

THE IMPACT OF APPLYING CORPORATE GOVERNANCE ON MANAGING RISKS AND PROFITS IN INSURANCE COMPANIESMakkawi Hasan*¹Aridah Mamoun Walid ²Alula Nerea Gebremeskel ³Hamad, Areej Ahmad ⁴^{*1,2,3}The Academy of Economic Studies of Bucharest, Bucharest, Romania⁴Jordan University, Amman, Jordan**ABSTRACT**

Insurance companies are considered important financial institutions in the economy because they provide insurance services to those who request them, and they also invest the funds collected in them in various investment aspects. Insurance companies (commercial or mutual) are financial institutions that face all kinds of financial and operational risks, and this requires taking several preventive measures to manage risks by adhering to local and international requirements. Among the most important risks facing insurance companies is the inability to fulfill their obligations towards their creditors from the insured, which means their bankruptcy and exit from the market. To reduce these risks, modern management and control mechanisms have been used, such as applying the concept of corporate governance, as this concept includes a set of rules and principles that target Provide effective internal control procedures and strict external regulatory and legislative tools. Because these risks affect the financial revenues of the insurance companies, so there must be mechanisms that the companies implement to reduce the risks and maximize the value of the insurance companies to ensure their growth and continuity.

In this study, we have worked on studying financial indicators, especially those related to revenues and profits, such as return on assets (ROA), return on investment (ROI), and the ratio of gross and net profits to equity for Jordanian insurance companies listed on the Amman Stock Exchange during the period (2015-2021), which is the period Before and after the adoption of the joint stock companies governance instructions for the year 2017 and the corporate governance instructions for insurance companies and the foundations of their organization and management for the year 2006 issued by the Insurance Authority, which was assigned to the Insurance Supervision Department in the Central Bank as of 6/15/2021 and its role in improving the revenues and financial performance of Jordanian insurance companies.

The results of the study indicated that there is an impact on the application of corporate governance instructions in Jordan and on nationalization companies, especially after the Central Bank took over the responsibility of controlling the insurance business, which led to a decrease in the level of risks to which Jordanian insurance companies are exposed, which was reflected on the financial performance of companies and led to an increase in profits in companies Which adhered to and applied governance procedures more efficiently.

Keywords:

Corporate Governance, Insurance Companies, Risk Management

INTRODUCTION

Insurance plays an important role in the lives of individuals, as it provides them with protection from the dangers that they are exposed to as individuals or companies, and these dangers continue as long as life lasts, through insurance companies we can face risks. The insurance services carried out by the insurance companies have increased because the risks exposed and multiplied, and have negatively affected profits, this prompted them to search for proactive steps to enable them to measure and evaluate risks and find out their causes. Risks technically and administratively improve

the results of the companies and reduce the amount of compensation and losses incurred by the company reflects on the companies' profits and reduce insurance risks and the risks of the insurance and investment contract and define its risk management strategy.

Insurance companies are the first party in the insurance contract, as they are the ones that provide insurance services to the insurance applicant (the insurer), they form organized financial bodies that are allowed to offer insurance services to customers and they must compensate them if the risks happened upon the insurance contract, we can be defined Insurance companies are financially reliable bodies making insurance applicant contracts and it confident of their financial ability to pay the value of compensation when the loss is realized.

Insurance companies achieve profits and financial returns by employing and investing the funds they obtain and the company's profits are measured by the ratio of the results achieved to the amounts employed. However, achieving these returns is linked with a set of risks that it may be exposed to. The most important risk faced by them is the inability to pay insurance contract dues to customers when they fall due, and related risks are directly reflected in the financial profits achieved.

In this paper, we will focus on the effects of applying the mechanisms and procedures of corporate governance on risk management and financial profits in Jordanian insurance companies and the role in achieving the main goal of companies, which is the stability and maximization of profits, with the lowest level of risk to achieving gains for the company and its work continuity.

Previous studies

[1] It aimed to identify the impact of corporate governance to hedge in a number of US companies listed on the New York Stock Exchange, focused on quality of governance, and concluded that improvements in governance standards lead to a reduction of risks in foreign currencies so it must control of foreign currency derivatives, credit Governance supports hedging with a significant positive relationship between governance, quality of management, hedging, and low risk.

[2] It aimed to identify the role of internal audit in risk management and its impact on corporate governance, the internal audit is one of the essential elements of corporate governance. The sample of companies was tested by a questionnaire and analyzed and concluded that an internal audit is an important tool for risk management, as an internal audit works positively on corporate governance. it concluded the importance of applying the principles of corporate governance and the internal audit in Algerian companies, and appointment more efficient staff in the internal audit department to ensure the improvement of performance financially and technically, which is reflected in corporate governance.

[3] It aimed to identify unexpected risks, how to assess the level of risk and its impact on the future of the company, determine the level of responsibility for taking risks by management's ability to manage risks. It concluded that companies apply principles of risk management only in specific operations but principles of risk management must be applied in all operations of the company if it wants to avoid risks and achieve objectives.

[4] It aimed to find the main tasks development of risk management to strengthen corporate governance, which leads to improving the value of the company in the long term, and concluded that the strength of governance contributes to reducing risk management through risk management affects the behavior of senior managers and members of the Board of Directors. The study recommended the establishment of effective risk management.

[5] The study aimed to find out the impact of applying corporate governance rules on the performance of Jordanian joint-stock service companies, and to know the extent to which corporate governance rules are applied by comparing the service companies' disclosures in their annual reports with the disclosure requirements required by the Securities Commission. It concluded the order of concerns in applying the principles of governance was as follows: The principle of disclosure and transparency, preserving rights of shareholders, The duties of the Board of Directors and important meetings of the general assembly of shareholders. It recommended working on the applied governance rules to protect the rights of shareholders.

[6] It aimed to measure the impact of the public shareholding companies' adoption of governance principles on decisions of the institutional investor in Amman Stock Exchange, to measure the impact of each of principles of governance for the investor. It concluded that investors were interested in the level of disclosure of Jordanian companies, and the level of companies' commitment to equality between shareholders.

IJETRM

International Journal of Engineering Technology Research & Management

www.ijetrm.com

METHODOLOGY

This paper seeks to answer the following questions:

- What is the concept of corporate governance followed by insurance companies and the most important principles based on?
- How do corporate governance principles contribute to reducing the risks that face insurance companies?
- What are the most important governance mechanisms in insurance companies and their impact on risk management and financial results of insurance companies in Jordan?

We relied upon the deductive approach and description and analysis to make our research.

Research importance

Governance plays an essential role in supporting confidence in corporate activities through improving administrative practices and reducing manipulation of corporate business results, rebuilding trust in published financial reports and enhancing disclosure in annual reports to appear accurate and transparent financial results, to enhance confidence Shareholders and stakeholders. Corporate governance has been attending as a result of the presence of cases of financial and administrative corruption that occurred in significant companies. Management facing problems resulting from Risk, try to manage it to reduce effects on the company. The governance works to balance interests between all parties to the insurance contract through disclosure and transparency in providing similar information to investors and avoiding accounting and financial problems.

Research problem

Corporate governance is the system through which the company is directed and managed, the principles of governance determine and distribute rights and responsibilities among the various parties in the company, such as the board of directors, managers, shareholders, and other stakeholders while studying the rules and procedures necessary for decision-making, (Guide to the rules of Jordanian corporate governance). The research problem focuses on answering the main question:

How does corporate governance contribute to improving their efficiency in managing and reducing risks to which insurance companies are exposed, and increasing their profits?

Research aims

This paper aims to identify the extent to which corporate governance principles are applied in the Jordanian insurance companies listed on the Amman Stock Exchange and their impact on managing risks and profits in the insurance companies. The main question can be formulated as follows:

What is the effect of applying corporate governance principles on managing risks and profits in the Jordanian insurance companies in the Amman Stock Exchange?

A group of sub-questions is derived from it:

- Are Jordanian insurance companies applying corporate governance principles to their work?
- Are applying corporate governance in insurance companies impact reducing risks and increasing profits for insurance companies?
- Does applying corporate governance affect the availability of a practical risk management framework to reduce risks and increase profits in insurance companies?

Research hypotheses

The research is based on the existence of a complementary relationship between corporate governance and risk management in insurance companies. A set of hypotheses can be formulated based on the objectives of the study, and the following are these hypotheses:

The main hypothesis:

Ho: There is no effect of applying the principles of corporate governance on risk management and profits in the

IJETRM

International Journal of Engineering Technology Research & Management

www.ijetrm.com

Jordanian insurance companies listed on the Amman Stock Exchange.

This hypothesis includes a set of sub-hypotheses, namely:

Ho1: There is no effect of applying corporate governance performance of Jordanian insurance companies.

Ho2: There is no effect of applying corporate governance on risk management in Jordanian insurance companies.

Ho3: There is no effect of applying corporate governance on the profits and revenues of the Jordanian insurance companies.

Ho4: There is no effect of applying corporate governance on reducing risks and increasing revenues and profits in Jordanian insurance companies.

Research limits

Spatial limitation: limited to the insurance sector companies listed on the Amman Stock Exchange.

Time limitation: The period covered by the study is from 2015-2021.

Research Variables

Independent Variables - Corporate Governance principles

The Dependent variable - Risk management and getting profit with more investment in insurance companies

The data collected is based on books, scientific journals, and published research to support the theoretical side.

Also, we used the analysis of financial data and financial ratios of insurance companies during the period 2015-2021 to support the applied side.

The main themes of the study

- First section: insurance and insurance companies.
- Second section: the application of corporate governance principle in insurance companies.
- Third section: risks and risk management in insurance companies.
- Fourth section: profits, revenues, and Investment in insurance companies.
- Fifth section: the link between applied corporate governance and (risk management, profits, revenues, and investment) in insurance companies.

- **First section: insurance and insurance companies**

The idea of insurance is based on precaution against disasters that face individuals and companies, resulting in material losses that may affect their financial ability. Insurance become essential for all developed and developing societies.

First: The concept of insurance.

Insurance has several definitions, including:

- Insurance is a “method used to distribute the losses incurred by an individual to a group and compensates those who suffer losses or damages, and its success depends on choosing a sufficient number of insurance contract holders.” [7]

- Insurance is “an agreement between the insurance company and a natural or legal person on his acceptance and commitment to paying a known amount (premium) in return for compensation for actual damage if he was injured as a result of a specific risk as agreed upon in the insurance policy and according to the company’s articles of association”. [8]

we can say that insurance depends on distributing the risk to a huge number of individuals in return for an amount of money called the insurance premium, which the insured pays to a specialized company that bears the consequences of the risks in return for the premiums it collects and compensates for the losses and damages incurred by the insured, and need presence insurance contract.

Second: components and benefits of insurance

IJETRM

International Journal of Engineering Technology Research & Management

www.ijetrm.com

- Components of insurance: It requires an available group of elements called elements of insurance activity; these elements are: [9]
 - Insurer: a company that specializes in insuring people or assets and undertakes contracting procedures with the insured.
 - insured (or his): a person or company who pays premiums according to the contract with a company in exchange for him or the beneficiary obtaining compensation estimated or specified in the insurance contract.
 - Beneficiary: is the party benefiting from the value of insurance and is represented by the insured himself, or for the benefit of a third party such as life insurance.
 - Insurance contract: It is a document issued by insurance companies for the insurance process including insurance conditions for each party, the most important data that must be included in the insurance contract are: - due insurance amount. - Periodic insurance premium paid by the insured to the insurance company.
 - Components of insurance: - insurer. - insured. – beneficiary. - insurance contract

- Benefits of insurance:

Insurance provides two services to the insured by distributing losses to the group of insured with the ability and experience to predict future results. The two services are:

- Compensating insured for losses that occurred and helping individuals and institutions avoid financial problems such as bankruptcy.
- Reducing the level of anxiety and uncertainty due to the inability to predict future events.

Third: insurance contract

- The concept of the insurance contract:

An insurance contract is a contract between the insurer and the insured, it is the main activity of any insurance company, it is done through contacting individuals to persuade them to insure, then obtaining their requests, examining and evaluating insurance risks to decide whether accept insurance on these risks or not, specifying conditions for accepting insurance, when taking the decision to accept insurance determines the value of insurance coverage, collection of premiums must be paid, how to settle claims due to insured in event of risk or loss. The steps of the insurance contract operations include - Examining the dangers. - Identifying the dangers. - Analyzing the risks to determine their pricing. - Monitoring the risks during the contract period. - Determining the rejected risks [10]

- Determinants insurance contract:

Factors and elements that are taken into account when studying and analyzing risk to decide to accept direct insurance or to undertake reinsurance, include:

- Value of the subject matter of insurance. - The type of insurance and degree of experience of the company. - The Degree of risk in the subject of insurance is exposed; including the geographical area of the thing to be insured is located. - The owner of the subject of insurance, his financial solvency and behavior. - Availability and adequacy of tools for control and prevention.

Financial insurance contract determinant: the Company's capital, technical and free reserves, the amount of insurance representing the value of the subject matter of the insurance.

The profits of the branch in previous years and the profits expected to be obtained, Competition with similar companies and Supervision and oversight laws. Basic principles for approving the insurance contract it including - Choosing the insured according to the insurance contract criteria of the company.

- Making a price balance within each group. - Fairness among policyholders. [11]

IJETRM

International Journal of Engineering Technology Research & Management

www.ijetrm.com

- Stages of carrying out the insurance contract process:
The process of concluding an insurance contract goes through several stages, including:
 - identifying the insurance applicant, and the risk associated with insurance and reviewing documents such as the property insurance inspection expert's report.
 - Submitting insurance requests to the risk manager for analysis, clarifying their pros and cons.
 - Based on the risk manager's report, the risk management office takes one of the following decisions: a- Rejecting the risk, b- Conditional acceptance, or c- Unconditional acceptance.
 - The actuary determines the appropriate insurance premium.
 - Insurance company prepares an insurance policy and makes appropriate amendments.
 - Insurance company determines the percentage of risk that wishes to transfer to a reinsurance company.[12]
- Most important objectives of the insurance contract process include:
 - Avoid approving an insurance contract against the interests of insurance companies or limiting it, excluding risks that exceed rates of occurrence of risks than acceptable levels.
 - Proper classification of accepted risks and each risk category and its degree of risk.
 - Determine the extent of coverage that can be covered by the insurance company (company's circumstances and nature of risk).

So, the insurance contract process achieves three basic objectives: - Safe distribution of risks. - Profitable distribution of risks. - Maintaining justice among policyholders.

Fourth: Types of Insurance:

- Purpose of insurance:
 - Private. - Commercial. - Social insurance.
 - Compensation for losses:
 - Cash insurance by paying a full amount, such as life insurance
 - Loss insurance by determining the value of compensation, such as fire insurance.
 - The point of view of the insurance contract to:
 - Optional insurance. - Compulsory insurance.
 - In terms of the insured risk, it is divided into three types:
 - Personal Insurance. - Property insurance. - Civil Liability Insurance.

Fifth: the importance of insurance activity

Insurance plays an essential role in life because it bears the burden of financing losses on behalf of the insured against a certain premium. Therefore, the importance of the insurance service is reflected in the following:

- Bringing comfort and tranquility instead of anxiety and stress to the insured.
- Increasing production, because insurance makes workers assured of their future and the future of their families.
- Accumulating savings and capital and then investing them to raise the income level of individuals.
- Activating credit, guarantees banks to recover the value of loans in the event of death or damage to property.
- Reducing average values of losses by advising the project of safe production methods and fire prevention.
- Distributing and dividing the risks and losses to the whole group or all the insured projects.
- Contributing to the eradication of the phenomenon of unemployment by hiring employees in insurance companies.[13]

Sixth: a theoretical framework for insurance companies:

IJETRM

International Journal of Engineering Technology Research & Management

www.ijetrm.com

- **Definition of the insurance company:** is “a specialized financial institution that compensates the insured for the losses incurred by him upon the occurrence of the insured event, through distributing loss among the total of insured persons, the compensation paid from contributions of insurers who pay insurance premiums of insurance contracts concluded with Insurance company, and this is the philosophy of insurance process”. [14]
- **Advantages of insurance companies:** Insurance companies enjoy several advantages, the most important of which are the following:
 - Insurance establishments are financially reliable establishments that perform a service when needed when its causes.
 - The productivity of insurance facilities depends on the paid-up capital
 - Prices of insurance services depend on the experience of specialized experts.
 - Insurance companies are considered among the most important means of saving in society
 - Insurance companies are supervised and controlled by the State to regulate their business and protect shareholders and the public.
 - Financial statements of insurance companies are difficult to analyze, which requires expertise when analyzing accounting, financial and investment information by financial analysts or auditors. [15]
- **Objectives of insurance companies:**
 - Search for profit and improve the level of profits.
 - Diversifying the insurance services offered;
 - Protection and improvement of the company's market share in the insurance market;
 - Ensure good quality of services provided to customers and at a good price.
- **Classification of insurance companies:**
Insurance companies can be classified according to:
 - Classification of companies according to insurance activities:
 - Life insurance companies - General insurance companies - Health insurance companies - Comprehensive companies
 - Classification according to the legal form of the insurance company:
 - Stock companies. - Fund companies. - Mutual and Takaful insurance companies. - Government insurance companies
- **The importance of insurance companies to the national economy:**
 - It encourages the import of goods from abroad and protects them from risks during the transportation process and prevents the risk or reduces its effects by taking preventive measures against the dangers of fire or earthquakes.
 - Insurance companies support the growth of the economy, influence economic progress and are linked with economic development.
 - Property insurance companies manage the risks to which productive projects are exposed.
 - It works to achieve social stability for the members of the community, to provide safety and reassurance, and to compensate the insured for losses or part thereof when they occur.
 - Insurance companies play a role in collecting national savings and reinvesting them to achieve economic development for society.
 - Insurance companies work to create job opportunities and employ young people, which reduce unemployment problems.
- **The main activities of insurance companies and the mechanism of work in insurance companies include:**
 - Issuing insurance policies after calculating the value of premiums required to perform insurance service and collection and investment of insurance premiums.

