that supports the ability to meet obligations. Furthermore, efficient underwriting policies and improved risk management have contributed to reducing technical losses and mitigating the volatility of insurance results, positively impacting financial stability. In addition, more efficient investment management and more effective utilization of surplus funds have bolstered the companies' financial position. This improvement can also be attributed to increased capital and technical reserves, along with improved governance and financial control practices, all of which have led to a stronger solvency margin and greater financial stability during the study period.

1.2 Indicators of Investment Activity in Insurance Companies: The investment activity of insurance companies receives significant attention from senior management, regulatory bodies, policyholders, and other stakeholders. The results of the company's investment activity during the research period were measured using the following indicators:

First: $\text{Return on Investment} = \text{Realized Return} / \text{Average Invested Capital} * 100$

Whereas:

$\text{Average Invested Capital} = \text{Beginning} + \text{Ending Values of Investment Assets} / 2$ Table (3) shows the average return on the company's investments during the years included in the research sample.

Table (3) Return on investment for the period 2014-2023

Year	Return on investment(1)	Average Invested Capital(2)	ratio(1 2) %
2014	4878000000	57750000000	8 %
2015	5627000000	86816000000	6.48 %
2016	6934000000	107081000000	6.47 %
2017	6679000000	119714000000	5.58 %
2018	8065000000	115088000000	7 %
2019	7215000000	129131000000	5.6 %
2020	8402000000	159842000000	5.25 %
2021	8512000000	160817000000	5.30 %
2022	8120000000	150820000000	5.40 %
2023	8751000000	146213000000	6 %

Source: Prepared by the researcher based on the company's financial statements

From Table (3) above, we observe a decrease in the return on investment (ROI) rate during the years (2015, 2016, 2017) by (6.48, 6.47, 5.58) respectively. While it witnessed a slight improvement during (2018), reaching an ROI of (7%), it declined again in (2019, 2020, 2021, 2022, 2023) by (5.6, 5.25, 5.30, 5.40, 6). The average ROI reached (6.1%), indicating the inefficiency of the company's

investment decisions. This necessitates that the company investigate the reasons for the low return on investments despite the large sums allocated for investment, The higher returns in some years can be attributed to exceptional profits from the sale of investments or the revaluation of financial assets, leading to a temporary improvement in the rate of return. Additionally, exchange rate fluctuations in the macroeconomy have impacted the value of investment returns, particularly given that a portion of investment portfolios are linked to assets or financial instruments denominated in foreign currencies. Overall, this variation reflects the interaction between internal factors related to the efficiency of portfolio management and external factors such as market volatility and economic policies, which explains the relative stability and limited fluctuations in the rate of return during the study period.

Second: Investment Amounts Development Index: The development of investment amounts refers to the increase or decrease in the current period's rate compared to the previous period. The value of this rate reflects the direction of change according to the following equation:

$$(\text{Current year investment amounts} - \text{Previous year investment amounts} / \text{Previous year investment amounts}) * 100$$

Table (4) Investment Movement Schedule for the period 2014-2023

<i>Year</i>	<i>Amount Invested</i>	<i>Investment Growth Indicator</i>
2014	72,417,000,000	52.87%
2015	109,161,000,000	50.74%
2016	113,002,000,000	3.52%
2017	128,485,000,000	13.70%
2018	101,692,000,000	-20.85%
2019	156,570,000,000	53.96%
2020	171,263,000,000	9.38%
2021	158,972,000,000	-7.18%
2022	155,710,000,000	-2.05%
2023	153,028,000,000	-1.72%

Source: Prepared by the researcher based on the company's financial statements

Table (4) above shows that the years (2014 and 2015) witnessed significant growth in the volume of funds allocated for investment. The amount allocated for investment increased from (47369,000,000) in (2013) to (72,417,000,000) in (2014), representing a growth rate of (52.87%). This was due to an increase in paid-up capital from (1,500,000,000) to (2,000,000,000) , and an increase in the balance of technical reserves from (61,048,000,000) to (7,540,800,000). During (2015), we also observed an increase in the volume of investments to (109,161,000,000), representing a growth rate of (50.74%). In (2016), investments grew at a rate of (3.52%). During 2017, investments rose to 128,485,000,000, representing a growth rate of 13.70%. However, investment growth declined in 2018, falling to 101,692,000,000, a decrease of 20.85%. 2019 saw the highest investment growth, reaching 156,570,000,000, a 53.96% increase. This upward trend continued in 2020, with total investment funds reaching 171,263,000,000, a 9.38% increase over the previous year. However, investments experienced a continuous decline in the last three years (2021, 2022, and 2023), with respective decreases of 7.18%, 2.05%, and 1.72%, due to a decrease in the balance. Technical reserves in the year (2021), and a decline in insurance operations revenue in the year (2022).

