



# **THE ROLE OF INSURANCE SURPLUS DISTRIBUTION ON UNDERWRITING IN SUDANESE INSURANCE COMPANIES: A CASE STUDY OF SHIKAN INSURANCE AND REINSURANCE CO. LTD. (FROM 2015-2021)**

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<p><b>Received:</b> April 30<sup>th</sup> 2022 <b>Accepted:</b> May 30<sup>th</sup> 2022 <b>Published:</b> July 6<sup>th</sup> 2022</p>	<p>This study dealt with the role of distributing the insurance surplus on underwriting in Sudanese insurance companies. The problem of the study is represented in answering the questions that revolve around the role of distributing the insurance surplus on underwriting, and the extent to which distributing the insurance surplus to the insured contributes in reducing the actual value of subscriptions. These questions include: To what extent does the distribution of the insurance surplus to policyholders reduce the fabricated accidents that in turn affect the underwriting, and what is the role of distributing the insurance surplus on underwriting in Sudanese insurance companies? The aim is to identify the distribution of the insurance surplus and the concepts associated with it. It is also to highlight the subscription and the concepts associated with it, as well as to identify the role of insurance distribution surplus in underwriting. The researcher used the descriptive analytical approach. The results show that there is a statistically significant relationship between the distribution of the insurance surplus and the total written premiums. It is also found that underwriting avoids or minimizes risks against the interests of the insurance company. Moreover, distribution of the insurance surplus develops a good behavior of policyholders towards maintaining the insured things. The researcher recommends the necessity to reduce the actual value of the contributions to the company and to work on the principle of distributing the insurance surplus to the insured. Moreover, those in charge of the insurance order should work to increase the market share of the insurance companies. They should also work to increase the subscription of insurance companies by distributing surplus insurance to policyholders.</p>

**Keywords:** Insurance Surplus - Underwriting Policy - Insurance Applications - Risk Policy

## **INTRODUCTION:**

The insurance business focuses on accepting or rejecting insurance operations, which is known as underwriting. The underwriting policy is sometimes referred to as the underwriting philosophy followed by the insurance company, which is the process of testing and classifying insurance applications in order to ensure the optimal distribution of the risk policy that achieves stability and competition among insurance companies. Distribution of surplus insurance to policyholders in insurance companies has a great

impact and relationship to the companies' underwriting operations, as it leads to an increase in the company's underwriting, and thus the expansion of the service to help in the growth and increase of the insurance industry. Accordingly, the company maintains continuity and survival and gains competitive strength among companies.

## **Problem Statement:**

The problem of the study is represented in the questions that revolve around the role of distributing



the insurance surplus on underwriting and the extent of the contribution of distributing the insurance surplus to the insured in reducing the actual value of subscriptions. These questions are: To what extent does the distribution of the insurance surplus to policyholders reduce the artificial accidents that in turn affect the underwriting? What is the role of distributing the insurance surplus over the subscription in Sudanese insurance companies?

#### **Research Significance:**

The importance of the research is that it aims to know the role of the insurance surplus distribution and its impact on underwriting by insurance companies for the insured and the extent of its impact on the strength of competition in the insurance market.

#### **Research Objectives::**

This research aims to:

1. Identify the distribution of the insurance surplus and the concepts associated with it
2. Know the underwriting and the concepts associated with it.
3. Identify the role of insurance distribution surplus in underwriting.

**Research Methodology:** The researcher uses the descriptive analytical method.

#### **PREVIOUS STUDIES:**

**Muhammad Ali (2006):** This study was titled "The Weakness of Insurance Awareness and Its Impact on the Underwriting Process in the Sudanese Insurance Market, Omdurman Islamic University". The problem of the study was represented in that it considered insurance awareness one of the major problems facing insurance companies in general and insured parties in particular, by identifying the importance of insurance, what is done in terms and contracts, how to compensate and reduce one of the parties to the loss. The researcher formulated the study problem in the following questions:

What are the problems faced by insurance companies in the underwriting process? Does poor insurance awareness affect underwriting in insurance companies? Do insurance companies suffer from the insured's ignorance of their rights and duties? What are the methods that insurance companies use to identify and reduce the insured's ignorance of insurance? The study aimed to identify the problems of underwriting in insurance companies. It also aimed to study the most important problems that insurance companies face in the underwriting process, and to

identify the role of insurance awareness in underwriting operations in insurance companies.