IJETRM

International Journal of Engineering Technology Research & Management

www.ijetrm.com

- Re-insurance operations with other insurance companies.
- Estimate the value of compensation to be met for insured risks, and pay them according to insurance contracts.

- Formation of various technical reserves.
 - For insurance of individuals and fund-accumulation operations:
 - Arithmetic Reserve.
 - Provision for unpaid claims.
 - Property and liability insurance:
 - Provision for applicable risks.
 - Provision for pending compensation.
 - Provision for reverse fluctuations.[16]
 -
- **Sources of income, expenses and investments in insurance companies:**
 - **Sources of income for insurance companies: It consists of:**
 - Premiums that you get from insured persons and other insurance companies.
 - Profits, interests and revenues resulting from investing the company's funds directly or the funds of others from premiums and reserve funds.
 - Investment revenues resulting from securities, or loans and real estate revenues.
 - Compensation that you get from reinsurance companies.
 - The value of the depleted part in marine insurance, fire insurance and amounts collected from third parties when compensation is returned to them.
 - Other revenues (fees for cancellation of insurance policies or fees for assignment of shares...etc.)
 - **Insurance companies' expenses: These include the following main items:**
 - Compensation paid by the company to the insured persons.
 - Compensation paid by the company to other insurance companies that have reinsured it.
 - Agents and brokers commission, medical examination, inspection and experience expenses.
 - Insurance and reinsurance premiums with other companies.
 - Administration and general expenses.
 - Other expenses such as donations, fees, taxes and any other allocations.

The insurance company allocates and operates part of the resources available to the company, to achieve future benefits through investment to be able to fulfill its obligations towards policyholders, as the insurance contract funds are invested at specific investment rates.

Insurance companies invest their money in the following areas of investment:

- Real estate investments. - Loans secured by insurance policies or secured by mortgages. - Investments in securities.
- Fixed cash deposits and current accounts in banks.

Investments can be classified into two types:

- Short-term investments: These are investments that can be quickly and easily converted into cash, and are made during the business cycle or one year.
- Long-term investments: These are investments that are difficult to convert into cash within a short period, and their duration is usually more than a year.

Where insurance companies invest money according to three basic axes: liquidity, guarantee, and profitability.

- **Opportunities and challenges facing the insurance sector:**

The insurance sector is facing a state of instability related to the economic environment and is linked to environmental, social and financial factors, and the desire to make profits, four main factors, represent opportunities and challenges in the insurance sector, which are as follows:

- ❖ Growing awareness of the risks facing companies and individuals
- ❖ Increasing interest rates and the possibility that prices will not remain stable for a long time.
- ❖ The growing role of technology.
- ❖ International economic changes, wars and geopolitical problems.

There are several factors affecting the performance of the sector in recent years, some of which are internal factors and external factors, the most important of which are the following:

- ✦ The growth of GDP is greater than the growth of insurance premiums
- ✦ The sector faces great difficulties in achieving returns that exceed the cost of capital.
- ✦ The cost base of insurance companies is irregular.
- ✦ The decline in the importance of insurance companies in the capital markets due to the lack of returns, the increase in the cost of capital, weak growth, and fluctuations in profits.

• Second section: Governance

The spread of globalization and economic openness need companies to keep pace with developments to survive, global financial crises led to increased interest in the concept of governance, by several organizations such as the Organization of Economic Cooperation Development (OECD), Center International Private Enterprise (CIPE), and financial institutions (IFC) they issued a set of standards for companies must abide by companies.

Interest in governance has increased after several financial collapses happened in several companies around the world, which were successful during past years, the main reason for failure was the absence or weakness of good management rules, which facilitated the manipulation of financial statements, preparation of misleading financial reports, making of failed decisions in absence of oversight and follow-up from shareholders and stakeholders. Therefore, financial and international institutions demanded to develop a set of standards and rules to ensure improved performance and provide oversight through “corporate governance”.[17]

Good governance is one of the responsibilities of the Board of Directors and guarantees good risk management, Therefore, attention to corporate governance and risk management in insurance companies increases and supports access of all stakeholders to reliable information about the company's value and risk management. The application of governance rules enhances the measurement and control of risks and stability of companies, it is reflected in the stability of the country's economy. Risk management also requires support for the implementation of governance and effective participation of the Board of Directors, which helps the company's management know its future and achieve a high degree of transparency. Corporate governance provides guarantees to protect investors from manipulation and embezzlement by regulating the relationship between the board of directors, executives' management, stakeholders, and shareholders by providing a high level of transparency between internal and external stakeholders, protecting the company's resources and preventing financial collapse. [18]

In Jordan, instructions were issued for the governance of insurance companies to provide an effective control system to monitor the extent of the insurance companies' compliance with the standards of governance. As Jordan is considered one of the developing countries that have been affected by changes in economic and political conditions, it was necessary to put a framework for governance in all sectors, and preparation of corporate governance rules began after 2004, and implementation was approved in 2008, and actual application began in 2009 [19]. The practical application of governance principles proved the necessity of having professional and technical standards for the insurance companies' management, Jordanian insurance companies committed to the concept of good governance through the application of the insurance business regulation law and its amendments, regulations and instructions issued by the Insurance Commission, which had a major role in Enhancing the performance of insurance industry effectiveness and attracting investment.[20]

The insurance companies witnessed a significant expansion and development in activity, size, or diversity of insurance services provided. The complexity of financial operations in financial markets between companies affected relations between various parties with different interests (Shareholders, customers, employees, and the state). The importance of corporate governance is represented in preserving banking and financial stability and the national economy in general

and building an environment that enjoys trust, transparency and accountability that encourages economic growth and investment.

Jordan Securities Commission issued amended instructions for corporate governance of listed companies in 2017, which became binding after the 2009 Governance Guide was not binding on companies when applying most rules, but for guidance only. Governance to reach full compliance, as the new instructions entered into force as of 22/5/2017. Governance rules in Jordan have been updated by the principles of corporate governance issued by the Organization for Economic Cooperation and Development (OECD), which have become binding and applied by the latest international standards and with recommendations of the Doing Business report issued by the World Bank, implementation of governance instructions has led to an advancement in the classification of Jordan's rank within protecting minority investors from 165th place in the 2017 Doing Business report to 146th place in Doing Business report Business for 2018, this indicates an improvement and more confidence in the investment climate in the financial market and the national economy, and the principles of governance are linked to the focus of rule of law and adoption of justice, equality and equal opportunities to achieve sustainable development.

The joint efforts of the supervisory authorities such as (the Central Bank, the Companies Control Department, the Insurance Department, and the Securities Commission) contributed to the application of the most important rules of governance in a binding manner in the joint-stock companies, with the adoption of mechanisms for coordination between these supervisory authorities so that application and compliance are easy and clear, and the goals of control governance are achieved, and Protecting investors and shareholders contributes to enhancing confidence in the national economy them to maintain the continuity of existence of companies, increase market value, and their competitiveness locally and globally, which ultimately leads to improving national economy and investment environment.

The amended Companies Law No. 34 of 2017 worked within three axes: 1- Stimulating the business environment 2- Compulsory governance 3- Greater protection for minority shareholders by Compulsory governance.

First: The concept of corporate governance:

The concept of corporate governance emerged in the United States of America as a result of the detection of cases of bribery, fraud and corruption in foreign trade, as the "Foreign Corrupt Practices Act" was drafted in 1977 Which included drafting and reviewing internal control system, increased interest in the concept of corporate governance as a result of the collapse of several giant international companies listed in financial markets, led to demand for the existence of means of control and accountability, disclosure and transparency, need to solve causes of Crisis. several committees recommended using corporate governance. as follows:

- Sarbanes-Oxley Act in the United States, passed in 2002, obliges companies to rely on financial information by internal control.
- Cadbury Report issued in the United Kingdom
- The Organization for Economic Co-operation and Development (OCDE) issued Principles of Corporate Governance in 1999.
- The global financial crisis in 2008, which began in the United States and spread to the world, led to governments' intervention to control major companies' management performance.

Definition of corporate governance: There is no unified definition of corporate governance, so there are several definitions, including It is "a set of laws, rules, standards that define the relationship between company's management, and owners and stakeholders, it is related to the accounting profession, and internal control structure." [21]

It is a "system includes a set of mechanisms, procedures, laws, systems and decisions that guarantee discipline, transparency and disclosure to achieve quality control work and excellence in performance by activating the management of economic unit to the exploitation of available scarce resources to achieve best possible economic benefits for all stakeholders and society. as a whole" [22]

The Organization for Economic Co-operation and Development (OECD) defines corporate governance as "a framework or system of relationships and corresponding responsibilities between a core group of shareholders and members of the board of directors, Management, and managers, mainly enhance competitive performance to achieve primary objectives of the company". [23]

IJETRM

International Journal of Engineering Technology Research & Management

www.ijetrm.com

The Institute of Internal Auditors (IIA) defines corporate governance as: “A series of procedures used by representatives of stakeholders to provide oversight, management, control of risk and to ensure adequate controls over control and direct contribution to the achievement of company's objectives to achieve agency's effectiveness”. [24]

There are vital points in the concept of corporate governance: (1) It is a set of rules and procedures through which management manages and supervises the company according to a structure that includes a set of rights and duties distributed among the board of directors, executives and shareholders, (2) A set of regulations and laws to monitor the performance of companies, (3) it is a regulation of the relationship between the board of directors, managers and shareholders.

Second: Benefits of governance:

- For companies: help the company to continue operating a competitive atmosphere, improve access to capital and enter financial markets, and adopt good governance practices to ensure a better system of internal control and a better profit margin.
- For shareholders: Good corporate governance practices provide more security for shareholders investments, and knowledge of essential decisions such as amending the Articles of Association, articles of incorporation, and sale of assets.[19]

Third: Corporate Governance Objectives: Corporate governance generally aims to achieve many objectives:

- Improving financial performance and maximizing the performance of economic units.[18]
- Protecting the rights of shareholders.[23]
- Develop control systems over the board of directors and unit management in a useful way improving the leadership skills of members.[25]
- Supporting the element of transparency in all transactions and operations of units and imposing procedures of accounting, financial, and administrative auditing that helps control elements of corruption in all stages of work.
- Enacting a set of laws, standards and policies that govern work of economic units, and disclosing the necessary information.
- Obtaining appropriate funding and predicting expected risks, as well as taking into account the interests of stakeholders, and activating communication channels.[26]
- Stopping risks or threats to interest's investors and shareholders, stopping, preventing fraud and corruption from abuse of power in economic units.[27]

Fourth: Principles of Corporate Governance:

The Organization for Economic Co-operation and Development (OECD) was the first organization to issue (Principles of Corporate Governance) in 1999 and developed these principles in 2004. Most countries adopted these principles, most important of these principles are as follows:

- Ensuring the existence of a basis for an effective framework for the control of the economic units: legal and regulatory requirements of governance are linked to the rules of law and transparency and work on the distribution and division of work and powers, and supervisory authorities must have authority and integrity adequate resources to carry out required tasks professionally and objectively.[22]
- Shareholders' rights and the main functions of the owners: Corporate governance guarantees the protection of the rights of individual and corporate shareholders despite the diversity of their goals, interests and investments. Governance provides a framework to protect shareholders by helping them to exercise their rights, which are:
 - Choosing the board of directors,
 - Transferring ownership of shares,
 - Reviewing the financial statements,
 - Obtaining a return from the profits,
 - Active participation in the meetings of the General Assembly.
- Fair treatment of shareholders: related to treating each class of shareholders equally, including minority shareholders and foreign shareholders, and the possibility of obtaining compensation when their legal rights are violated.

IJETRM

International Journal of Engineering Technology Research & Management

www.ijetrm.com

- Role of stakeholders in corporate governance: recognizes rights of all stakeholders by laws and mutual agreements, which encourages effective cooperation between the company and various stakeholders.[28]
- Disclosure and transparency: disclosing important information and emphasizing the role of the external auditor in disclosing the company's status, and information of the board and executive managers fairly and clearly for all shareholders and stakeholders on time.[29]
- Responsibilities of the Board of Directors: Company objectives and strategy must be defined guaranteeing the right to hold board of directors accountable to shareholders and supervise its management. [18]

Fifth: the importance of corporate governance: good governance regulates relations between stakeholders, boards of directors and executive management in a prevents abuse of power to serve personal interests, restricts the behavior of corporate managers, and eliminates conflicts of interest between managers and board members on one hand, and shareholders and investors on the other. its importance contains:

- Economic importance: fighting financial and administrative corruption, not allowing it to exist or return.
- Oversight importance: protecting the rights of all stakeholders and ensuring integrity, impartiality and integrity.
- Social importance: emphasizes the company's social responsibility towards society for all workers, and employees in the company.
- Accounting importance: making maximum use of accounting, internal control, ensuring the effectiveness and independence of external auditors.

The importance of governance can be divided into several levels:

- Corporate level, including 1. improving competitive performance. 2. Achieving an appropriate return on investments. 3. Increasing ability to attract investments for local and foreign companies. 4. Reducing costs of obtaining capital.
- shareholders and investors level, including 1. reducing the degree of risk on investments. 2. Achieving a high degree of liquidity. 3. Reducing risks arising from crises. 4. Reducing risks to the lowest possible level. And5. Maximizing the value of shareholders and preserving their rights.
- capital markets level, including 1. Preventing or managing internal trading operations. 2. Improving market share value. 3. Improving follow-up and supervision procedures 4. Promoting the process of disclosure plus transparency.[26]

Sixth: Principles and mechanisms of governance in insurance companies:

Principles of governance of insurance companies: - Insurance companies use governance to reduce risks, application of principles of governance includes a set of rules and principles aimed at providing strict internal and external control measures. Legislation in different countries seeks to provide necessary tools to ensure the proper functioning of insurance companies to ensure the provision of insurance services to customers according to their needs and ability to pay their obligations. It was necessary to develop principles of governance in the insurance sector to create efficient and rational management. Several bodies and organizations have developed a list of principles for governance systems to serve as application guides for practice systems, including:

- **Principles of Governance issued by the Organization for Economic Co-operation and Development (OCED).**
- **Principles of governance issued by the Commission for Supervision of Insurance Companies and Cooperatives (ACAM).**
- **Principles of Governance issued by Arab Organizations Forum Institute for the Supervision and Control of Insurance Business.**

Governance mechanisms in insurance companies:

There are two groups of governance mechanisms applied in insurance companies:

- External mechanisms for governance in insurance companies.
- Internal mechanisms of governance in insurance companies

IJETRM

International Journal of Engineering Technology Research & Management

www.ijetrm.com

External mechanisms of governance in insurance companies:

External audit: external auditor expresses an opinion on company's financial statements in accordance with accounting standards.

Governmental supervision: Securities Commission and Central Bank supervise the application of corporate governance principles in insurance companies according to the corporate governance guide in Jordan.

Internal mechanisms of governance in insurance companies:

Board of Directors and its committees: Board of Directors consists of two groups of members, independent members from outside executive management, their presence is considered one of the most important corporate governance mechanisms in addition to the members of the executive management, because the presence of an independent and qualified board is practiced function of supervision and control in a free and independent of management It is considered one of elements of governance.

The Board of Directors forms specialized committees, each committee is concerned with a specific task, such as Governance Committee, Risk Management Committee, and Audit Committee. The two committees report directly to the Board of Directors.

The Risk Management Committee and Corporate Governance Committee are the company's line of defense because they monitor and report on risk practices, risk management and compliance.

- **Risk Committee:** is responsible for identifying and evaluating main risks, measuring levels of the company's risk exposure and following up.

- **Governance Committee:** is responsible for identifying risks of non-compliance with laws and regulations, and capital requirements on a regular basis and following up.

Governance Committee:

Seeks to promote sound practices and ensure that the company does not exceed the requirements of the regulatory bodies, it plays an important role in monitoring the extent of the company's compliance with governance standards, and it supervises and participates In setting internal procedures in accordance with the regulatory instructions in a way that supports the company's senior management by applying and developing compliance procedures at all levels in the company and ensuring of all work done with integrity and accordance with laws, instructions and internal policies.

Key elements of adhering to principles of sound corporate governance include:

- Board of Directors provides general directives to spread the culture of governance and requests adherence in the company
- Company's work and governance policies and procedures are reviewed by Committee and approved by the Board of Directors.
- Comprehensive periodic reports on the company's degree of compliance and any risks resulting from non-compliance are presented to the company's board of directors
- Committee coordinates and works with senior management under the full supervision of the Board of Directors.
- Committee verifies the adequacy and effectiveness of internal audit procedures at the company level.

Duties of the Governance Committee:

- Ensuring independence, efficiency and effectiveness of the Board of Directors in the company.
- Supervising rewards of managers.
- Reviewing recommendations of nominations for membership of committees.

Develop and implement methods for evaluating the performance and effectiveness of the Chairman and all the Board committees.

- Supervising company's management plans.
- Presenting plans and recommendations to the Board of Directors to apply the principles of corporate governance.
- Presentation of proposals and required amendments to the company's organizational regulations.

Risk Management Committee

The framework of the company's risk management committee is an important part of the company's operations, aims to

IJETRM

International Journal of Engineering Technology Research & Management

www.ijetrm.com

manage risks in an organized and systematic through processes of measuring and monitoring risks, determining the type of risks and how to deal with them effectively by the Board of Directors. The Risk Committee ensures risk management policies are implemented and reported effectively to the Board of Directors. Risk Management assists executive management in confronting and determining and controlling Risks Company is exposed.