3.3. Hypothesis testing: Conducting statistical analysis of data requires certain conditions, the most important of which is that the data be normally distributed. The Kolmogorov – Smirnov Test and the Shapiro-Wilk test were conducted, where the test was performed for both the acceptable solvency index and the investment activity indicators, as shown in Table No. (5) below:

Table No. (5) Results of the Normal Distribution Test for Data

variable/indicator	K- S test		S – W Test	
	Test value	P - value	Test value	P - value
Acceptable Solvency	0.19	0.21	0.91	0.22
Investment amounts	0.25	0.08	0.93	0.38
Return on investment	0.22	0.20	0.92	0.26

Source: Prepared by the researcher using the outputs of SPSS V26.

The results of the normality test show that all (P-value) associated with both the Kolmogorov – Smirnov Test and the Shapiro-Wilk test are greater than the significance level of 0.01, which means that the acceptable solvency indicators and investment decision indicators follow a normal distribution.

3.3.1. Testing Correlation Hypotheses

First: testing the statistical relationship between the acceptable solvency index and investment decision indicators. Table (6) shows the correlation coefficients between the study variables.

Table (6) Correlation coefficients between acceptable solvency indicators and investment activity indicators

	Y	Y1: Investment amounts index	Y2: (ROI) Index
X			
X1: Acceptable Solvency		0.83**	0.68*

The sgin (*) indicates that the correlation is statistically significant, assuming a significance level of (0.05), meaning that the (P-value) is less than (0.05). The sgin (**) indicates that the correlation is statistically significant, assuming a significance level of (0.01), meaning that the (P-value) is less than (0.01). The absence of mark either indicates that the correlation is not statistically significant, meaning there is no correlation.

Source: Prepared by the researcher using the outputs of SPSS V26.

Table (6) above shows the results of the Pearson correlation coefficient between the acceptable solvency index and the following investment activity indicators:

1. A strong, statistically significant positive correlation exists between the acceptable solvency index and the investment amounts index. The Pearson correlation coefficient between them is (0.83), which is a direct positive correlation (reflecting a reciprocal relationship between the two indicators, i.e., an increase in one will lead to an increase in the other). It is strong because its value is within the range of (0.7-1), and significant (statistically significant) below the (0.01) level, as shown in the correlation matrix. This means accepting the first hypothesis of the correlation, which states: There is a statistically significant correlation between acceptable solvency and the investment amounts development index.

2. 2. A moderate, statistically significant positive correlation exists between the acceptable solvency index and the return on investment index. The Pearson correlation coefficient between them is (0.68), which is a direct positive correlation. It reflects a reciprocal relationship between the two indicators, meaning that an increase in one will lead to an increase in the other. Its average value is within the range of (0.7-0.5), and it is significant (statistically significant) below the level of (0.05), as shown in the correlation matrix. This means accepting the second hypothesis of the correlation, which states: There is a statistically significant correlation between acceptable financial ability and the return on investment index.

Second: Testing the impact of the acceptable solvency index on investment decision: indicators. Table (7) shows us the results of the regression analysis between the research variables.

Table (7) Regression Analysis of the Acceptable Financial Solvency Index in Investment Activity Indicators

X1: Acceptable Solvency	Regression analysis outputs		Y1: Investment amounts index	Y2: (ROI)
	F		16.58	6.63
	P – value		0	0.030
	R ²		68%	46%
	A		-47541.47	1288.38
	B		215.7**	7.22*

The sign (*) with the highest values of the regression parameters (A, B) indicates that the parameter is statistically significant below the significance level of (0.05), meaning that the p-value for the t-test of the parameter is less than (0.05). The sign (**) with the highest values of the regression parameters (A, B) indicates that the parameter is statistically significant below the significance level of (0.01), meaning that the p-value for the t-test of the parameter is less than (0.01). The absence of either of the above marks indicates that the parameter value is not statistically significant (i.e., equal to zero).