The study gains its importance from the importance of the insurance process as it is important for both parties, as each of the parties seeks to achieve gains in addition to compensating a loss that may result from the risk of what is insured. The knowledge of insurance companies' clients about the legal aspects contributes to overcoming many problems that insurance companies may face. The study followed the descriptive analytical approach. It showed many results, which include the procedures and conditions in the underwriting process, being an important factor in the insurance awareness process. Moreover, the study recommended the need to increase insurance awareness, especially in underwriting operations in insurance companies.

**Sherif Adam (2015):** This study was entitled "Pricing of insurance services and its impact on underwriting in insurance companies", unpublished research in insurance, Al-Neelain University. The research problem was represented in the following questions: What is the impact of the insurance services pricing strategy on underwriting risks in Sudanese insurance companies by focusing on general insurance? Is there a relationship between pricing insurance services and underwriting risks? What are the models used in the Sudanese insurance market? Is it possible to calculate and record the actual insurance cost elements before determining the insurance price? The aim of the research is to determine the impact of insurance pricing on underwriting in insurance companies. The research also aims to find the relationship between the pricing of insurance services and the underwriting of risks. It used the descriptive analytical method. The study presented a set of results and recommendations, the most important of which are: the dependence of insurance companies on predicting the dependence of customers from the insurance service, and the paralysis in the use of the new and changing dimensions of Internet technology in the marketing of insurance products. The study recommended giving absolute priority to the insurance price and insurance premium, regardless of the reputation of the insurance company, the image of the insurance service performed, or the insurance program that meets the accreditation of the insurance applicant.

**Mohamed Moussa Ibrahim (2017):** This study was titled "Insurance Awareness and its Impact on Underwriting in Fire Insurance", unpublished thesis, Al-Neelain University, Faculty of Commerce, Insurance



Department. The research dealt with the impact of insurance awareness on underwriting insurance. The problem of the study was that fire insurance is one of the important and necessary insurances through the great losses it causes to property and lives. Therefore, the lack of sufficient interest is a major obstacle to the advancement of this insurance and affects the demand for underwriting. The study aimed to shed light on the reality of the insurance industry in Sudan and the importance of spreading insurance awareness and increasing underwriting in fire insurance. The study relied on the descriptive approach, and it presented many results, the most important of which is the low level of income that affects the underwriting of fire insurance. Besides, it recommended working to raise the level of insurance awareness.

## **THE FIRST TOPIC: UNDERWRITING AND INSURANCE SURPLUS**

### **First: Underwriting**

#### **The Concept of Underwriting:**

The underwriting policy is sometimes referred to as the company's underwriting philosophy, which is relied upon when making decisions, whether for an individual risk, or for the branch or the company as a whole. The underwriting process includes a set of steps represented in collecting information, assessing the risk, identifying alternatives, selecting the best ones, implementation and follow-up (Ahmed, 1997, p. 203).

At the beginning of its emergence, the process of underwriting risks was the main activity in any insurance company, and many other insurance operations fell under it, so the underwriter was the one who contacted individuals to convince them to insure. After obtaining their requests, he examined and evaluated the risks and then decided whether to accept the insurance or refuses. Then he defines the terms of acceptance. In the case of acceptance, he determines and collects the premiums. It also falls within his powers of settling claims and arriving at the claims values in case the risk is realized (Mr. 1986, p. 392).

Salama Abdullah believes that the underwriting process is intended to study and examine risks in insurance companies with the intention of accepting or rejecting them. The underwriting process is done by examining the submitted applications in order to arrive at a correct idea of the risk before insuring it (Salama 1974, p. 193).

On the other hand, Frederick Crane believes that the underwriting process is the process of determining the

risks that must be accepted and how to insure them, as it is undertaken by persons in the insurance company called underwriters who receive insurance applications from the company's producers. In the case of acceptance, they determine the appropriate prices in the acceptable risks according to their degree of risk.

Rejda sees underwriting as a process of selecting and categorizing insurance applications. The primary objective of the underwriting process is to arrive at a comfortable business portfolio. The underwriter is the person who decides to accept or reject insurance applications and does his best to choose certain types of insurance applications and rejects others to obtain a comfortable portfolio of risks corresponding to insurance (Abbas, 1998, p. 115).