Main elements of a comprehensive risk management policy include:

- Board of Directors provides general directions for managing and supervising risks
- Company's risk group is reviewed by Risk Committee and approved by the Board of Directors.
- Risk management prepares a plan to comply with laws, regulations and internal policies, and defines the committee's work procedures.
- Committee coordinates and integrates credit risk, market risk, liquidity risk and operational risk management processes within the company.

Risk Management Committee raises its reports directly to the Board of Directors, assumes following responsibilities:

- Identify and evaluate the main risks facing the company.
- Measuring the extent to which these risks are likely to occur.
- Monitoring the type of risks that the company may be exposed, to must be approved by the Board of Directors.
- Determine capital requirements necessary for Committee to face these risks on an ongoing basis.
- Monitoring and evaluating key decisions related to monitoring and evaluating decisions related to specific risks.

Internal Audit Department:

It is considered one of the most important basic functions in a company in accordance with principles of governance. Among the duties of an internal auditor, according to principles of governance are:

- Developing and implementing a risk-based audit plan Examining and evaluating the adequacy and effectiveness of internal control systems in the insurance company.
- Determining internal controls and systems of the company, the extent of commitment, and compliance of all sections and employees with these controls.
- Ensure of all technical aspects of the insurance company are reviewed in specified periods, issuing findings and recommendations on the extent of compliance with laws and regulations.

Presence of the actuary:

He is an expert in insurance mathematics who rates all insurance risks and forms appropriate technical precautions for insurance companies. This function appeared and developed includes studying and analyzing all the risks associated with the financial services sector, including short and long-term risks associated with the approved pricing, investment and reinsurance policies.

The actuary possesses a set of specifications, which makes him an effective and essential element in practice governance in insurance companies, including:

- Possessing scientific and technical qualifications to provide advice and observations in acceptance, selection of control and supervision systems.
- Independence of actuary from various parties of interest in the insurance company.
- He is responsible by the Board of Directors for his reports submitted and the results of studies and analyses he presents.
- It is an important mediator to give transparency of complex technical aspects in calculating risks and compensations that could be a source of manipulation and fraud by the company's management.

- **Third section: Risk and risk management**

First: concept of risk in insurance companies.

The most important risk that insurance companies face is becoming, at a certain moment, demanding obligations exceed their financial capacity, this affects revenues, financial profits, and their competitive position in the insurance market,

and may lead to bankruptcy. There are several definitions of risk management because there is a difference in views when defining risk. It can define according to nature of risk those insurance companies.

Risk Identification (RISK)

There are several definitions of risk, which are:

We can define risks as: "A state of uncertainty about what will happen in future, whether the good or not, risk is represented in expectation of events and activities in future with a certain possibility".[30]

We can define risks as a circumstance in which the company is exposed to undesirable conditions in a deviation that occurs opposite to the expected or desired result.

Main causes of risks: risks facing any institution and its activities from external and internal factors. Risks causes can be divided into several sections, including: [31]

- Strategic risks: include 1- competition 2- customer changes 3- industry changes and solved by research and development of strategies
- Financial risks: include 1- interest rate, 2- exchange rate, and 3- credit - it affects liquidity and cash flows.
- Operational risks: include 1- organization 2- contracting 3- composition of the board of directors -it effects on accounting control and information system
- Moral risks: include 1- contracts 2- natural accidents 3- suppliers 4- environment - it effects on continuity

Risks can be classified into two types:

- **"general" systemic risk:** it is "risk cannot be avoided or eliminated and must be coexisted with, its negative effects minimized through diversification in the investment portfolio and preparation of contingency plans to confront, it is related to the environment where the company operates, such as Market risk, credit risk, operational risk, political, legal, and environmental risks.

- **Non-formal risks:** risks related to the company and can be avoided or treated, such as mismanagement, miss-investment, and strategic organizational risks, they can be avoided through the development of appropriate policies, controls and work procedures and selection of competent, experienced management, improvement of internal control systems and commitment of good governance".[32]

Insurance companies' risks are exposed can be divided into several types, include: [33]

- Natural risks, technical risks, new product risks, operational risk, underwriting risks, liquidity risk and fraud risks.

There are other special risks to which insurance companies are exposed:

- Competition with other insurance companies
- Deficit in payments.
- Risks of investing the company's capital and technical reserves.
- The administrative, organizational and planning aspects.

The risks can also be classified as actuarial, the Association of Actuaries in the United States of America divided risks in insurance companies into four groups as follows:

- **The first group is the risks of assets:** arising from fluctuations in the market value of the assets of the investment portfolio of the insurance company, such as interest rate risks, credit risks and market risks.
- **The second group of pricing risks:** due to the conditions of uncertainty surrounding when providing insurance services related to the future, such as the rate of return on investments, actual death rates, recurrence of losses, and rates of administrative expenses, where pricing is based on certain assumptions may not actually occur.
- **The third group is the risks of the suitability of assets for liabilities:** as a result of fluctuation of interest rates and inflation, the difference in interest rates and inflation in the market value of assets than the value of future liabilities insurance companies.
- **The fourth group is general risks:** external risks that control insurance companies, they cannot predict their occurrence; include laws and regulations that govern the work of insurance companies, the result of a lack of training for the insurance company's employees, brokers, and sales agents.

Second: Concept of risk management

Risk management is part of the risk cycle applied in the organization and depends on internal control procedures applied by management, the establishment of controls to prevent and detect any irregularities or abuses in operations when carrying out the activity to increase confidence in financial statements, there are several definitions of risk management, include:

Risk management is defined as “a process that includes the following four activities, which are planning, organizing, leading, and monitoring of company’s activities, it aims to reduce the size of the impact of accidental and commercial losses at a reasonable cost. [8] Insurance companies are exposed to several risks. Board of Directors uses Risk Committee to ensure the effectiveness of risk in the company, to:

- Protecting the interests of shareholders and stakeholders
- Ensure that the Board of Directors undertakes all strategic efforts to achieve added value for the company with an effective control system.
- Ensure adequate implementation of regulatory and oversight controls.

Risk management objectives:

The objective of risk management is to set the general policy to face potential damages and deal with risks to achieve the objectives of the company.

The general objectives of risk management can be summarized as follows: [34]

- Developing and analyzing the basis for determining types of risks.
- Defining goals, drawing strategies and documenting.
- Create a database of risks and classify them according to their expected effects.
- Develop plans and procedures to deal with risks.
- Follow up on effects and problems resulting from risks to reduce.
- Identifying and measuring risks and controlling or limiting effects.
- Reaching the company's financial goals while avoiding harming the company's reputation.
- Efficiency and effectiveness of operational processes with full compliance with laws and regulations.

Third: role of risk management

Risk management plays an essential role for the client and the insurance company: [12]

▪ **Regard to client /customer:**

- ❖ Studying risks that the client is exposed to.
- ❖ Preparing a practical guide to identify risks that the client is exposed to and their causes.
- ❖ Studying phases of the client's economic activity and identifying insurable risks.
- ❖ Examining and studying risks to be insured by the client.
- ❖ Studying means of prevention and determining their adequacy and efficiency to confront dangers and identify weaknesses.

▪ **Regard to insurance company: Risk management is responsible for structure, size and homogeneity of company's credit portfolio.**

- ❖ Divide acceptable risks on a technical basis and fully define the riskiness of credit operations to determine the obligations of insurance and reinsurance companies.
- ❖ Determine the company's general retention of each type of insurance and acceptable risk
- ❖ Determining the structure of reinsurance by composition of accepted risks and their limits and conditions
- ❖ Assisting the company's investment department in managing the insurance company's funds.
- ❖ Managing risks of various economic activities carried out by insurance companies.

Fourth: The procedures used to reduce the risks

Risk management can reduce the negative effects of risks in insurance companies by important measures: [35]

- **Control:** development of control procedures to ensure that risks do not occur or reduce them to the lowest level.
- **Diversification:** diversification of financing and investment sources and operations to reduce risks.
- **Participation:** participation of other parties in taking risks.
- **Transfer:** distribution of risks by transferring to another party.
- **Acceptance risk:** the administration's acceptance certain level of risk in cases the effects of negative risks are few and the cost of treatment is high.
- **Avoiding risks:** Designing processes to avoid risks according to a specific plan to reduce them.

Fifth: Risk management steps

The risk management process goes through a set of stages through a comprehensive and separate examination, analysis of all types of risks to the subject of risk study is exposed, by applying five basic steps: [36]

- **Definition of risk:** the first step to identifying risks surrounding work.
- **Risk analysis:** risk classified based on its sources

IJETRM

International Journal of Engineering Technology Research & Management

www.ijetrm.com

- **Risk Assessment:** Determine the element of risk by defining (the effects of each risk causes, the probability of each risk occurring)
- **Risk Control:** Determine methods used to reduce the probability of risk and its effects.
- **Periodic monitoring and follow-up:** explore any new sources of risk or failure to control previous risks.

Risk management consist several operations:

A- **Discovery process:** discovering and correcting actual problems when occur, requires a cycle of continuous controls to ensure effectiveness, policies and procedures are designed to identify unwanted results and discover them when occur.

B - **Preventive process:** designed and implemented by preventive policies and procedures for fear of undesirable results before occur.

C - **Corrective process:** Ensure corrective policies and procedures are taken for undesirable results, or ensure not repeated.

- **Fourth section: Profits and Investment in the insurance company.**

First: financial profits of the insurance company: profits in insurance companies vary as a result of risks exposed. Sources of funds and profits in the insurance company: Insurance companies seek to maximize profit (financial revenues), by searching for possible means to achieve goals and trying to control various aspects to prevent the achievement of goals.

Concept of profits: There are many definitions of profits, including:

Profits in general concept “ability of employed or invested funds to achieve financial returns, as company’s profits are represented in its ability to achieve profits from total financial resources placed at its disposal, company’s profits are measured by the ratio of results achieved by employed or used to achieve results [37]

Components of Profits: Profits consist of a group of elements as follows:

- **Productivity:** ratio of outputs to inputs. Inputs include working hours, production costs, and maintenance of machinery and equipment, while outputs include sales, income, and market share. Productivity is an indicator to know production functions.
- **Profitability:** increase in output compared to costs or expenses.
- **Effectiveness:** the ability to achieve expected activity and reach expected results.

Financial components: profits focus on two concepts:

Financial flows: the value of flows associated with the project during a certain period, the difference between the financial flows entering and leaving project represents the change in cash balance.

Gross profit margin: expresses the difference between sales of goods and costs of purchasing.

Profitability ratios and indicators: management focuses on indicators of profitability, they represent measures of efficiency of the company's performance in front of all stakeholders based on decisions and policies implemented by management, the most important financial ratios are: [38]

Gross profit ratio: evaluate the company's profits, a comparison must be made between net business output with capabilities placed at the company's disposal, including:

- Gross Profit Ratio of Own Funds = $\frac{\text{Gross Profit Value}}{\text{Own Funds Value}} * 100$
- Percentage of total profit for permanent funds = $\frac{\text{value of gross profit}}{\text{value of permanent funds}} * 100$
- Percentage of net profits for private funds = $\frac{\text{value of net profit}}{\text{value of private funds}} * 100$
- Percentage of net profits for permanent funds = $\frac{\text{value of net profit}}{\text{value of permanent funds}} * 100$
- Net profit ratios: depend on overall result and compare with one of elements of assets and liabilities
- * Some percentages are complementary to percentage of profits, such as:
- Economic Revenue Ratio = $\frac{\text{Deposit Interest Revenue} + \text{Total Activity Profit}}{\text{Permanent Funds}} * 100$
- Financial revenue ratio = $\frac{\text{net profit}}{\text{all available funds}} * 100$
- Activity profit ratio = $\frac{\text{net profit}}{\text{revenue value from insurance activities}} * 100$
- Exploitation ratio = $\frac{\text{net profit}}{\text{value of funds used in the insurance business}} * 100$

Second: Sources of Profits in Insurance Companies: Determine sources of profits in insurance companies, sources and components must be analyzed: [39]

Return on private funds is mainly related to following factors:

IJETRM

International Journal of Engineering Technology Research & Management

www.ijetrm.com

Net profits: represented the difference between total revenues and total costs, its source in the insurance company is:

- **Profits of insurance activity:** the net profits achieved from insurance activity, calculated by the difference between the insurance gross profit margin and costs of insurance activity.
- **Financial profits:** related to investment and management of assets, represented in the difference between investment returns and capital expenditures. the financial result is affected by net premiums through:
 - Investment returns: interest and capital gains from investments, higher returns, higher financial results.
 - Asset Leverage: increase in value of invested assets over their purchase value, leads to an increase in financial results.
- **The solvency margin:** is represented by the volume of private funds required to cover contract obligations towards the insured, financial leverage links the volume of private funds and return on private funds.

Third: importance of revenues and profits.

The main goal of the company is to achieve profit by achieving its objectives, including profit, keeping pace with modern economic developments, competition, progress and continuity of the company, including:

- Shareholders' reassurance that the company is continuing and achieving profits and returns.
- Continuing to achieve profits from old investments in future.
- Achieving financial balance and financial independence for the company, enabling it to raise working capital.

Fourth: profits to ensure the development of company as follows:

- Increasing investment and developing projects so the company has a strong financial program.
- Thinking about new projects to develop the company's activity.
- Lower costs (external funding source), and financial independence.

Investment and investment portfolio:

First: concept of investment

The investment concept focuses on activities of investing money in bonds, stocks and investment funds. Investment is defined as “investing money in assets that are kept sometimes to achieve a return on these assets in the future.[40]

Second: Investment Elements: Investment elements include the following:

- Contribution: the amount of the investor’s contribution, in cash, the investor is either a natural or legal person.
- Intention to obtain profit: investor aims to obtain profits or benefits from the investment.
- Risk: There must be a risk to achieve profits.
- Time factor: investor must wait for a certain period to achieve a return on his investment.

Third: Investment tools in insurance companies:

The investor is “any person who puts his resources and experience into a specific speculation, he may be among shareholders. Insurance companies are considered among these investors because they employ net money collected from their clients in various investments. [41] Investments in insurance companies include:

Long-term investments: - Financial assets, - Capital assets.

Short-term investments: - Financial assets.

Fourth: Factors affecting the investment policy of the insurance company:

There Several financial and technical factors affect investment policy in insurance companies and affect the decision of insurance companies to invest money in certain investments to ensure profits on capital because most of the money invested is belonging to policyholders, Insurance companies must preserve invested capital, such as government bonds. [12]

In property insurance, insurance companies build reserves and technical provisions such as - Provision for applicable risks - Provision for compensation under settlement - Provision for reverse fluctuations.

These provisions are considered the main source of financing investments and correspond to the company’s obligations towards policyholders and must be paid upon request, The administration should draw up an investment policy for insurance funds when investing them.

Fifth: Factors Affecting the Investment Portfolio: an investment portfolio is “a group of securities and other investment tools, as the company seeks to build an optimal investment portfolio, so it identifies factors affect portfolio to form a good portfolio, this requires focusing on long-term growth”. Factors affecting investment portfolio include:

- Portfolio capital growth rate

- Return or profit growth
- The amount of risk and the possibility of losing some or all investments

Sixth: risks of investing in insurance companies

Reasons for investment risks: Risk is a relative measure of the degree of volatility in expected rates of return from available investment alternatives; volatility in rates of return is due to two types of reasons: [12]

- General reasons: a set of factors affect the investment market as a whole in all investment channels, investment trends within each investment channel, including 1- Changing interest rates in the market, 2- Changing the purchasing power of money, 3- Changing economic cycles, 4- Market changes.
- Special reasons: a group of factors affect certain investments to the exclusion of other investments, or a specific investment trend without the rest of investments in the same group, including 1- Risks of investing in a specific field. 2- Risks of economic cycles related to a particular investment field 3- Risks Related to poor management efficiency in a particular investment field

Types of investment risks: [42]

Business risk, Market risk, Price risk - Money purchasing power risk, financial risk and Social or regulatory risk.

Measuring returns and risks of investing insurance companies' funds

- Investment return: amount of addition or increase occurs to wealth as a result of investing. Return can be divided into:
- Current return: return from dividends and interest in case of financial investment or return from commercial activity in case of physical investment.
- Capital return: return on differences in value of investment and in case of both financial investment and physical investment.

To build an optimal investment portfolio, we must take into account commitment to the following elements:

Relying on the private capital of a portfolio and Investment Portfolio Risk Measures

Among measures used to measure risks are:

- Standard deviation: one of the measures of risk and is considered one of the measures of dispersion for data, greater dispersion from the average of this data, greater standard deviation. A project with a higher standard deviation is more risky and less attractive. This depends on the existence of expected future data and the possibility of occurrence based on the company's experience, and the changes it expects to occur in future.
- Semi-variance: variance in the distribution of returns is one of the effective measures, but it faced several criticisms, so it was resorted to using something similar to variance it focuses on the investor's interest in reducing fluctuations in returns, the deviation is higher than arithmetic mean is one of the preferred things among managers. Therefore, Semi-variance is considered one of the best measures used.
- Coefficient of Variation: comparison between projects is based on variance if the arithmetic averages of returns of projects to be compared are equal, but if returns are unequal, it is preferable to rely on the coefficient of difference, which is a measure of relative variance helps to overcome the problem of unequal arithmetic averages of returns to be compared. When making a comparison between projects with returns of different averages, it is calculated by dividing the standard deviation by the arithmetic average of expected return on the average expected value of future data. A project with the lowest coefficient of difference is less risky.[43]

- **Fifth section: Relationship between Insurance, Governance, Risk Management, profits, and investment in insurance companies**

Insurance companies face all kinds of financial and operational risks; this requires taking preventive measures and measures to manage risks. The inability of insurance companies to fulfil their obligations is one of the most important risks may face and may lead to bankruptcy and exit from the market. Interest in the financial solvency of insurance companies increased after the financial crises in various companies, international bodies and insurance companies sought to set rules aimed at guiding insurance companies and helping them to fulfil their obligations, such as European decisions for solvency 2.