Source: Prepared by the researcher using the outputs of SPSS V26.

The following observations are noted from the results of the analysis of the impact of the acceptable solvency index on investment activity indicators:

1. There is a statistically significant impact of the acceptable solvency index on the investment amounts index, where the calculated F-value reached (16.58). This is a statistically significant value below the significance level of (0.01), as the P-value for the F-test was less than (0.01). This means accepting the first hypothesis of the impact, which states: There is a statistically significant impact of acceptable financial capacity on the investment amounts index. The value of the coefficient of determination (R²) reached approximately (68%), which means that the acceptable solvency index explains approximately (68%) of the changes that occur in the investment amounts index. The remaining (32%) is due to other variables and the random error factor. The simple linear regression equation was calculated according to the following statistical formula:

$$y_1 = 215.7x_1$$

The simple linear regression equation above shows that when the acceptable solvency index changes by one unit, the investment amounts index changes by (215.7) units. If the acceptable solvency index is equal to zero, then the investment amounts index will also be equal to zero.

2. 1. There is a statistically significant effect of the acceptable solvency index on the return on investment index, where the calculated F-value was (6.63). This is a statistically significant value below the significance level of (0.05), as the p-value for the F-test was less than (0.05). This means accepting the first hypothesis of the effect, which states: There is a statistically significant effect of acceptable solvency on the return on investment index. The coefficient of determination (2R) was approximately (46%), meaning that the acceptable solvency index explains approximately (46%) of the changes in the investment amounts index. The remaining (54%) is due to other variables and the random error factor. The simple linear regression equation was calculated according to the following statistical formula:

$$y_1 = 7.22x_1$$

It is evident from the simple linear regression equation above that when the acceptable solvency index changes by one unit, the return index The investment changes by (7.22) units, and if the acceptable solvency index is equal to zero, then the return on investment index will also be equal to zero, Thus, the research hypothesis has been proven. .

4. Conclusions and Recommendations

4.1 Conclusions: Among the most prominent conclusions reached by the research are:

- 4.1.1. The low return on investment obtained from investing the company's funds, despite the large sums allocated to investment, as the return on investment does not exceed (10%), indicating the inefficiency of the investment decisions made by the company during the years of the research sample. The company's heavy reliance on insurance premiums to generate revenue may expose it to the risk of financial distress if insurance activity revenue declines.
- 4.1.2. Investment decisions are among the most important long-term strategic decisions in insurance companies. Therefore, it is crucial that they be based on scientific principles and practical experience to protect the company's scarce resources, namely insurance premiums and shareholders' funds. Furthermore, these decisions bind the company to obligations that cannot be revoked without incurring financial losses, This, along with the Pearson correlation coefficient of 0.68, indicates a positive correlation. This correlation reflects a reciprocal relationship between the two indicators; that is, a rise in one leads to a rise in the other. Its average value falls within the range of 0.5–0.7, and is statistically significant at a level below 0.05.
- 4.1.3. . The company enjoys a high level of financial solvency, which enhances its ability to meet its obligations to its customers on time, and also allows it to generate a cash surplus that can be used to support its operational and investment activities.

4.2. Recommendations: Based on our findings, we recommend the following:

- 4.2.1. Re-evaluate the investment instruments currently in use and develop investment plans based on feasibility studies that consider current market conditions when selecting future investment instruments.
- 4.2.2. Based on the above findings from the practical aspect of the study, which indicate a relative improvement and stability in the company's solvency levels over the years, insurance companies

can be required to conduct annual solvency assessments and disclose them in their annual reports. This measure would be a practical extension of the data reflecting the strength of the financial position and would enhance the credibility of these results through official documentation and publication. Furthermore, the periodic disclosure of solvency indicators contributes to increased transparency and reduced uncertainty among policyholders, which positively impacts the confidence of existing customers and attracts new ones. Therefore, the systematic implementation of this recommendation supports the company's financial stability and strengthens its competitive reputation in the insurance market.

- 4.2.3. Consider adopting the research indicators to evaluate the solvency and investment activity of Iraqi insurance companies and other companies operating in the Iraqi insurance sector.

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