Some see that the underwriting process is to determine the insurance applications that are suitable for coverage and insurance. Therefore, insurance companies usually reject some insurance requests and reduce others, and the loan from the underwriting is to control the reverse selection and group the insured into groups so that the potential losses are homogeneous. This is because when the potential losses are homogeneous, the premiums are paid to the group as a whole (Frederick. 1984. p 413).

The researcher believes that the process of selecting risks is not only intended to avoid underwriting bad risks, but rather it aims to increase the volume of insurance operations carried out by the insurance company through the appropriate selection of risks.

#### **The importance of underwriting:**

Some try to underestimate the importance of the insurance company's underwriting process, based on the fact that insurance prices of any kind are determined on the basis of the average values of claims arising from the realization of the risk and the expenses faced by the insurance company in order to carry out its business. Accordingly, they believe that the insurance company can accept all the risks presented to it and set the price in proportion to the expected compensation and expenses. Thus, the premiums obtained will be sufficient to cover all the actual expenses as long as their expectations are accurate and there is no unfavorable deviation between the expected rates on the basis of which the insurance premiums were calculated and the rates actually achieved (Al-Sayyid, 395).

However, in practice, the application of this leads to a significant increase in insurance prices in proportion to the rates of risk realization, which will occur in the absence of a process of examination and selection of



risks on the part of the company. This is because the process of purchasing insurance is voluntary on the part of individuals. So they pursue their own interests. Accordingly, the insured will not represent a random sample of the community, but the ratio of bad risks among them will be much higher than those of the community, which will have an impact on the rates of risk realization and thus on insurance prices, and with each increase to match the rates of risk realization. This leads to the exit of those with good risks from the system (Mo'men, 2014n, p. 22).

The researcher believes that the underwriting function is one of the most important and complex technical functions in insurance companies. Therefore, the company does not assign this process to people outside the company, but rather undertakes it and with knowledge of its function. While the insurance company can rely on specialized offices in the areas of pricing, investment, marketing and claims settlement, it always keeps the underwriting processes within the company and limits them to those highly specialized individuals.

And since the insurance sector is one of the sensitive sectors to discretionary, financial and economic variables, so it is required of insurance companies that all their subscriptions be sound, their prices fair and appropriate to the risks so that they can occupy a competitive position, whether at the local or global level to the extent that ensures that it contributes to the process of economic and social development (Abdul Halim, 1993, p. 123).

#### **Objectives of the underwriting process:**

The main objective of the underwriting process is to maintain that the deviations of the actual results from those expected and based on which the premiums are calculated, remain within that range that does not endanger the financial position of the insurance company. Thus, the basic objectives of the subscription process can be formulated in the following risks (Al-Sayyid, 396):

1. Avoiding risks against the interest of the insurance company or reducing them to the maximum degree by excluding bad risks for which the risk realization rates are much higher than the acceptable level. This process entails excluding bad risks and maintaining risk realization rates for acceptable risks.
2. The correct classification of the acceptable risks by making sure that each risk is placed in the category that is commensurate with its degree of risk in order to achieve justice between the insured and each other so that

the actual probability does not differ from the expected probability for each category.

3. Determining the extent of coverage that can be kept within the insurance company in light of the company's special circumstances and the nature of the risk in order to reduce concentrated risks (Abdullah, 2015 p. 281).

Some believe that the underwriting process should achieve three basic goals, which are (Zayd, 2006, p. 245):

- a. Secure distribution of risks.
- b. Profitable distribution of risks.
- c. Maintaining justice among policyholders.

Some see that underwriting coverage has many objectives, which are as follows (Bernard, 1990. P124):

1. Accept or reject the offered notices. In the case of acceptance, the premiums and the retention limit are determined.
2. Classification and pricing of each risk, as coverage criteria are established and the amount of protection offered for each acceptable risk is determined.
3. Safe and profitable distribution of risks, as the necessary standards, rules and procedures for maintaining and implementing these standards are established.

The subscription procedures are as follows (Momen, 2014, p. 31):

- a. pricing.
- b. Insurance application forms.
- c. Installment account.
- d. Insurance documents, notices of coverage and certificates of insurance.
- e. Pay the premium.