First: Procedures to ensure insurance companies comply with governance standards

Ministry of Commerce and Industry and Securities Commission is currently following up on the commitment of insurance companies to corporate governance because they are responsible for establishing joint stock companies and

monitoring their work in the Amman stock exchange, by issuing governance instructions to ensure the rights of stakeholders, application of governance include setting contract period with external auditors to five years continuous, two years must elapse before re-contracting again with the same previous auditor.

The Securities Commission issues instructions for corporate governance, through it monitors the performance of companies listed on the stock exchange, including insurance companies, imposes financial fines or suspends trading of shares of any company that violates rules of corporate governance, especially transparency and disclosure.

Insurance companies are exposed to many risks due to their activities, this requires building an effective control system that can avoid risks and predict them, by applying principles of corporate governance that affect reputation and investment in companies, to adhere to controls, insurance companies must work according to three Basic principles to the governance:

Independence: members of the Board of Directors independent and not bound by contracts with the company within the organizational structure; Recommendation for their appointment by Board of Directors, determines their rewards and incentives, approves appointment by the General Assembly of the company. Members may not be dismissed except by a decision of the Board of Directors, and approved by General Assembly [44].

One of the most important elements of the Authority's independence is the autonomy of the member; he enjoys high morals and responsibility with no interest between him and the company he supervises.

Obligatory: members have authority over the company to implement what is issued by accounting standards for insurance companies.[45]

Comprehensiveness: All company's business, transactions, contracts and investments are subject to the supervision of oversight committees, and internal and external scrutiny during and after implementation.

Second: Governance mechanisms and factors related to insurance supervision and control:

Oversight and oversight bodies intervene in companies by setting governance mechanisms and procedures insurance companies must adhere to when developing and implementing an investment policy.

Restrictions are imposed on insurance companies' investments through three main groups:

- Legal restrictions: a set of restrictions that determine conditions for investing funds related to insurance contracts.
- Qualitative restrictions: a set of restrictions that determine aspects of investments that must be invested in and conditions that must be met in each type of authorized investment.
- Quantitative restrictions: include restrictions that specify percentages that must be allocated and invested from each type of investment, these restrictions specify a maximum or minimum amount of funds that must be invested in each type of permitted investment.

Third: relationship between corporate governance and risk management in insurance companies

The existence of a risk management framework and the existence of governance are two sides of the same coin and are considered among the effective pillars of a company trying to impose a solid internal control system, they enable those in charge to provide methods that help in providing advice and advice to Board of Directors, as identification of positions of responsibility for risk management is linked to the existence of a basis for corporate governance. The importance of the special and complementary relationship between corporate governance and risk management (Jamil, 2014) is summarized as follows:

- Effectiveness of strategic and operational planning.
- Improving the organizational structure of the economic unit.
- Increasing the chances of successful implementation of projects.
- Providing a competitive advantage and adding value to the unit.
- A formal and integrated approach to the decision-making process.
- The achievement of operational and strategic goals.
- The company has organizational flexibility when setting plans, setting goals, and preparing appropriate budgets.
- Improving the mechanism for identifying opportunities and risks.
- Providing services effectively, efficiently, and economically.
- Improving the design and construction of the internal environment of the company and components of internal control elements, and improving and developing employee skills.

Fourth: Insurance risks and relationship with financial profits in insurance company

Financial revenues of insurance company are affected by result of technical and financial work of insurance companies, as technical and financial activity is exposed to several types of risks, including:

Decline in number of insurance contracts and volume of premiums paid, increase in percentage of paid insurance compensation, increased costs of insurance contract, increase in volume of disasters insured by insurance companies. and increase in bank interest rates.

Therefore, to increase return on private funds, increase and improve profits, and maintain the loyalty of owners, the company's management must be aware and able to deal with these risks through:

- Constantly updating and developing marketing and production policies.
- Creating new insurance products characterized by comprehensiveness and flexibility.
- Entering new markets instead of competing in traditional markets while expanding the customer base through advertising new products.
- Prevention of accidents through the adoption of safety and security conditions.
- Reliance on various distribution channels such as insurance brokers, agents or brokers.
- Electronic sales and presentation of products at reasonable prices.
- Reducing costs in instalments within reasonable limits.
- Investing insurance companies' funds in ways that are characterized by less volatility in value or speculation.
- Policy of diversifying an investment portfolio, because diversification of investments in the portfolio, lower risks.
- Diversifying investments geographically to avoid the impact of crises occurring in a particular region.

** Variables affecting the rate of profitability of insurance contracts: the process of profitability of an insurance contract is a measure of the performance of the insurance company's management and the essence of the insurance process, these variables can be identified with a statement of their relationship to the profitability of insurance contract: [12]
- dependent variable (profitability rate of insurance contract): profitability rate of the insurance contract is used as a measure of the outcome of an insurance contract on property and persons in insurance companies, it is necessary to distinguish and measure the difference between the profitability of the company's activity (profits of insurance activity) and profitability of company for entire business portfolio (profits activity and investment profits), indicate strength of company's financial position and stability of insurance companies in performing their original function, which is insurance contracts.

Various factors affect profitability of insurance company: [12]

- **Size of the company:** the size of the insurance company is measured by the company's net insurance premiums.
- **Market share of the company:** share of the insurance company in net premiums of the market as a whole:

Company's market share = direct insurance contract premiums for the company / net direct insurance contract premiums for the market as a whole.

- **Retention rate:** retention rate is calculated based on the company's net premiums (after subtracting reinsured contracts with other insurance companies) from the company's total contracts:

Retention rate = company's net premiums/company's total contracts

- **Growth rate (rate of change in the insurance contract)**

Growth rate = (net direct insurance contract premiums for the current year - direct insurance contract net premiums for the previous year) / direct insurance contract net premiums for the previous year

- **The size of the notification in the insurance portfolio (the rate of exposure of the insurance contract)**

Exposure rate for insurance contracts = net premiums/surplus (adjusted shareholders' equity)

This ratio measures the insurance company's ability to withstand sudden losses, as the surplus is the main reference for loss prevention.

- **The rate of change in the technical loss rate:** The pricing process in property and liability insurance depends mainly on the accurate prediction of loss rates using modern statistical models

- **Insurance activity surplus rate (insurance and investment contract profits)**

The capacity of the insurance contract for the insurance company begins with estimating the financial capacity of the insurance companies for the insurance contract

Insurance surplus rate = insurance surplus activity/net written premiums

- **The ratio of technical provisions and surplus to net premiums:**

The Ratio of technical provisions and surplus to net premiums = (technical provisions + surplus) / net premiums

- **The rate of return on investment:**

The rate of return on investment = net income from investment / average amount of money invested, whenever the investment rate is low, this indicates a deficiency in the company's investment portfolio.

- **Reinsurance facilities:**

Reinsurance facilities = reinsurance premiums issued to reinsurance companies / total direct premiums

From the foregoing, the relationship between risk management and profits appears through good management of risks and improvement of raising profits to achieve these activities, the company requires the following:

- Improving its financial performance and investments to cover risks it may be exposed to.
- Continuous improvement of the quality of services provided to customers, such as the use of information technology facilitate access to information.

Accordingly, mission of insurance companies is: Supporting economic growth by protecting institutions and individuals from risks that can be insured and covered by providing quality services at a good price.

Practical framework of research (applied study)

Includes following procedures:

First - research methodology

- **Descriptive approach:** It consists of theoretical framework and testing of research hypotheses to reach results of research, through use studies, research, scientific theses and various references and dealt with literature of subject.

- **Analytical approach:** this research problem was studied by reviewing financial statements of insurance companies and results before and after applying governance instructions in Jordanian companies in 2017 and governance instructions of insurance companies to analyze and interpret the results.

Second - research community

the research community selected consisted of Jordanian insurance companies listed on the Amman Stock Exchange, (23) insurance companies in the Amman Stock Exchange 2015-2022 (using comprehensive enumeration method due to the small size of the community), but some companies excluded: 2 insurance companies due to their exit from the market in 2017 and two companies stopped work after 2020, as we analyzed and interpreted actual results for only 19 companies that continued to operate during the period (2015-2021) and knowing results of their work plus financial ratios, interpreting their data in order to reach conclusions and interpretations. the study population consisted of (8) insurance companies listed in the first market, (11) insurance companies listed in the second market, and (4) insurance companies listed leaving the insurance market to determine the impact of applying principles of governance in Jordanian insurance companies and its impact on risk management, and reflected in returns and profits.

Table 1. Study community, source: filed study data

Market	Number of Firms	Percentage
First market	8	34.78%
Second market	11	47.82%
Leave market	4	17.40%
Total	23	100.00%

Table 2. The studied insurance companies, source: filed study data

No.	Insurance company name	Note	New Market section	Previous Market section	Study period
1	Al Nisr Al Arabi Insurance		1	1	2015-2022
2	Arab Insurance - Jordan		2	2	2015-2022
3	Arab Union		2	3	2015-2022
4	European Arabic		2	2	2015-2022
5	Arab Guarantors		2	3	2015-2022
6	Insurance Group		2	3	2015-2022
7	Arab Insurance	Until 2020	2	2	2015-2020
8	Delta Insurance	Until 2020	2	2	2015-2020
9	First Insurance		1	2	2015-2022
10	Gulf Insurance Group - Jordan		2	2	2015-2022
11	Holy Land Insurance	Until 2017	3	3	2015-2017
12	Jerusalem Insurance		1	1	2015-2022
13	Jordan International Insurance		2	2	2015-2022
14	French Jordanian Insurance		1	2	2015-2022
15	Jordanian insurance		1	1	2015-2022
16	Med Gulf - Jordan Insurance		2	2	2015-2022
17	Middle East Insurance		1	1	2015-2022
18	The Islamic lighthouse Insurance		2	3	2015-2022
19	National insurance		2	1	2015-2022
20	Philadelphia Insurance		2	3	2015-2021
21	Al Safwa Insurance	Until 2017	3	3	2015-2017
22	Islamic documentation		1	1	2015-2022
23	United Insurance		1	1	2015-2022

As we note that each of the insurance companies (Holy Lands Insurance and Al Safwa Insurance) stopped trading in 2017, i.e., on the date of mandatory adoption of corporate governance instructions and that companies (Arab Insurance and Delta Insurance) have stopped working as result of the COVID-19 crisis in 2020, as they Before the COVID-19 crisis, she was suffering from a group of financial problems, which led to her stopping and her inability to continue after the COVID-19 crisis.

Third - Study variables

- Define the variables of the study.
- Analyzing the financial statements of Jordanian insurance companies and presenting and interpreting the results

Time Series: It is the set of values for a specific statistical indicator arranged according to a time series so that each period corresponds to numerical values for the indicator called the series, and each limit of the time series is formed as a result of the interaction of a large number of factors affecting the studied phenomenon. The study of the time series aims to judge the logical relationship between the study variables, where we say that the time series is stable.

First: Measuring the effect of applying governance on insurance risks, profits, gross and net revenues, return on assets,

and return on equity during the period before and after the adoption of mandatory Jordanian corporate governance in 2017, during the period from 2015-2021, through a time series study.

The dependent variable: financial profits and returns

Profits are an indicator that measures the net income achieved for every one dinar of private funds, and companies seek to maximize these profits to distribute more profits to shareholders in addition to supporting their financial position.

Total profit ratio: To evaluate the company's profits, a comparison must be made between each of the companies' business results with the capabilities placed at the company's disposal to obtain this return calculated in the following way:

- **Gross profit:**

Table 3. gross profit for insurance companies between 2015-2021

Insurance company name	type	2021	2020	2019	2018	2017	2016	2015
Arabian eagle insurance	Gross profit	13,346,885	15,082,399	13,648,756	13,728,360	14,685,496	12,122,021	14,420,518
Jordanian insurance	Gross profit	10,387,808	11,418,655	10,096,565	8,818,989	8,856,152	13,247,301	12,876,448
First insurance	Gross profit	1,036,529	4,753,803	3,949,376	2,585,949	3,076,347	5,501,630	4,077,141
Gulf Insurance	Gross profit	8,859,892	13,063,007	13,442,184	5,497,295	-11,157,416	1,652,515	14,677,405
Middle East insurance	Gross profit	4,295,571	4,914,875	4,630,731	5,147,245	6,384,832	7,825,367	6,698,685
Jordan International	Gross profit	5,445,716	3,400,782	-710,331	289,007	-140,662	1,452,901	484,649
Islamic insurance	Gross profit	5,744,477	6,436,212	5,353,507	6,317,225	5,893,869	6,416,170	8,077,339
Mediterranean and Gulf	Gross profit	1,537,024	539,977	2,216,575	748,853	207,271	2,650,885	660,029
Jordanian Arabi insurance	Gross profit	1,385,327	3,439,459	5,382,506	3,624,285	3,250,260	4,820,153	4,490,359
Arab Guarantors insurance	Gross profit	1,440,586	1,618,945	-759,849	3,353,425	2,134,550	312,745	2,289,010
French Jordanian insurance	Gross profit	6,133,172	3,519,206	5,063,636	4,416,939	5,538,436	5,770,635	6,807,074
United insurance	Gross profit	3,243,403	3,586,514	2,282,365	2,943,131	2,959,723	4,727,324	5,202,782
national insurance	Gross profit	2,491,183	1,380,020	1,529,005	2,074,103	2,921,795	2,192,898	3,703,760
Arab Union insurance	Gross profit	4,124,579	2,424,513	2,205,862	1,803,912	1,766,846	90,946	2,105,241
Jerusalem insurance	Gross profit	2,858,868	2,927,374	3,981,240	850,858	2,946,196	3,671,950	4,380,366
Delta insurance	Gross profit	2,786,754	3,301,790	3,053,171	2,147,591	694,644	2,051,046	3,439,890
Arabs insurance	Gross profit	0	0	719460	749419	3120748	4103366	3658723
Arabic insurance	Gross profit	859,506	2,087,338	263,818	1,701,191	3,569,145	2,776,104	2,871,814
European Arabic insurance	Gross profit	4,305,025	4,948,400	4,312,078	4,050,379	4,078,417	2,656,756	4,817,922
Al manara insurance	Gross profit	4,060,631	6,637,550	700,709	-965,566	1,046,114	210,400	-895,530
Holy Land insurance	Gross profit	0	2858925	2295636	910080	2516536	1996460	424473
Al Safwa insurance	Gross profit	0	1898635	-16389	558634	1012048	1259086	1173807
Philadelphia insurance	Gross profit	0	362260	-1072285	86441	2180815	-101382	179544

We note that companies whose annual total profits decreased were eventually forced to stop working, which gives an indication that a company whose insurance contract revenues decline because its main activity will suffer in the end, will not be able to cover customer claims, leads to its cessation of work, exit from insurance market who has a strong competition between companies. Companies were affected by when the mandatory application of governance instructions in 2017, some companies were able to continue, and some were affected by COVID-19 pandemic in 2020 and had to exit the insurance market, this indicates companies who apply governance procedures were able to Continue.

Gross Profit of Own Funds Ratio = Gross Profit Value / Own Funds Value * 100

Table 4. Gross Profit of Own Funds Ratio for insurance companies between 2015-2021

Insurance company name	Type	2021	2020	2019	2018	2017	2016	2015
Arabian eagle insurance	Gross Profit Ratio of Own Funds	58.41%	66.41%	61.24%	65.19%	70.16%	58.40%	67.76%
Jordanian insurance	Gross Profit Ratio of Own Funds	20.67%	28.54%	28.01%	26.19%	24.77%	38.25%	37.97%
First insurance	Gross Profit Ratio of Own Funds	3.04%	14.36%	11.93%	7.88%	9.46%	17.45%	13.55%
Gulf Insurance	Gross Profit Ratio of Own Funds	21.37%	38.89%	48.33%	23.29%	-49.09%	4.89%	42.90%
Middle East insurance	Gross Profit Ratio of Own Funds	10.50%	12.74%	12.01%	13.09%	15.35%	18.55%	17.90%
Jordan International	Gross Profit Ratio of Own Funds	26.58%	15.87%	-3.18%	1.25%	-0.59%	5.67%	1.86%
Islamic insurance	Gross Profit Ratio of Own Funds	23.97%	28.71%	26.08%	30.51%	26.90%	32.74%	43.59%
Mediterranean and Gulf	Gross Profit Ratio of Own Funds	28.80%	10.33%	37.78%	13.01%	3.35%	36.82%	9.82%
Jordanian Arabic insurance	Gross Profit Ratio of Own Funds	17.02%	38.69%	66.22%	50.96%	49.42%	80.53%	83.86%
Arab Guarantors insurance	Gross Profit Ratio of Own Funds	29.12%	25.12%	-12.43%	56.37%	37.16%	7.01%	58.12%
French Jordanian insurance	Gross Profit Ratio of Own Funds	47.37%	27.86%	41.33%	41.10%	56.53%	69.36%	96.06%
United insurance	Gross Profit Ratio of Own Funds	19.64%	23.28%	16.08%	21.23%	21.29%	34.57%	39.25%
national insurance	Gross Profit Ratio of Own Funds	21.83%	14.71%	16.83%	23.93%	28.35%	21.29%	38.59%
Arab Union insurance	Gross Profit Ratio of Own Funds	198.10%	41.38%	35.72%	27.26%	29.76%	2.58%	53.64%
Jerusalem insurance	Gross Profit Ratio of Own Funds	19.59%	20.44%	28.26%	6.18%	21.65%	27.31%	31.78%
Delta insurance	Gross Profit Ratio of Own Funds	26.87%	31.06%	30.42%	22.08%	7.32%	19.31%	32.40%
Arabs insurance	Gross Profit Ratio of Own Funds			18.63%	18.96%	40.59%	44.77%	41.81%
Arabic insurance	Gross Profit Ratio of Own Funds	8.26%	19.53%	2.56%	16.83%	33.91%	25.81%	28.06%
European Arabic insurance	Gross Profit Ratio of Own Funds	36.05%	41.62%	38.25%	38.24%	38.83%	25.36%	49.48%
Al manara insurance	Gross Profit Ratio of Own Funds	83.15%	120.75%	20.04%	-30.94%	26.04%	4.19%	-17.82%
Holy Land insurance	Gross Profit Ratio of Own Funds		940.01%	80.94%	45.97%	113.95%	83.95%	5916.82%
Al Safwa insurance	Gross Profit Ratio of Own Funds		182.53%	-1.38%	37.52%	87.61%	68.77%	84.53%
Philadelphia insurance	Gross Profit Ratio of Own Funds		17.49%	-42.10%	2.10%	47.99%	-2.30%	4.33%

We note that companies whose annual total profits decreased by relying on their funds were eventually forced to stop working, indicating that companies whose contract revenues and other insurance activity declined, depending on revenues and profits from insurance activities as the main activity of insurance companies will suffer in the end, will not be able to continue to coverage of customer claims, this leads to the cessation of work and exit from the insurance market due to existence great competition between companies, as companies were affected by mandatory application of governance instructions in 2017, some companies able to continue, but other affected by COVID-19 pandemic in 2020 and had to exit from the insurance market, this indicates that companies were able to apply governance procedures were able to continue.