#### **Underwriting policy and factors affecting underwriting:**

The underwriting policy in insurance companies differs from one company to another, and the leniency in the underwriting policy is one of the most important reasons for the insurance companies' exit from the insurance market. Some insurance companies use lenient underwriting policies, and this appears in that they bear more risks than their absorptive capacity, so that if the companies used expansion policies, this led to a negative impact. However, if the companies used rational policies, this led to a positive impact for the company (Abdullah, p. 288).



### **Underwriting policy:**

The underwriting policy is defined as a set of foundations, standards and rules set by the general management of the company or its underwriting department regarding accepting risks or insuring against them. It includes the type of insurance business or the insurance branches that are underwritten, the level of prices, premiums, profit margins, or expected results (Abdullah, pg 288).

The first step in the underwriting activities is to determine the successful underwriting policy because it translates the company's senior management objectives into a set of rules, guidelines and procedures that guide when making underwriting decisions. Proceeding from the fact that the insurance company seeks to increase the volume of premiums and increase its market share and profits, the underwriting policy should achieve a balance between these objectives and the available possibilities. Accordingly, the underwriting policy of the insurance company should be based on the following aspects (Momen, p. 66):

1. Determining the trends of the qualitative structure of underwriting. It determines if the company intends to subscribe to new insurance branches or decrease the volume of its business from a particular insurance branch or stop subscribing to one of the branches that generate losses. It also determines the ratio of each branch to the total governorate, and the management expresses in this tracking the achieved results and the expected profitability for each branch.
2. Determining the company's activity according to geographical areas, such as establishing a branch of the company in new areas or closing some branches in other regions, whether inside or outside the country.
3. Determining the company's policy in terms of competition in general and according to the different insurance branches and in the relevant insurance market. That is, will the company resort to adopting a highly competitive method in terms of prices, conditions and marketing methods to obtain a larger share of business from insurance branches for them at the levels of prices and conditions prevailing in the market?
4. Determining the company's policy regarding reinsurance therein, as its policies are based on direct insurance business or acceptance of incoming reinsurance business, whether voluntary or agreement, and specifying the branches and

areas in which the company can practice incoming reinsurance operations.

.5Determining the issued reinsurance policy, which is one of the most important aspects of the company's underwriting policy, especially with regard to determining the net retention of the company in each branch of insurance, as well as determining the degree of adoption of both relative and non-relative reinsurance, the size of the absorptive capacity of reinsurance agreements and coverages for each branch, and an estimate of rates of expected losses, production commission rates, and administrative, general and technical expenses rates within the next three or five years. It also outlines the pricing policy and the company's policy in selecting clients or insurance brokers who are anticipating the consolidation of the relationship between them, evaluating the achieved results and comparing them with the expected results, knowing the cause of deviations, if any, and modifying future plans (Mamdouh, 2010, p. 135).

### **Underwriting Portfolio Management:**

The work of the direct underwriting department of the insurance company is to manage the underwriting activities. Usually, this management passes the targets for the premiums to the direct individual underwriter. Here, the underwriting portfolio must reflect the objectives of the insurance company. For example, some insurance companies may make the direct individual underwriter responsible for the underwriting portfolio that has been accepted. In this case, the subscriber's portfolio must not only reflect the insured's goals but must also reflect the portfolio objectives for each product separately, thus achieving the objectives of the company regarding its plan to accept insurance operations of various types of insurance (Al-Sayed, p. 399).

### **Preparing the underwriting policy:**

The effective underwriting policy is what translates the objectives of the senior management of the insurance company in the form of procedures and rules to guide when making underwriting decisions. Therefore, the structure of the insurance company's portfolio includes the following (Abdul Mawla, 1991, p. 310):

- a. Certain types of insurance policies that the insurance company will issue.
- b. The volume of the activity in which the underwriting is made, expressed in the form of the



limits of liability (amount of insurance). There is no doubt that the preparation of the underwriting policy requires a kind of reconciliation between the insurance company's desire to increase the market share and increase the volume of the collected premiums and the desire to achieve satisfactory results.

**The main dimensions of the underwriting policy:**

The main dimensions of the subscription policy are to determine the following (Abdullah, p. 179):

1. Types of coverages that are underwritten.
2. The geographical areas in which they are developed.
3. Price plan.

**SECOND: INSURANCE SURPLUS:**

**The concept of insurance surplus:**

It is the remainder of the insurance premiums paid by the "custodians" in the "Islamic insurance company" and its returns after paying compensation and expenses and setting aside reserves and provisions. It is owned by them and is distributed to them according to several ways, all of which are approved, but it is required to work in one of these ways that it be stipulated in the company's articles of association. But when there is no provision, it works in the way that requires distributing the surplus to all the insured without differentiating between those who took compensation and those who did not take" (Sabbagh, 2009, pg. 5).

The basic principle for seizing a year's surplus from the distribution, carrying it forward to a future year, or using it to compensate for another year's loss is impermissibility. It is also excluded from this if there is a text in the company's articles of association that requires it to carry out these actions on behalf of the insured because of the realization of their interest and cooperation between them (Ahmed, p. 175).

In case that the insured's insurance policy expires before the end of the company's financial year, the insured is entitled to the surplus for the period he remained as a partner, and he is not entitled to it for the subsequent period, and his share is calculated on the basis of the premium and the period.

In the case that the ownership of the insured thing changes and is transferred to a new owner, the surplus shall be given to the old owner who paid the premium, unless he assigns it to the new one. In the event of the company's termination, the

accumulated reserve shall be transferred to charitable causes. All company funds, including the insurance surplus, are subject to zakat.

The insurance surplus is one of the most important differences that distinguish the Islamic insurance system from the commercial or traditional insurance system, and this difference is due to the nature of the contract on which the basic system of both systems is built (Al-Saeed, p. 181).

The difference between the collected premiums and the compensation payments made in the Islamic insurance system was divided into an insurance surplus and it was called profit in the commercial system. Each of them has its own legal adaptation based on the nature of the contract from which the insurance company was launched. If there is a defect in the equation for distributing the insurance surplus from the emergence of Islamic insurance companies, this defect is due to a shortcoming in the scientific application and not a shortcoming in the Islamic insurance system based on achieving justice between the account of shareholders and the account of contributors (policyholders) (Haitham, pg. 88).

**Surplus:**

It was said in Lisan Al-Arab, the basin is overflowing, meaning full, and the basin is overflowing, meaning it overflows from it or from its sides to make it full.

**Surplus insurance as a term:**

Surplus insurance denotes the difference between revenues and expenses in the Takaful Fund at the end of the fiscal year. If the revenues exceed the expenses, the surplus is positive, and if it is the opposite, the surplus is negative according to the accounting definition (Karima, 2014, p. 224).

**The importance of the insurance surplus:**

The importance of the insurance surplus is illustrated by the following points:

First: Retaining all or part of the insurance surplus to form technical reserves, especially at the beginning of the company's life, is considered a wise decision from an insurance point of view. This is because it strengthens the financial solvency of the Cooperative Insurance Fund, which has the rule of legal personality and financial disclosure independent of the participants' funds. Increasing the amounts of the reserves made up of the insurance surplus enables the Fund to successfully



handle large financial claims and successfully overcome them because they constitute the first line of defense for the insurance subscribers' interest and protect them from resorting to borrowing from shareholders' funds. The insurance surplus is distributed to policyholders for a fiscal year that has passed and a surplus was realized. (Sabbagh, 2009, p. 8).

Regarding the legal personality of the Cooperative Insurance Fund, I say: This personality is determined by the law, or stipulated in the company's system, and this follows the necessity of separating its account from the accounts of the managing entity completely. The existence of this legal personality is necessary for arranging the provisions of the insurance contract, because the contributor pays the premiums and donates from them and the returns on their investment sufficient to pay compensation to those who suffer harm from among the contributors and thus out of the contributor's responsibility. Therefore, it must be entered into the custody of another, and its entry into the custody of the insurance company is not permissible according to the Islamic law. This is because the contract with this becomes a netting contract, and it must enter into a judgmental estate that has a legal personality, and a financial liability independent of its members who benefit from it. For this it was necessary to have this legal personality to apply the provisions of Islamic insurance.

As long as these provisions are legitimate, Sharia rules by evaluating their existence even if they do not take legal character abroad, such as the Bayt al-mal, endowment, speculation and other bodies that were considered and assessed in order to facilitate reaching goals that are consistent with Islamic law (Abdul Bari 2010, p. 2).