Percentage of gross profit of permanent funds = value of gross profit/value of permanent funds * 100

Table 5. Percentage of gross profit of permanent funds for insurance companies between 2015-2021

Insurance company name	Type	2021	2020	2019	2018	2017	2016	2015
Arabian eagle insurance	Percentage of gross profit for permanent funds	11.52%	14.07%	14.00%	15.69%	18.84%	17.87%	23.30%
Jordanian insurance	Percentage of gross profit for permanent funds	36.46%	41.01%	35.42%	29.43%	27.16%	39.73%	44.67%
First insurance	Percentage of gross profit for permanent funds	2.06%	11.88%	10.96%	7.68%	8.60%	15.88%	12.02%
Gulf Insurance	Percentage of gross profit for permanent funds	11.25%	19.25%	20.83%	8.64%	-16.32%	2.43%	23.40%
Middle East insurance	Percentage of gross profit for permanent funds	29.55%	30.64%	30.56%	36.26%	45.44%	55.94%	53.70%
Jordan International	Percentage of gross profit for permanent funds	15.99%	10.27%	-2.15%	0.88%	-0.43%	4.61%	1.61%
Islamic insurance	Percentage of gross profit for permanent funds	11.82%	13.10%	11.10%	13.43%	12.66%	14.09%	18.98%
Mediterranean and Gulf	Percentage of gross profit for permanent funds	3.21%	1.30%	5.62%	2.17%	0.56%	7.20%	1.76%
Jordanian Arabic insurance	Percentage of gross profit for permanent funds	3.34%	10.24%	19.35%	15.35%	14.30%	14.26%	13.12%
Arab Guarantors insurance	Percentage of gross profit for permanent funds	1.61%	2.16%	-1.13%	5.77%	3.58%	0.44%	3.19%
French Jordanian insurance	Percentage of gross profit for permanent funds	21.50%	12.21%	17.23%	15.18%	19.23%	21.12%	28.20%
United insurance	Percentage of gross profit for permanent funds	7.93%	9.30%	5.92%	7.49%	7.12%	11.21%	13.90%
National insurance	Percentage of gross profit for permanent funds	3.59%	2.05%	2.25%	3.03%	4.15%	3.16%	6.02%
Arab Union insurance	Percentage of gross profit for permanent funds	43.34%	46.71%	68.61%	38.61%	38.71%	1.93%	54.48%
Jerusalem insurance	Percentage of gross profit for permanent funds	13.96%	13.66%	17.84%	3.68%	12.33%	14.33%	16.85%
Delta insurance	Percentage of gross profit for permanent funds	9.29%	12.40%	11.96%	7.73%	2.44%	6.76%	11.52%
Arabs insurance	Percentage of gross profit for permanent funds	0.00%	0.00%	5.14%	5.15%	23.64%	30.77%	27.59%
Arabic insurance	Percentage of gross profit for permanent funds	3.59%	9.31%	1.29%	8.22%	16.29%	14.17%	15.50%
European Arabic insurance	Percentage of gross profit for permanent funds	11.78%	13.88%	12.49%	11.49%	11.62%	8.07%	15.16%
Al manara insurance	Percentage of gross profit for permanent funds	27.54%	46.58%	4.42%	-6.41%	6.59%	1.29%	-5.81%
Holy Land insurance	Percentage of gross profit for permanent funds	0.00%	54.71%	39.13%	15.81%	40.64%	27.73%	6.32%
Al Safwa insurance	Percentage of gross profit for permanent funds	0.00%	9.75%	-0.08%	2.68%	4.59%	5.34%	5.30%
Philadelphia insurance	Percentage of gross profit for permanent funds	0.00%	2.97%	-8.27%	0.78%	21.02%	-1.00%	1.97%

We note that companies whose annual total profits decreased by relying on permanent funds, including funds and clients' funds, were eventually forced to stop working, indicating that company whose contract revenues and insurance activity decrease and depends on revenues and profits from insurance activities(main activity of insurance companies) It will suffer in the end and not be able to continue and cover claims of customers, which lead to cessation of work and exit from insurance market due to existence of great competition between insurance companies.

- Net profit:

Table 6. Net profit for insurance companies between 2015-2021

Insurance company name	Type	2021	2020	2019	2018	2017	2016	2015
Arabian eagle insurance	Net profit	2,926,301	3,062,142	2,841,688	2,566,125	2,001,316	2,528,659	2,438,730
Jordanian insurance	Net profit	876,439	3,011,696	1,470,912	115,704	-499,723	1,189,214	623,851
First insurance	Net profit	5,131,224	5,675,597	5,160,552	3,212,900	-11,082,984	1,204,560	4,375,945
Gulf Insurance	Net profit	1,632,335	1,011,416	1,212,958	1,470,182	1,162,567	4,583,876	2,210,131
Middle East insurance	Net profit	-133,380	-256,581	430,914	99,602	-551,284	1,012,926	1,603,020
Jordan International	Net profit	73,671	-562,784	131,134	35,729	-980,125	495,391	94,165
Islamic insurance	Net profit	-823,846	949,906	1,017,402	650,465	590,891	700,354	503,489
Mediterranean and Gulf	Net profit	-1,394,005	331,556	176,729	662,090	1,319,982	528,532	454,077
Jordanian Arabic insurance	Net profit	791,237	1,422,422	1,439,001	1,102,089	1,316,541	1,597,809	1,209,581
Arab Guarantors insurance	Net profit	1,322,145	1,501,528	1,103,973	1,122,172	1,149,697	1,565,313	1,281,283
French Jordanian insurance	Net profit	920,380	888,162	461,171	-902,050	1,216,504	1,363,603	1,282,201
United insurance	Net profit	-3,776,108	-210,792	96,552	693,509	407,254	-394,976	-720,931
National insurance	Net profit	1,314,876	1,196,141	1,243,501	1,031,054	800,606	460,860	1,037,356
Arab Union insurance	Net profit	140,125	611,772	261,064	213,890	-299,691	696,660	549,980
Jerusalem insurance	Net profit			-351,810	-3,048,385	-1,346,812	490,496	445,561
Delta insurance	Net profit	-427,812	622,480	360,871	304,899	450,864	620,965	119,916
Arabs insurance	Net profit	942,202	1,218,057	999,122	695,900	625,234	739,277	720,020
Arabic insurance	Net profit	-798,103	1,777,316	405,638	-945,265	-989,770	629	-214,895
European Arabic insurance	Net profit		-2,531,963	-2,893,172	-131,395	-169,693	1,072,022	-1,332,688
Al manara insurance	Net profit		-398,226	-350,073	567,298	-642,237	-557,745	-1,570,711
Holy Land insurance	Net profit		-515,367	-1,567,707	-222,672	105,720	259,868	315,996
Al Safwa insurance	Net profit	2,926,301	3,062,142	2,841,688	2,566,125	2,001,316	2,528,659	2,438,730
Philadelphia insurance	Net profit	876,439	3,011,696	1,470,912	115,704	-499,723	1,189,214	623,851

We note that companies whose annual net profits decreased were eventually forced to stop working, giving an indication that company whose contract revenues and activity of insurance operations decline will suffer in the end and not be able to cover customer claims, leading to the cessation of work and exit from the insurance market which characterized the presence of great competition among companies. companies were affected by the mandatory application of governance instructions in 2017, and some of them affected by COVID-19 pandemic in 2020, were forced to exit the insurance market, this indicates that companies were able to apply governance procedures when it faces crises can continue.

Percentage of net profits for private funds = value of net profit / value of private funds * 100

Table 7. Percentage of net profits for private funds for insurance companies between 2015-2021

Insurance company name	Type	2021	2020	2019	2018	2017	2016	2015
Arabian eagle insurance	Percentage of net profits for private funds	12.81%	13.48%	12.75%	12.19%	9.56%	12.18%	11.46%
Jordanian insurance	Percentage of net profits for private funds	1.74%	7.53%	4.08%	0.34%	-1.40%	3.43%	1.84%
First insurance	Percentage of net profits for private funds	15.06%	17.15%	15.59%	9.79%	34.08%	3.82%	14.54%
Gulf Insurance	Percentage of net profits for private funds	3.94%	3.01%	4.36%	6.23%	5.12%	13.56%	6.46%

Middle East insurance	Percentage of net profits for private funds	-0.33%	-0.67%	1.12%	0.25%	-1.33%	2.40%	4.28%
Jordan International	Percentage of net profits for private funds	0.36%	-2.63%	0.59%	0.15%	-4.10%	1.93%	0.36%
Islamic insurance	Percentage of net profits for private funds	-3.44%	4.24%	4.96%	3.14%	2.70%	3.57%	2.72%
Mediterranean and Gulf	Percentage of net profits for private funds	-26.12%	6.34%	3.01%	11.50%	21.32%	7.34%	6.76%
Jordanian Arabic insurance	Percentage of net profits for private funds	9.72%	16.00%	17.70%	15.50%	20.02%	26.69%	22.59%
Arab Guarantors insurance	Percentage of net profits for private funds	26.73%	23.30%	18.06%	18.86%	20.01%	35.08%	32.53%
French Jordanian insurance	Percentage of net profits for private funds	7.11%	7.03%	3.76%	-8.39%	12.42%	16.39%	18.10%
United insurance	Percentage of net profits for private funds	-22.86%	-1.37%	0.68%	5.00%	2.93%	-2.89%	-5.44%
National insurance	Percentage of net profits for private funds	11.52%	12.75%	13.69%	11.89%	7.77%	4.47%	10.81%
Arab Union insurance	Percentage of net profits for private funds	6.73%	10.44%	4.23%	3.23%	-5.05%	19.74%	14.01%
Jerusalem insurance	Percentage of net profits for private funds	0.00%	0.00%	-2.50%	22.16%	-9.90%	3.65%	3.23%
Delta insurance	Percentage of net profits for private funds	-4.12%	5.86%	3.60%	3.13%	4.75%	5.85%	1.13%
Arabs insurance	Percentage of net profits for private funds			25.88%	17.61%	8.13%	8.07%	8.23%
Arabic insurance	Percentage of net profits for private funds	-7.67%	16.63%	3.94%	-9.35%	-9.40%	0.01%	-2.10%
European Arabic insurance	Percentage of net profits for private funds	0.00%	-21.29%	-25.67%	-1.24%	-1.62%	10.23%	-13.69%
Al manara insurance	Percentage of net profits for private funds	0.00%	-7.24%	-10.01%	18.18%	15.99%	-11.12%	-31.26%
Holy Land insurance	Percentage of net profits for private funds		-169.45%	-55.28%	11.25%	4.79%	10.93%	4404.74%
Al Safwa insurance	Percentage of net profits for private funds		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Philadelphia insurance	Percentage of net profits for private funds		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

We note that companies whose annual net profits decreased by relying on their funds were eventually forced to stop working, indicating that company whose contract revenues and activity of insurance operations declined and depends on revenues and profits from insurance activities of the insurance companies will suffer in the end and will not be able to continue and coverage of customer claims, which leads to the cessation of work and exit from the insurance market due to the existence of great competition between companies.

Percentage of net profits for permanent funds = value of net profit / value of permanent funds * 100

Table 8. Percentage of net profits for permanent funds for insurance companies between 2015-2021

Insurance company name	Type	2021	2020	2019	2018	2017	2016	2015
Arabian eagle insurance	Percentage of net profits for permanent funds	2.53%	2.86%	2.91%	2.93%	2.57%	3.73%	3.94%
Jordanian insurance	Percentage of net profits for permanent funds	3.08%	10.82%	5.16%	0.39%	-1.53%	3.57%	2.16%
First insurance	Percentage of net profits for permanent funds	10.21%	14.19%	14.32%	9.54%	-	3.48%	12.90%
Gulf Insurance	Percentage of net profits for permanent funds	2.07%	1.49%	1.88%	2.31%	1.70%	6.74%	3.52%

Middle East insurance	Percentage of net profits for permanent funds	-0.92%	-1.60%	2.84%	0.70%	-3.92%	7.24%	12.85%
Jordan International	Percentage of net profits for permanent funds	0.22%	-1.70%	0.40%	0.11%	-3.01%	1.57%	0.31%
Islamic insurance	Percentage of net profits for permanent funds	-1.70%	1.93%	2.11%	1.38%	1.27%	1.54%	1.18%
Mediterranean and Gulf	Percentage of net profits for permanent funds	-2.91%	0.80%	0.45%	1.92%	3.57%	1.44%	1.21%
Jordanian Arabic insurance	Percentage of net profits for permanent funds	1.91%	4.23%	5.17%	4.67%	5.79%	4.73%	3.54%
Arab Guarantors insurance	Percentage of net profits for permanent funds	1.48%	2.00%	1.64%	1.93%	1.93%	2.22%	1.78%
French Jordanian insurance	Percentage of net profits for permanent funds	3.23%	3.08%	1.57%	-3.10%	4.22%	4.99%	5.31%
United insurance	Percentage of net profits for permanent funds	-9.23%	-0.55%	0.25%	1.76%	0.98%	-0.94%	-1.93%
National insurance	Percentage of net profits for permanent funds	1.89%	1.77%	1.83%	1.51%	1.14%	0.66%	1.69%
Arab Union insurance	Percentage of net profits for permanent funds	1.47%	11.78%	8.12%	4.58%	-6.57%	14.79%	14.23%
Jerusalem insurance	Percentage of net profits for permanent funds	0.00%	0.00%	-1.58%	-	-5.64%	1.91%	1.71%
Delta insurance	Percentage of net profits for permanent funds	-1.43%	2.34%	1.41%	1.10%	1.58%	2.05%	0.40%
Arabs insurance	Percentage of net profits for permanent funds	7.49%	9.21%	7.13%	4.78%	4.74%	5.54%	5.43%
Arabic insurance	Percentage of net profits for permanent funds	-3.33%	7.93%	1.98%	-4.57%	-4.52%	0.00%	-1.16%
European Arabic insurance	Percentage of net profits for permanent funds	0.00%	-7.10%	-8.38%	-0.37%	-0.48%	3.26%	-4.19%
Al manara insurance	Percentage of net profits for permanent funds	0.00%	-2.79%	-2.21%	3.77%	-4.05%	-3.41%	-10.19%
Holy Land insurance	Percentage of net profits for permanent funds	0.00%	-9.86%	-26.72%	-3.87%	1.71%	3.61%	4.70%
Al Safwa insurance	Percentage of net profits for permanent funds	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Philadelphia insurance	Percentage of net profits for permanent funds	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

We note that companies whose annual net profits decreased by relying on permanent funds, including their funds and clients' funds, were eventually forced to stop working, indicating that company whose contract revenues and activity of insurance operations decrease depends on revenues and profits from insurance activities as the main activity of insurance companies. It will suffer in the end and not be able to continue, cover claims of customers, will lead to cessation of work, its exit from insurance market due to existence of great competition between companies.

- **Rate of return on investment:**

Rate of return on shareholders' equity = net investment income / average invested funds (shareholders' equity)

We note through the time series extending for the period (2015-2021) that rate of return on investment witnessed fluctuations and faced changes as a result of the mandatory application of governance instructions in companies listed on the Amman stock exchange in 2017 and the occurrence of the COVID-19 crisis in 2020, greatly affected insurance companies during the period from 2015 to 2021.

Table 9. Rate of return on shareholders' equity for insurance companies between 2015-2021

Insurance company name	Type	2021	2020	2019	2018	2017	2016	2015
Arabian eagle insurance	ROI	12.81	13.48	12.75	12.19	9.56	12.18	11.46
Jordanian insurance	ROI	1.74	7.53	4.08	0.34	-1.4	3.43	1.84
First insurance	ROI	6.12	4.87	6.93	8.28	7.75	6.81	4.4
Gulf Insurance	ROI	15.8	16.89	18.56	13.61	-48.76	3.56	12.79
Middle East insurance	ROI	3.99	2.62	3.15	3.74	2.8	10.87	5.91
Jordan International	ROI	-0.68	-1.21	2.03	0.38	-2.38	4.09	6.38
Islamic insurance	ROI	8.35	8.18	5.95	5.6	9.68	10.08	10.18
Mediterranean and Gulf	ROI	1.38	-10.77	2.24	0.62	-15.83	6.88	1.4
Jordanian Arabic insurance	ROI	-10.12	10.68	12.52	9.15	8.98	11.7	9.4
Arab Guarantors insurance	ROI	-28.18	5.14	2.89	11.13	22.98	11.84	11.53
French Jordanian insurance	ROI	6.11	11.26	11.75	10.25	13.44	19.2	17.07
United insurance	ROI	8	9.75	7.78	8.09	8.27	11.45	9.67
National insurance	ROI	8.06	9.46	5.08	-10.41	11.8	13.24	13.36
Arab Union insurance	ROI	-181.36	-3.6	1.56	10.48	6.86	-11.19	-18.37
Jerusalem insurance	ROI	9.01	8.35	8.83	7.49	5.88	3.43	7.53
Delta insurance	ROI	1.35	5.76	2.6	2.2	-3.16	6.56	5.18
Arabs insurance	ROI			-9.11	-77.13	-17.52	5.35	5.09
Arabic insurance	ROI	-4.11	5.82	3.5	3.02	4.28	5.77	1.17
European Arabic insurance	ROI	7.89	10.24	8.86	6.57	5.95	7.06	7.39
Al manara insurance	ROI	-16.34	32.33	11.6	-30.29	-24.64	0.01	-4.28
Holy Land insurance	ROI		-832.51	-102.01	-6.64	-7.68	45.08	-18,576.64
Al Safwa insurance	ROI		-38.28	-29.46	38.1	-55.6	-30.46	-113.12
Philadelphia insurance	ROI		-24.88	-61.55	-5.41	2.33	5.89	7.61

We note that the return on shareholders' equity index decreased when implementing governance instructions in 2017 in a mandatory manner for a group of companies and became negative for others, which eventually led these companies to stop their business and exit from the market, especially when the COVID-19 crisis occurred, it also gives an indication for companies whose return is Investing in it is low or negative because it is exposed to risks that may lead to its exit from the market, as several companies exited market showed their financial statements of return on equity for negative numbers and eventually exited the market. Therefore, more attention must be to governance procedures applied in them and management Risks for coming years and indicates that whenever the rate of return on investment is low, this indicates a deficiency in the company's investment portfolio.

- **Rate of return on assets (ROA):**

We note through the time series extending for the period (2015-2021) that rate of return on assets index witnessed fluctuations and faced changes as a result of the mandatory application of governance instructions in companies listed on the Amman stock exchange in 2017 and the occurrence of the COVID-19 crisis in 2020, greatly affected insurance companies during the period from 2015 to 2021.

Table 10. Rate of return on assets (ROA) for insurance companies between 2015-2021

Insurance company name	Type	2021	2020	2019	2018	2017	2016	2015
Arabian eagle insurance	ROA	2.35	2.69	2.71	2.73	2.4	3.47	3.64
Jordanian insurance	ROA	0.81	3.36	1.64	0.13	-0.55	1.49	0.83
First insurance	ROA	3.54	2.72	3.76	4.5	4.41	3.75	2.56
Gulf Insurance	ROA	3.85	4.82	4.73	3.21	-10.46	1.09	4.24
Middle East insurance	ROA	1.8	1.15	1.4	1.7	1.32	5.25	2.66
Jordan International	ROA	-0.36	-0.76	1.27	0.29	-1.45	2.59	4.56
Islamic insurance	ROA	4.4	4.17	2.97	2.76	5.01	4.93	4.8
Mediterranean and Gulf	ROA	0.3	-2.29	0.48	0.13	-3.77	1.84	0.38
Jordanian Arabic insurance	ROA	-3.11	3.61	3.88	2.94	2.93	3.56	2.94
Arab Guarantors insurance	ROA	-8.04	1.95	1.02	3.7	8.49	3.69	3.11
French Jordanian insurance	ROA	2.12	4.54	4.28	3.41	4.22	5.46	4.42
United insurance	ROA	3.27	3.63	2.8	2.93	3.03	4.14	3.58
National insurance	ROA	3.18	3.31	1.72	-3.4	4.55	5.45	5.16
Arab Union insurance	ROA	-18.09	-1.23	0.59	4.34	2.49	-2.34	-4.15
Jerusalem insurance	ROA	3.59	3.24	3.45	2.93	2.22	1.33	3.16
Delta insurance	ROA	0.45	1.99	0.91	0.82	-1.24	2.74	2.17
Arabs insurance	ROA			-2.55	-16.72	-6.28	2.21	1.96
Arabic insurance	ROA	-1.53	2.21	1.3	1.03	1.56	2.21	0.46
European Arabic insurance	ROA	2.34	3.27	2.75	2	2.04	2.66	2.56
Al manara insurance	ROA	-3.4	9.25	2.69	-6.87	-6.41	0	-1.22
Holy Land insurance	ROA		-24.88	-24.84	-1.6	-1.8	12.37	-18.35
Al Safwa insurance	ROA		-3.52	-3.88	7.13	-7.64	-5.77	-14.52
Philadelphia insurance	ROA		-6.45	-17.62	-2.17	0.96	2.71	2.94

We note that the return on assets index decreased when implementing governance instructions in 2017 in a mandatory manner for a group of companies and became negative for others, which eventually led these companies to stop their business and exit the market, especially when the COVID-19 crisis occurred. It also gives an indication for companies whose return is on assets in it are low or negative because they are exposed to risks and lead to an exit from the market, this is what happened to several companies that exited during years 2017 and at the end of 2020, that need more attention of governance procedures applied and risk management for coming years, this indicates that higher rate of return on investment is low, as this indicates a deficiency in company's investment portfolio.

- **Measuring the impact of each of the insurance risks (liquidity risk, the risk of change in the insurance contract, the risk of change in the size of the risk) on the total and net financial profits of the insurance companies.**

The Dependent variable: insurance risks (size of risks)

as we notice through a time series during the period from 2015 to 2021. Lower insurance risks, the more profits the company achieves and protects the rights of customers, shareholders and stakeholders.

It is represented in the following indicators: (Al-Hamidi 2012)

- **The risks of the insurance portfolio:**

It is calculated through the ratio of the size of risks and measures net premiums of insurance contracts to surplus.

Insurance portfolio risk = net insurance contract premiums/surplus

Table 11. Net insurance contract premiums/surplus for insurance companies between 2015-2021

Insurance company name	Type	2021	2020	2019	2018	2017	2016	2015
Arabian eagle insurance	Insurance portfolio risk	77857.03%	63034.69%	67317.75%	39938.71%	27959.62%	18020.61%	35215.92%
Jordanian insurance	Insurance portfolio risk	5331.95%	5681.28%	6239.51%	6060.80%	6985.99%	6375.59%	6598.63%
First insurance	Insurance portfolio risk	8369.35%	5769.19%	10634.57%	9774.58%	7181.07%	10569.55%	6832.05%
Gulf Insurance	Insurance portfolio risk	4076.26%	4119.53%	6719.72%	4851.74%	4360.92%	5065.61%	4652.40%
Middle East insurance	Insurance portfolio risk	7298.42%	5572.10%	6932.16%	7070.29%	6712.75%	8285.56%	6776.03%
Jordan International	Insurance portfolio risk	12792.10%	7394.94%	6721.84%	18006.82%	19187.27%	48917.21%	14945.92%
Islamic insurance	Insurance portfolio risk	3813.14%	3337.36%	3736.80%	3827.29%	3846.54%	3548.38%	2255.12%
Mediterranean and Gulf	Insurance portfolio risk	3114.42%	4417.50%	5494.50%	5266.96%	6100.21%	6200.81%	5961.42%
Jordanian Arabic insurance	Insurance portfolio risk	6469.67%	6942.71%	8857.17%	7633.74%	6799.10%	7211.72%	6814.36%
Arab Guarantors insurance	Insurance portfolio risk	4327.39%	3903.67%	4354.90%	5968.75%	4740.87%	4329.64%	4706.83%
French Jordanian insurance	Insurance portfolio risk	12502.15%	7111.36%	14596.68%	11379.40%	10620.85%	11180.37%	5027.93%
United insurance	Insurance portfolio risk	4988.14%	12733.70%	16951.10%	17780.74%	11099.76%	12288.05%	15907.60%
National insurance	Insurance portfolio risk	3073.26%	3742.92%	4419.90%	3897.04%	4958.33%	2617.52%	2786.06%
Arab Union insurance	Insurance portfolio risk	5925.31%	3761.05%	3504.09%	4021.32%	3672.41%	1187.77%	3935.32%
Jerusalem insurance	Insurance portfolio risk	15454.38%	8564.79%	9692.87%	7155.88%	6613.12%	3510.28%	4663.68%
Delta insurance	Insurance portfolio risk	7953.99%	7736.17%	6488.20%	5500.50%	3744.47%	2887.06%	2372.46%
Arabs insurance	Insurance portfolio risk			5181.46%	5570.06%	5943.20%	6511.29%	7731.14%
Arabic insurance	Insurance portfolio risk	6305.50%	5782.58%	10254.69%	7550.50%	6832.92%	6158.36%	3675.38%
European Arabic insurance	Insurance portfolio risk	10773.81%	11163.57%	10650.35%	9096.88%	8058.52%	7097.97%	6708.29%
Al manara insurance	Insurance portfolio risk	4575.56%	3915.08%	2823.03%	3232.47%	3474.99%	3144.45%	2415.98%
Holy Land insurance	Insurance portfolio risk		4295.57%	8071.11%	6476.79%	1854.13%	5345.12%	4665.65%
Al Safwa insurance	Insurance portfolio risk		3461.08%	3342.36%	2306.83%	3456.55%	3413.08%	1873.41%
Philadelphia insurance	Insurance portfolio risk		2496.03%	2459.95%	3995.49%	4793.53%	2558.37%	1555.78%

The higher value of net premiums from insurance contracts indicates company can fulfil its obligations towards clients and continue its work, that it is doing its work in a way that reduces risks and increases profits. In 2017 and after the COVID-19 crisis in 2020, percentages gradually decreased, in the end, stopped and left the insurance market.

- **The risk group of the insurance contract/growth rate (the rate of change in the insurance contract):**

It includes the percentage of change in insurance contracts and measures the amount of change in the volume of net premiums for a year ((N) compared to the year before (N-1). The acceptable range for this percentage ranges between % - 33 and + 33%, however, an increase in the volume of net insurance premiums requires an increase in capital and reserves, the percentage of change is given as follows:

Growth rate (rate of change in the insurance contract) = volume of net premiums for current year - volume of net

premiums for previous year.

Growth rate of insurance premiums = (net direct insurance contract premiums for current year - direct insurance contract net premiums for previous year) / direct insurance contract net premiums for previous year

Table 12. Growth rate of insurance premiums for insurance companies between 2015-2021

Insurance company name	Type	2021	2020	2019	2018	2017	2016
Arabian eagle insurance	Growth rate of insurance premiums	7.36%	0.61%	-0.01%	9.77%	14.85%	0.45%
Jordanian insurance	Growth rate of insurance premiums	0.50%	-11.22%	-6.52%	-5.39%	2.95%	13.67%
First insurance	Growth rate of insurance premiums	-0.38%	-3.17%	27.63%	-4.77%	3.58%	34.33%
Gulf Insurance	Growth rate of insurance premiums	18.66%	-5.91%	4.58%	6.20%	-1.65%	-19.35%
Middle East insurance	Growth rate of insurance premiums	2.68%	-13.87%	0.36%	2.59%	-2.20%	14.27%
Jordan International	Growth rate of insurance premiums	76.72%	40.77%	-32.87%	2.17%	0.97%	40.27%
Islamic insurance	Growth rate of insurance premiums	7.52%	-9.95%	2.39%	-0.50%	2.74%	2.25%
Mediterranean and Gulf	Growth rate of insurance premiums	6.87%	-15.34%	4.35%	1.45%	-2.53%	10.07%
Jordanian Arabic insurance	Growth rate of insurance premiums	1.94%	-12.78%	23.38%	16.63%	-0.57%	7.37%
Arab Guarantors insurance	Growth rate of insurance premiums	13.56%	-15.00%	-15.44%	35.43%	15.91%	-5.21%
French Jordanian insurance	Growth rate of insurance premiums	24.71%	-4.27%	13.11%	2.93%	2.87%	2.69%
United insurance	Growth rate of insurance premiums	-3.65%	-15.96%	4.96%	15.20%	-9.80%	1.91%
National insurance	Growth rate of insurance premiums	6.01%	-12.50%	-18.52%	14.27%	16.11%	-1.88%
Arab Union insurance	Growth rate of insurance premiums	73.65%	13.15%	10.34%	12.77%	8.81%	-15.59%
Jerusalem insurance	Growth rate of insurance premiums	9.74%	-11.53%	15.33%	1.16%	4.50%	2.72%
Delta insurance	Growth rate of insurance premiums	4.77%	-3.02%	19.95%	18.03%	-6.69%	-0.09%
Arabs insurance	Growth rate of insurance premiums		-100.0%	-16.26%	-3.08%	-12.52%	7.15%
Arabic insurance	Growth rate of insurance premiums	8.14%	-9.08%	-11.93%	7.68%	12.03%	-1.90%
European Arabic insurance	Growth rate of insurance premiums	2.36%	-7.49%	7.37%	18.30%	12.68%	-7.36%
Al manara insurance	Growth rate of insurance premiums	21.16%	67.29%	1.66%	-15.00%	27.54%	-0.42%
Holy Land insurance	Growth rate of insurance premiums	-100.00%	-11.51%	28.02%	-13.95%	40.81%	14.56%
Al Safwa insurance	Growth rate of insurance premiums	-100.00%	3.24%	-17.90%	-24.38%	0.80%	-10.58%
Philadelphia insurance	Growth rate of insurance premiums	-100.00%	-21.62%	-13.81%	-10.19%	50.88%	-3.57%

We indicate changes in the value of insurance contracts through time series during the period from 2015 to 2021. The ratio reflects the extent of change that occurs in the policy of the direct insurance contract of the company, then the relative weight of market income, as an increase or decrease of this ratio means instability of the policy of insurance contracts. Whenever these ratios are high and increasing, the company's position is stable and progresses in future. Whenever this ratio decreases or becomes negative, this indicates that it will not be able to fulfil its obligations. When the ratio becomes negative, this is a dangerous indication it will exit from the market unless it rearranges its position to stay in the sector witnessing fierce competition.

- **Liquidity risk group:**

It is measured by liquidity ratio, this ratio is calculated by dividing value of liabilities/ value of current assets, it gives an indication of extent to which insurance company responds to any financial claims and the possibility of settling obligations of policyholders in event of liquidation, as acceptable range for this ratio is less than 105%.

Liquidity risk = value of liabilities / value of current assets.

Table 13. Liquidity risk for insurance companies between 2015-2021

Insurance company name	Type	2021	2020	2019	2018	2017	2016	2015
Arabian eagle insurance	Liquidity risk	95.83%	98.78%	97.70%	96.16%	94.24%	92.20%	87.47%
Jordanian insurance	Liquidity risk	79.72%	92.48%	95.86%	102.99%	119.68%	99.17%	96.71%
First insurance	Liquidity risk	93.30%	99.49%	99.78%	90.03%	79.99%	83.65%	79.53%
Gulf Insurance	Liquidity risk	120.18%	119.72%	128.97%	140.21%	158.43%	181.15%	164.70%
Middle East insurance	Liquidity risk	76.48%	79.07%	79.60%	73.86%	69.59%	68.63%	69.45%
Jordan International	Liquidity risk	75.62%	63.71%	56.68%	51.53%	60.37%	59.60%	37.51%
Islamic insurance	Liquidity risk	55.26%	56.39%	60.34%	60.50%	54.83%	59.72%	59.66%

Mediterranean and Gulf	Liquidity risk	155.52%	160.57%	163.74%	228.53%	206.15%	199.25%	188.96%
Jordanian Arabic insurance	Liquidity risk	180.25%	154.85%	183.49%	173.82%	158.73%	173.78%	176.75%
Arab Guarantors insurance	Liquidity risk	171.45%	142.05%	150.72%	161.11%	125.81%	134.38%	140.29%
French Jordanian insurance	Liquidity risk	198.65%	166.52%	175.79%	189.21%	182.38%	198.33%	220.42%
United insurance	Liquidity risk	103.02%	117.58%	120.03%	115.09%	118.34%	118.12%	112.39%
National insurance	Liquidity risk	96.48%	107.21%	106.78%	106.38%	94.91%	93.55%	98.44%
Arab Union insurance	Liquidity risk	212.88%	123.49%	113.43%	99.77%	114.78%	159.49%	149.51%
Jerusalem insurance	Liquidity risk	93.40%	86.92%	84.79%	86.64%	87.80%	78.86%	72.35%
Delta insurance	Liquidity risk	107.56%	109.33%	104.12%	94.08%	88.98%	88.59%	88.10%
Arabs insurance	Liquidity risk			257.73%	375.42%	170.34%	132.05%	114.29%
Arabic insurance	Liquidity risk	109.98%	114.04%	121.02%	130.41%	115.83%	109.53%	105.86%
European Arabic insurance	Liquidity risk	117.96%	112.41%	112.41%	113.64%	105.43%	93.64%	103.21%
Al manara insurance	Liquidity risk	155.28%	145.17%	166.88%	155.94%	125.70%	106.80%	108.16%
Holy Land insurance	Liquidity risk		207.56%	185.62%	274.57%	188.65%	220.00%	308.49%
Al Safwa insurance	Liquidity risk		211.95%	228.68%	249.26%	273.67%	191.63%	203.20%
Philadelphia insurance	Liquidity risk		369.74%	153.43%	88.89%	85.27%	72.50%	83.82%

Liquidity risk indicator: this indicator is considered one of the most important indicators, decrease in liquidity against obligations during the period from 2015-2021 is an indication that the company is unable to fulfil its obligations as a result of not collecting due insurance premiums or a decrease in returns and revenues for investments or existence of losses as a result of not properly assessing risks of insurance contracts, which renders it unable to continue in the future.

• **Retention rate = company's net premiums (after subtracting reinsured contracts with other insurance companies) from company's total contracts, through following relationship:**

Retention rate = company's net premiums / company's total contracts

Whenever value of retained premiums is low (i.e. retention rate is high), insurance company is just an intermediary between insured and reinsurance companies, and this is reflected in ratio of volume of business and strength of insurance companies and their rate of profits.

Table 14. Retention rate for insurance companies between 2015-2021

Insurance company name	Type	2021	2020	2019	2018	2017	2016	2015
Arabian eagle insurance	Retention rate	72.79%	73.28%	71.33%	74.29%	84.04%	82.80%	84.41%
Jordanian insurance	Retention rate	46.95%	49.21%	52.48%	52.90%	51.52%	52.50%	51.82%
First insurance	Retention rate	43.37%	44.60%	45.19%	38.98%	43.49%	44.18%	47.06%
Gulf Insurance	Retention rate	49.20%	46.46%	47.36%	45.53%	38.29%	33.71%	44.87%
Middle East insurance	Retention rate	41.38%	41.40%	45.83%	46.22%	44.51%	46.75%	43.65%
Jordan International	Retention rate	50.68%	42.57%	30.33%	48.51%	34.79%	32.35%	36.68%
Islamic insurance	Retention rate	65.68%	68.11%	70.22%	67.80%	71.44%	70.96%	69.71%
Mediterranean and Gulf	Retention rate	88.60%	81.37%	85.61%	84.15%	83.85%	84.91%	85.62%
Jordanian Arabic insurance	Retention rate	68.41%	70.88%	78.12%	80.68%	81.12%	81.42%	82.54%
Arab Guarantors insurance	Retention rate	85.89%	93.14%	93.70%	91.40%	84.01%	91.64%	90.82%
French Jordanian insurance	Retention rate	85.70%	85.72%	77.22%	76.51%	75.47%	75.96%	76.38%
United insurance	Retention rate	63.43%	68.01%	69.29%	69.71%	67.18%	70.12%	69.94%
National insurance	Retention rate	59.54%	62.61%	69.09%	73.54%	64.88%	62.56%	61.37%
Arab Union insurance	Retention rate	94.95%	97.83%	98.05%	97.50%	97.68%	89.09%	91.28%
Jerusalem insurance	Retention rate	67.78%	70.57%	82.86%	78.50%	80.17%	84.49%	85.79%
Delta insurance	Retention rate	67.19%	67.32%	67.42%	68.14%	67.72%	66.15%	64.06%
Arabs insurance	Retention rate			78.28%	78.75%	78.59%	79.78%	82.61%

Arabic insurance	Retention rate	60.14%	55.72%	61.71%	63.86%	64.23%	62.68%	70.06%
European Arabic insurance	Retention rate	72.06%	80.55%	80.59%	77.79%	82.66%	82.26%	82.94%
Al manara insurance	Retention rate	75.38%	79.50%	77.41%	80.61%	80.64%	74.74%	74.63%
Holy Land insurance	Retention rate		98.92%	98.24%	97.57%	96.88%	96.20%	95.28%
Al Safwa insurance	Retention rate		93.51%	95.49%	97.14%	93.63%	92.21%	87.42%
Philadelphia insurance	Retention rate		94.20%	88.09%	88.02%	83.93%	87.42%	75.38%

We note that companies that had a high retention rate indicated they were only intermediary companies, which led to a decrease in their revenues and an increase in risks in them until they would eventually exit the market as they obtained premiums from customers and then re-collected with other insurance companies.

- **Size of in insurance portfolio (rate of exposure of insurance contract)**

Average exposure to insurance contracts = net premiums/surplus (adjusted shareholders' equity)

This ratio measures the insurance company's ability to withstand sudden losses, as surplus is the main reference for loss prevention. It is noted that the higher this percentage, the more this means that the company will bear risks that exceed its ability, which leads to its inability to fulfill its obligations in favour of customers.

Table 15. Average exposure to insurance contracts for insurance companies between 2015-2021

Insurance company name	Type	2021	2020	2019	2018	2017	2016	2015
Arabian eagle insurance	Average exposure to insurance contracts	151.06	141.54	143.36	151.74	139.07	122.11	118.57
Jordanian insurance	Average exposure to insurance contracts	63.99	80	100.02	114.5	114.01	114.31	102.72
First insurance	Average exposure to insurance contracts	59.36	61.3	63.59	50.22	53.23	52.99	41.3
Gulf Insurance	Average exposure to insurance contracts	109.27	113.67	145.92	164.4	160.78	109.89	134.66
Middle East insurance	Average exposure to insurance contracts	40.78	42.13	48.94	47.83	44.07	44.43	43.82
Jordan International	Average exposure to insurance contracts	57.95	31.28	21.32	30.62	28.95	26.68	18.77
Islamic insurance	Average exposure to insurance contracts	73.05	72.6	86.13	83.84	81.08	88.34	90.91
Mediterranean and Gulf	Average exposure to insurance contracts	279.3	266.86	280.79	274.19	251.29	221.73	215.89
Jordanian Arabic insurance	Average exposure to insurance contracts	185.21	166.33	208.57	193.23	179.15	197.96	206.12
Arab Guarantors insurance	Average exposure to insurance contracts	240.17	162.3	201.38	244.64	187.07	207.77	248.35
French Jordanian insurance	Average exposure to insurance contracts	216.56	177.96	191.72	193.19	205.9	235.68	269.48
United insurance	Average exposure to insurance contracts	86.37	96.12	124.16	121.05	104.8	118.13	119.57
National insurance	Average exposure to insurance contracts	103.46	118.69	140.1	180.25	132.65	114.33	125.04
Arab Union insurance	Average exposure to insurance contracts	860.6	176.12	147.69	124.89	123.45	190.84	203.34
Jerusalem insurance	Average exposure to insurance contracts	115	106.79	122.73	108.98	108.93	105.48	100.17
Delta insurance	Average exposure to insurance contracts	120.96	112.66	123.04	105.83	91.94	88.01	88.11
Arabs insurance	Average exposure to insurance contracts			290.03	338.37	179.46	172.08	168.19
Arabic insurance	Average exposure to insurance contracts	122.63	110.36	125.93	145.74	130.01	113.54	121.66

European Arabic insurance	Average exposure to insurance contracts	189.46	185.9	211.97	210.09	179.13	159.36	185.09
Al manara insurance	Average exposure to insurance contracts	283.44	207.84	195.3	215.29	196.71	123.49	123.84
Holy Land insurance	Average exposure to insurance contracts		3,136.43	380.07	425.3	443.05	292.2	845.46
Al Safwa insurance	Average exposure to insurance contracts		442.61	375.3	364.81	621.79	389.18	573.86
Philadelphia insurance	Average exposure to insurance contracts		209.27	217.11	156.03	157.21	107.34	118.3

- **The rate of change in the technical loss rate:**

The pricing process in property and liability insurance depends mainly on the accurate prediction of loss rates using modern statistical models, which provide an appropriate approach to predict the rate of loss depending on the interaction of realized loss and earned premiums. As technical provisions are the first line of defence and determine the company's ability to fulfil its obligations.

Table 16. The rate of change in the technical loss rate for insurance companies between 2015-2021

Insurance company name	Type	2021	2020	2019	2018	2017	2016	2015
Arabian eagle insurance	Rate of change in the technical loss rate	269.37	262.75	235.47	207.92	195.89	185.8	160.89
Jordanian insurance	Rate of change in the technical loss rate	88.58	86.99	79.07	77.7	80.01	84.22	82.75
First insurance	Rate of change in the technical loss rate	71.93	79.06	72.32	86.47	81.51	84.05	100.69
Gulf Insurance	Rate of change in the technical loss rate	105.75	108.72	97.24	88.91	101.06	99.11	81.62
Middle East insurance	Rate of change in the technical loss rate	170.95	177.26	155.71	154.76	157.12	145.78	147.19
Jordan International	Rate of change in the technical loss rate	83.64	80.63	70.3	68.58	68.46	71.33	82.08
Islamic insurance	Rate of change in the technical loss rate	76.07	85.97	81.98	87.16	78.7	81.69	83.06
Mediterranean and Gulf	Rate of change in the technical loss rate	98.94	102.17	96.28	95.44	102	102.56	106.32
Jordanian Arabic insurance	Rate of change in the technical loss rate	76	82.38	76.46	80.78	88.08	85.72	82.53
Arab Guarantors insurance	Rate of change in the technical loss rate	65.04	60.01	55.2	58.99	64.98	74.82	81.53
French Jordanian insurance	Rate of change in the technical loss rate	60.26	56.61	56.08	61.31	63.67	60.2	57.02
United insurance	Rate of change in the technical loss rate	125.2	120.09	103.69	110.78	127.49	112.41	109.38
National insurance	Rate of change in the technical loss rate	107.47	109.78	100.62	82.83	82.92	90.61	92.25
Arab Union insurance	Rate of change in the technical loss rate	78.76	81.86	86.28	90.94	106.58	122.17	122.87
Jerusalem insurance	Rate of change in the technical loss rate	104.78	113	101.99	108.01	120.68	123.42	115.95
Delta insurance	Rate of change in the technical loss rate	106.96	106.04	100.51	110.87	124.88	117.55	115.46
Arabs insurance	Rate of change in the technical loss rate			62.42	75.17	73.67	61.94	70.98
Arabic insurance	Rate of change in the technical loss rate	102.91	103.43	98.54	95.25	105.86	108.43	104.49
European Arabic insurance	Rate of change in the technical loss rate	89.59	84.28	74.05	73.71	81.53	84.05	78.05

Al manara insurance	Rate of change in the technical loss rate	88.39	84.71	94.71	113.9	111.07	139.47	166.55
Holy Land insurance	Rate of change in the technical loss rate		89.88	68.3	57.77	58.99	70.54	95.17
Al Safwa insurance	Rate of change in the technical loss rate		54.75	50.02	61.97	72.12	68.07	62.29
Philadelphia insurance	Rate of change in the technical loss rate		98.35	81.07	73.66	75.48	86.6	109.92

We note that companies in which ratio of technical reserves to net premiums were high indicated.

- **Reinsurance facilities:**

Reinsurance facilities = reinsurance premiums issued to reinsurance companies / total direct premiums

Table 17. Reinsurance facilities for insurance companies between 2015-2021

Insurance company name	Type	2021	2020	2019	2018	2017	2016	2015
Arabian eagle insurance	Reinsurance facilities	27.21%	26.72%	28.67%	25.71%	15.96%	17.20%	15.59%
Jordanian insurance	Reinsurance facilities	53.05%	50.79%	47.52%	47.10%	48.48%	47.50%	48.18%
First insurance	Reinsurance facilities	56.63%	55.40%	54.81%	61.02%	56.51%	55.82%	52.94%
Gulf Insurance	Reinsurance facilities	50.80%	53.54%	52.64%	54.47%	61.71%	66.29%	55.13%
Middle East insurance	Reinsurance facilities	58.62%	58.60%	54.17%	53.78%	55.49%	53.25%	56.35%
Jordan International	Reinsurance facilities	49.32%	57.43%	69.67%	51.49%	65.21%	67.65%	63.32%
Islamic insurance	Reinsurance facilities	34.32%	31.89%	29.78%	32.20%	28.56%	29.04%	30.29%
Mediterranean and Gulf	Reinsurance facilities	11.40%	18.63%	14.39%	15.85%	16.15%	15.09%	14.38%
Jordanian Arabic insurance	Reinsurance facilities	31.59%	29.12%	21.88%	19.32%	18.88%	18.58%	17.46%
Arab Guarantors insurance	Reinsurance facilities	14.11%	6.86%	6.30%	8.60%	15.99%	8.36%	9.18%
French Jordanian insurance	Reinsurance facilities	14.30%	14.28%	22.78%	23.49%	24.53%	24.04%	23.62%
United insurance	Reinsurance facilities	36.57%	31.99%	30.71%	30.29%	32.82%	29.88%	30.06%
National insurance	Reinsurance facilities	40.46%	37.39%	30.91%	26.46%	35.12%	37.44%	38.63%
Arab Union insurance	Reinsurance facilities	5.05%	2.17%	1.95%	2.50%	2.32%	10.91%	8.72%
Jerusalem insurance	Reinsurance facilities	32.22%	29.43%	17.14%	21.50%	19.83%	15.51%	14.21%
Delta insurance	Reinsurance facilities	32.81%	32.68%	32.58%	31.86%	32.28%	33.85%	35.94%
Arabs insurance	Reinsurance facilities			460.35%	470.48%	467.01%	494.68%	575.11%
Arabic insurance	Reinsurance facilities	39.86%	44.28%	38.29%	36.14%	35.77%	37.32%	29.94%
European Arabic insurance	Reinsurance facilities	27.94%	19.45%	19.41%	22.21%	17.34%	17.74%	17.06%
Al manara insurance	Reinsurance facilities	24.62%	20.50%	22.59%	19.39%	19.36%	25.26%	25.37%
Holy Land insurance	Reinsurance facilities		1.08%	1.76%	2.43%	3.12%	3.80%	4.72%
Al Safwa insurance	Reinsurance facilities		6.49%	4.51%	2.86%	6.37%	7.79%	12.58%
Philadelphia insurance	Reinsurance facilities		5.80%	11.91%	11.98%	16.07%	12.58%	24.62%

It is considered one of the important indicators of the ability to make reinsurance contracts with other insurance companies, and it indicates the extent to which the company relies on itself in making insurance contracts and benefiting from its profits. Profits from making any insurance contracts in future will not cover its expenses and realize losses.

Other indicators that indicate the status of governance, risk management and investment in insurance companies

Size of the company = net insurance premiums of company,

Increase in volume of net premiums indicates an increase in profitability of the insurance contract.

Table 18. Net premiums indicate for insurance companies between 2015-2021

Insurance company name	Type	2021	2020	2019	2018	2017	2016	2015
Arabian eagle insurance	Net premiums indicate	34,514,020	32,147,694	31,951,699	31,954,961	29,110,435	25,346,703	25,232,914
Jordanian insurance	Net premiums indicate	32,163,098	32,004,510	36,047,856	38,561,081	40,759,046	39,592,611	34,830,980
First insurance	Net premiums indicate	20,211,992	20,289,211	20,952,540	16,416,218	17,239,230	16,642,809	12,389,578
Gulf Insurance	Net premiums indicate	45,310,357	38,185,700	40,582,312	38,804,672	36,540,841	37,155,121	46,072,339

Middle East insurance	Net premiums indicate	16,689,802	16,253,691	18,871,203	18,803,225	18,327,761	18,740,198	16,399,882
Jordan International	Net premiums indicate	11,377,421	6,437,964	4,573,339	6,812,522	6,667,575	6,603,824	4,707,964
Islamic insurance	Net premiums indicate	16,543,009	15,385,732	17,086,533	16,686,975	16,770,902	16,323,539	15,964,840
Mediterranean and Gulf	Net premiums indicate	14,903,777	13,945,550	16,472,287	15,786,283	15,560,836	15,964,286	14,503,170
Jordanian Arabic insurance	Net premiums indicate	15,074,333	14,787,973	16,953,944	13,741,499	11,782,221	11,849,650	11,036,743
Arab Guarantors insurance	Net premiums indicate	11,879,496	10,461,331	12,307,509	14,554,027	10,746,798	9,271,793	9,781,588
French Jordanian insurance	Net premiums indicate	28,037,070	22,482,550	23,486,061	20,763,989	20,172,288	19,608,685	19,095,189
United insurance	Net premiums indicate	14,265,245	14,806,112	17,618,125	16,785,022	14,570,208	16,152,768	15,850,014
National insurance	Net premiums indicate	11,808,461	11,138,728	12,730,293	15,624,310	13,672,839	11,775,792	12,001,007
Arab Union insurance	Net premiums indicate	17,918,377	10,318,679	9,119,706	8,265,253	7,328,984	6,735,661	7,979,734
Jerusalem insurance	Net premiums indicate	16,785,778	15,295,595	17,289,073	14,991,575	14,819,285	14,181,341	13,806,407
Delta insurance	Net premiums indicate	12,546,468	11,975,203	12,347,767	10,294,020	8,721,326	9,347,068	9,355,315
Arabs insurance	Net premiums indicate			11,198,586	13,372,596	13,798,206	15,772,628	14,719,469
Arabic insurance	Net premiums indicate	12,757,865	11,797,333	12,976,085	14,733,671	13,683,464	12,213,812	12,450,648
European Arabic insurance	Net premiums indicate	22,625,004	22,103,867	23,894,595	22,255,163	18,812,622	16,695,714	18,023,028
Al manara insurance	Net premiums indicate	13,841,443	11,424,476	6,829,249	6,717,592	7,902,987	6,196,391	6,222,625
Holy Land insurance	Net premiums indicate		9,539,039	10,779,216	8,419,830	9,784,248	6,948,660	6,065,347
Al Safwa insurance	Net premiums indicate		4,603,891	4,459,345	5,431,557	7,182,424	7,125,107	7,968,352
Philadelphia insurance	Net premiums indicate		4,334,412	5,529,986	6,416,156	7,144,273	4,735,140	4,910,643

Market share of company: market share of insurance company in net premiums of market as a whole

Market share of company = premiums of company's direct insurance contract / net premiums of direct insurance contract for market as a whole.

Greater market share of insurance company, greater profitability of company from insurance contracts, and thus company can cover expenses and possibility of continuity and increase market share in future.

Table 19. Market share of the company for insurance companies between 2015-2021

Insurance company name	Type	2021	2020	2019	2018	2017	2016	2015
Arabian eagle insurance	Market share of the company	7.86%	7.82%	7.48%	7.32%	5.93%	5.32%	5.59%
Jordanian insurance	Market share of the company	11.35%	11.60%	11.47%	12.40%	13.53%	13.11%	12.57%
First insurance	Market share of the company	7.72%	8.11%	7.74%	7.16%	6.78%	6.55%	4.92%
Gulf Insurance	Market share of the company	15.26%	14.66%	14.31%	14.50%	16.32%	19.16%	19.20%
Middle East insurance	Market share of the company	6.68%	7.00%	6.88%	6.92%	7.04%	6.97%	7.03%
Jordan International	Market share of the company	3.72%	2.70%	2.52%	2.39%	3.28%	3.55%	2.40%
Islamic insurance	Market share of the company	4.17%	4.03%	4.06%	4.19%	4.02%	4.00%	4.28%
Mediterranean and Gulf	Market share of the company	2.79%	3.06%	3.21%	3.19%	3.17%	3.27%	3.17%
Jordanian Arabic insurance	Market share of the company	3.65%	3.72%	3.62%	2.90%	2.48%	2.53%	2.50%

Arab Guarantors insurance	Market share of the company	2.29%	2.00%	2.19%	2.71%	2.19%	1.76%	2.01%
French Jordanian insurance	Market share of the company	5.42%	4.68%	5.08%	4.62%	4.57%	4.49%	4.67%
United insurance	Market share of the company	3.73%	3.88%	4.25%	4.10%	3.71%	4.00%	4.24%
National insurance	Market share of the company	3.29%	3.17%	3.08%	3.61%	3.61%	3.27%	3.66%
Arab Union insurance	Market share of the company	3.13%	1.88%	1.55%	1.44%	1.28%	1.31%	1.63%
Jerusalem insurance	Market share of the company	4.10%	3.87%	3.49%	3.25%	3.16%	2.92%	3.01%
Delta insurance	Market share of the company	3.09%	3.17%	3.06%	2.57%	2.20%	2.46%	2.73%
Arabs insurance	Market share of the company	0.00%	0.00%	2.39%	2.89%	3.00%	3.44%	3.33%
Arabic insurance	Market share of the company	3.51%	3.78%	3.51%	3.92%	3.64%	3.39%	3.32%
European Arabic insurance	Market share of the company	5.20%	4.89%	4.95%	4.87%	3.89%	3.53%	4.06%
Al manara insurance	Market share of the company	3.04%	2.56%	1.47%	1.42%	1.68%	1.44%	1.56%
Holy Land insurance	Market share of the company	0.00%	1.72%	1.83%	1.47%	1.73%	1.26%	1.19%
Al Safwa insurance	Market share of the company	0.00%	0.88%	0.78%	0.95%	1.31%	1.34%	1.70%
Philadelphia insurance	Market share of the company	0.00%	0.82%	1.05%	1.24%	1.46%	0.94%	1.22%

The relationship between the variables:

After studying and analyzing the numbers and financial ratios of insurance companies listed in the Amman Stock Exchange, we find that there are a set of important indicators that occurred during the period (2015-2021), there were two important changes that affected the status of insurance companies, it reflected in indicators of profitability and value of risks in insurance companies:

- ❖ Mandatory implementation of corporate governance instructions for companies listed on Amman Stock Exchange in 2017
- ❖ Global COVID-19 pandemic crisis in 2020

Results of choosing hypotheses:

- ✚ **First hypothesis:** risks of insurance and investment contracts are among the most important risks to insurance companies are exposed, they have an important impact on financial profits of insurance companies so risks of insurance contract are defined as risk that occurs when average value of compensation is greater than expected value when selling insurance policies. Investment risk is various risks related to performance, structure, returns and liquidity of investment portfolios.
- ✚ **Second hypothesis:** relationship between amount of change in application of corporate governance procedures and instructions as an inverse relationship on level of risk and as a direct relationship on financial profits for Jordanian insurance companies.
- ✚ **Third hypothesis:** relationship between profits and changes in insurance contracts appears in insurance companies and direct or inverse relationship.
- ✚ **Fourth hypothesis:** relationship between volume of liquidity and financial profits in insurance companies, a direct or inverse relationship.

Where we noticed that changes took place in 2017 led to the exit of two companies from the insurance market due to the existence of previous financial and administrative problems, obligation to implement governance procedures led to their inability to continue due to disclosure, transparency and oversight procedures from various bodies such as Securities Commission, Amman stock exchange and Central Bank. The occurrence of COVID-19 crisis led to the exit of two companies from the insurance market because they were unable to achieve profits and revenues, pay their financial obligations towards customers, and decrease market share and profits as a result of the pandemic.

There is a set of indicators that express the ability of companies to fulfil their obligations through their ability to achieve revenues and profits and the ability to face various risks to which insurance companies are exposed, paying their obligations and achieving profits to continue working.

- The existence of a direct relationship between insurance companies achieving profits and their ability to continue

IJETRM

International Journal of Engineering Technology Research & Management

www.ijetrm.com

indicates the existence of a direct relationship between two variables: profits, continuity and progress in insurance companies, their non-bankruptcy and exit from the market during the study period.

- The existence of an inverse relationship between decreases in risk ratios to insurance companies is exposed and able to continue, indicating the existence of an impact and a direct relationship between two variables: decrease in risks, continuity and progress in insurance companies, non-bankruptcy and exit from the market during the study period.
- The existence of an inverse relationship between the decrease in the risk ratios to insurance companies exposed and the application of mandatory corporate governance procedures indicates the existence of an impact and a direct relationship between two variables, a decrease in risk and application of governance procedures, companies implement good governance procedures achieve progress in insurance companies and continue in the market during the study period.
- The existence of a direct relationship between insurance companies achieving profits and mandatory application of governance procedures and instructions indicates the existence of a direct relationship effect between two variables, profits, application of corporate governance instructions in insurance companies, non-bankruptcy and exit from the market during the study period.
- The study focused on the effect of applying mandatory governance procedures and instructions on risk management and profits of insurance companies, where risks are related to the size of profits achieved at the end of the financial year for insurance companies, as insurance companies seek to reduce the level of risk and increase the volume of revenues and profits by searching for means that lead to raising the level of profits. The application of governance procedures is reflected in the development of risk management within insurance companies to reduce risks to which insurance companies are exposed.

This study attempted to shed light on the impact of mandatory application of corporate governance instructions on Jordanian insurance companies and management of insurance risks, and the relationship between the impacts of these risks on the financial profits of insurance companies. its impact on financial profits through the use of indicators of financial ratios in measuring and predicting the existence of risks in insurance and financial portfolios and insurance contract, depending on risk size ratio, liquidity ratio, and percentage of change in insurance contracts using financial statements of insurance companies and analysis.

CONCLUSION

The insurance sector is one of the most important sectors that require risk management, application of corporate governance procedures contributes to reducing many of the risks that insurance companies are exposed to and affects achieving revenues and profits. Insurance companies implement governance procedures, because corporate governance, is an effective control system for tightening control over the performance of insurance companies through disclosure and transparency in financial statements and enhances independence, contributes to insurance companies reporting financial irregularities and increases confidence in their financial statements in a way affects their future performance. The study concluded that the application of governance standards works to reduce and manage risks and is reflected in the revenues and profits of insurance companies. The most important findings in this study are:

- Insurance sector companies listed on Amman Stock Exchange implement mandatory governance rules and procedures that began applied as non-compulsory in 2005, these rules became mandatory for all companies listed in Amman Stock Exchange in 2017, which contributed to setting precautions to manage risks faced by insurance companies to reduce risks.
- Insurance sector companies listed on Amman Stock Exchange have an effective control system that is closely related to risk management and considered one of the basic aspects of governance in a company, the application of rules of governance in insurance sector companies leads to increase effectiveness and efficiency of work. 3- 3- financial and administrative procedures carried out by the administration of all risks identified and evaluated within these companies.
- Mandatory application of governance rules in insurance sector companies helps internal control departments and strengthens links between risk management committees and various administrative units in insurance companies.
- The application of corporate governance rules increases disclosure and transparency and provides more transparent

IJETRM

International Journal of Engineering Technology Research & Management

www.ijetrm.com

information to investors, leading to a reduction in the degree of risk, and their effects.

- Expansion and increase of activity in insurance companies internally and externally led to an increase in risks related to activities, so companies were interested in applying rules of governance to reduce and mitigate risks facing companies.
- The application of corporate governance led to the provision of data and information for insurance companies and the preparation of periodic and continuous reports on governance and risks within companies in a way that contributes to protecting the rights of stakeholders and investors.
- The application of corporate governance in insurance companies has led to the promotion of effective and sound risk management through the issuance of necessary legislation and legal and regulatory systems, formation of oversight and follow-up committees to monitor and follow up risk management in companies.

Recommendations

- The effective and mandatory application of corporate governance principles in Jordanian insurance companies is reflected in annual reports; its role is to reduce manipulation of business results and rebuilding confidence in published financial reports of companies. Therefore, must be care to disseminate the concept of governance further and clarify its positive effects through introductory brochures and specialized courses to obtain the best application of principles of governance.
- Urging companies to reflect a commitment to rules of governance on rules of professional conduct for management and managers when carrying out their duties, to fully comply with requirements of disclosure and transparency that are reflected in published financial statements, and to treat shareholders equally and fairly.
- Modern control systems based on electronic procedures must be adopted in insurance companies based on the application of institutional control system that focuses on risk management in all activities and strengthens internal control system in all departments and units.
- Carrying out studies and research to measure the extent of application principles of corporate governance in Jordanian insurance companies to ensure practical application of corporate governance.
- The Accounting and Auditing Standards Board in Jordan must adopt international auditing standards that promote the existence and adoption of a modern control system based on risk assessment and management in all administrative departments.
- The need for the insurance company's business to be subject to the supervision of an independent governance committee and the risk committee to organize its business and procedures in a way that reduces the size of the risks to which the company is exposed by following appropriate monitoring and management procedures.
- Qualifying the cadres working in the insurance companies, and informing them of all that is new in the field of corporate governance in a manner that enhances the supervisory role of the responsible authorities. and need to develop a comprehensive framework of risk management in each department and management to improve risk management and strengthen internal control.

REFERENCES

- [1] Hege, U.; Hutson, E.; Laing, E. *The impact of mandatory governance changes on financial risk management*, 2018
- [2] Traboulsi, S.; Maati Allah, Kh. *The role of internal auditing in risk management and its implications for corporate governance: a field study*. Economic Sciences Journal, Algeria, 17(2) : 45-63. 2016
- [3] Arnesen, D. W.; Foster, T. N. *PLANNING FOR THE KNOWN, UNKNOWN AND IMPOSSIBLE-RESPONSIBLE RISK MANAGEMENT TO MAXIMIZE ORGANIZATIONAL PERFORMANCE*. Journal of Business & Behavioral Sciences, 28(1), 1-25. 2016
- [4] Stein, V.; Wiedemann, A. *Risk governance: conceptualization, tasks, and research agenda*. Journal of Business Economics, 86, 813-836. 2016
- [5] Al Manaseer, O. I. F. *The Effect of Application Corporate Governance Rules on the Performance of services Jordanian shareholding companies*. Unpublished Master's Thesis, The Hashemite University, Zarqa, Jordan.2013
- [6] Ishhadat, M.; Abed Al-Jaleel, T. *The Effect of Corporate Governance Principles Adoption in The Institutional Investor's*

Decisions in Amman Bourse. Jordan journal of business administration,8(1). 2012

- [7] Al-Serafi, M. *Insurance Mathematics*, Horus International Foundation for Publishing and Distribution, Alexandria, Egypt. 2005
- [8] Hussain, H.; Al-Ajmi, J. *Risk management practices of conventional and Islamic banks in Bahrain*. Journal of Risk Finance, The. 13. 215-239. 10.1108/15265941211229244. 2012
- [9] Saraya M. E. S. *Accounting in Financial Institutions, Banks and Insurance Companies*, University Press House, Alexandria, Egypt, pp. 284. 2008
- [10] Abdo, A. M. A *Principles of Insurance*, Dar Al-Nahda Al-Arabia, Al-Fahira. 1986
- [11] Saudi Financial Institute, *Introduction to the Fundamentals of Insurance*, Riyadh, Al-Mukalla, Saudi Arabia. 2016
- [12] Abu Bakr, E. A., *Managing the risks of insurance companies (writing risks, investment risks)*, Dar Safa for printing, publishing and distribution. 2011
- [13] Hamza, M. *Risk Management and Insurance*, Faculty of Commerce, Cairo University, Egypt. 2003
- [14] Al-TaHER, A. *Money, Banks and Financial Institutions*, Yazid Publishing Center, Amman, second edition, p. 288. 2006
- [15] Omar, M. *Management of Accounting for Insurance Facilities*, Faculty of Commerce, Cairo University, Egypt.1994
- [16] Attia, A. S. *Accounting for Insurance Companies*, University House, Alexandria. 2002
- [17] Abdullah, H. A. *Audit committees in light of corporate governance and their impact on the quality of financial reports: a field study on a sample of Sudanese banks*. Unpublished Doctoral Thesis, National Ribat University, Sudan. 2016
- [18] Al-Turman, A. M. *The role of accounting systems and standards in fulfilling the requirements of corporate governance in the industry Jordanian share holding companies*, Unpublished Master's Thesis, Middle East University, Amman, Jordan. 2009
- [19] Jordanian Corporate Governance Rules Guide - Securities Commission, Amman, Jordan. 2014
- [20] Al-Hindawi, B. *A symposium entitled: Institutional Governance in the Insurance Sector*, Elaph Magazine, website Electronic, published article. 2005
- [21] Al-Qatawneh, A. S. *The Availability Characteristics of the Governing Institutional Dimensions, and their Impact on Work Motivation in Commercial Banks Operating in Jordan*, Journal of Administrative Sciences Studies, 38(1): 82-83. 2011
- [22] Al-Quraishi, I. R. *External auditing (a theoretical and practical scientific approach)*, 1st edition: Dar Al-Maghrib for Printing and Publishing, Baghdad. 2011
- [23] Yacoub, F. A. *Internal auditing and its role in corporate governance*, Unpublished Doctoral Thesis, Al-Mustansiriya University. 2006
- [24] The Institute of Internal Auditors, USA, pp.2. 2002
- [25] Al-Shammari, H. R. T. *A proposed model for the role of the management accountant in implementing corporate governance mechanisms*, Unpublished Master's Thesis, University of Baghdad. 2009
- [26] Zaini, H. Z. A. A. *Enhance the Predictive Ability of Accounting Information Using the Corporate Governance Variables Suggested Model for Industrial Companies on The Basis of Financial Failure Prediction Models*, Unpublished Master's Thesis, University of Kufa. 2013
- [27] Al-Obaidi, S. B. *The Role of Corporate Governance in Reducing Creative Accounting Practices and Achieving Compatibility between the Interests of the Agency Parties*, Unpublished Master's Thesis, University of Baghdad. 2008
- [28] . Hawari, M. A.Q. *Corporate Governance in the Banking and Financial Sector and its Role in Establishing the Rules of Transparency*, published research, University of Al-Aghout. 2012
- [29] Ismail, A. *The relationship between the level of actual application of corporate governance and the quality of financial reports*, Unpublished Master's Thesis, Middle East University. 2010
- [30] Amer, A. H. *Accounting Measurement and Disclosure of Credit Risks in Banks*, The Journal of Sadat Academy for Administrative Sciences, 4, 119-122. 2006
- [31] Belazouz B. A. *Risk Management Strategies in Financial Transactions*, Elbahith Journal, 7: 332.2009-2010
- [32] Abdul Karim, N. *Operational Risks According to Basel II Requirements: A Study of Its Nature and Ways to Manage It in the Case of Banks Operating in Palestine*, The Fifth Annual Scientific Conference of the Jordanian University of

IJETRM

International Journal of Engineering Technology Research & Management

www.ijetrm.com

- Philadelphia, Amman. 2007
- [33] The Saudi Arabian Monetary Agency: *Risk Management Regulations*, Riyadh, pp.10. 2008
- [34] Raji, A. A. H. *The role of external audit in evaluating project risk management according to the framework of (COSO)*, unpublished doctoral University of Baghdad. 2015
- [35] Al-Issa, M. H. N. *Risk Management (Credit Portfolios)*, Dar Al-Raya for Publishing and Distribution, Jordan, Amman. 2010
- [36] Abdel Moneim, A. *Risk Evaluation and Management*, Graduate Studies and Research Development Center - Faculty of Engineering, Cairo University. 2008
- [37] Al-Arqam, A. H. *Financial Analysis - Part 1*, university publication, Mentouri University, Constantine, October. 1999
- [38] Nasser, S. *Banking techniques and credit operations*, University Publications Office, Ouargla. 2012
- [39] Mousawi, A. N. *Analysis of the solvency and profits of insurance companies*, Journal of Human Sciences, 31(B). 2009
- [40] El-Hennawy, M. et.al, *investment in financial securities and risk management*, University Office, Alexandria. 2007
- [41] Al-Jazrawi, I.; Emad A.F. L. *Evaluating investment alternatives using modern mathematical models (a theoretical-applied study in medical insurance companies)*, The Economic and Administrative Journal - Volume13. 2007
- [42] Hardan, T. *Investment Basics*, Dar Al-Mustaqbal for Publishing and Distribution, Amman. 2012
- [43] Al-Shabib, D. K. *Management of Investment Portfolios*, Dar Al-Masirah for Publishing and Distribution, Amman. 2010
- [44] Al-Baali, A. H. *Effective Sharia Supervision in Islamic Financial Institutions*, Umm Al-Qura University, Makkah Al-Mukarramah, pp. 25. 2005
- [45] Al-Ziyadat, E S. *Supervision of Cooperative Insurance Institutions and Methods of Activating those*, research presented to the Cooperative Insurance Conference in Jordan, Amman, pp.11. 201