The resolution of the International Islamic Fiqh Academy No. 200 (6/21) stipulates that: "Article Sixteen: Independence of the Fund: The cooperative insurance fund shall be independent, consisting of the contributions of participants or others by granting it a legal personality determined by law, or by separating its account from the accounts of the managing body".

Sharia Standard No. (26) on Islamic insurance issued by the Accounting and Auditing Organization for Islamic Institutions, which was established in Algeria in 1990 and was registered in Bahrain in 1991 as an independent, non-profit global body stipulates that: "Islamic insurance is the agreement of persons exposed to certain risks

to avoid damages arising from these risks, by paying contributions on the basis of the commitment to donate, and from this an insurance fund that has the rule of legal personality and has an independent financial liability..." (Shari'ah Standard No. (26), Islamic Insurance, p. 364).

Second: Distributing the insurance surplus to Islamic insurance subscribers reduces the actual value of insurance premiums at the individual and institutional levels and is considered an incentive to continue insurance with Islamic companies compared to their counterparts from traditional companies in the insurance markets. This is because the amount of the premium is taken into consideration in some groups and institutions that do not pay the legal aspect too much attention when wanting insurance. The decrease in the value of the insurance premium according to what is returned from it as an insurance surplus encourages these categories to take out insurance with Islamic companies.

Third: Continuing to distribute the insurance surplus to the insured, and confirming their ownership of it, and their specialization in it, generates in them a sense of responsibility, and develops in them ardor over the insured's money represented by the insurance premiums they own. It also generates among the group of the insured a high behavior represented in maintaining the insured things and good disposal of them during their use and not thinking about investing or undermining the insured's money illegally. If such high morals and upright behavior prevail, artificial accidents will be reduced or absent, and the amount of compensation will be reduced accordingly, resulting in an increase in the insurance surplus (Resolution of the International Islamic Fiqh Academy No. 200 (6/21)).

Fourth: Continuing to distribute the insurance surplus or dispose of it for the benefit of the participants in the cooperative insurance contract contributes greatly to the consolidation of the Islamic insurance thought in their minds and encourages others to insure with Islamic insurance companies and confirms the credibility of these companies and their commitment to the provisions of Islamic Sharia in providing insurance services.

There is no doubt that this leads to the progress and prosperity of the Islamic insurance industry and its spread in the local and global markets.

How to distribute the insurance surplus (Aladdin, 2000, p. 296):



- a. The insurance departments in the company are considered a single unit and are treated as a single portfolio, from which the various types of expenses and obligations are deducted, and the surplus is treated on the basis that it is the surplus of the cooperative insurance fund of the company.
- b. Part of the insurance surplus is allocated as technical reserves to strengthen the company's financial position, knowing that the amounts allocated to this reserve are considered the property of the insured.
- c. The insurance surplus is distributed to all the insured according to the first criterion of the criteria approved by Islamic insurance companies (the first method of distributing the insurance surplus).

#### **Distribution rule of insurance surplus:**

The share of each underwriter from the surplus allocated for distribution is calculated according to the following equation:

The subscriber's share of the surplus = insurance premiums for each subscriber x the surplus allocated for distribution

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Total premiums

#### **The second topic: Field study**

##### **First: Procedures of the field study**

###### **Introduction:**

This part of the study deals with an accurate and detailed description of the methodology and procedures that were followed in the implementation of this field study at Shikan Insurance and Reinsurance Company Ltd. In addition, it includes an analysis of the results of the study and aims to identify the role of distributing the insurance surplus on underwriting.

###### **Methodology:**

The study relied on the descriptive-analytical approach as it is commensurate with the nature of the study. This approach is characterized by an accurate and detailed description of the studied problem through data and information collection, analysis and interpretation in order to obtain scientific results and come up with recommendations for future use, in addition to using the case study approach, which depends on field case study. The questionnaire was used as a

means of collecting primary data on the study problem.

###### **Study population:**

The study population consists of all organizational levels of Shikan Insurance and Reinsurance Company, as they represent managers, heads of departments, and employees who are related to the subject of the study. The number of the study population is (751) employees occupying administrative, technical and application positions, according to the records of the General Department of Human Resources in the company. The researcher chose the study sample in a simple random way, as (75) questionnaires were distributed to all the target audience, and (70) questionnaires were retrieved. The number of (2) invalid questionnaires were excluded, thus the total number of questionnaires that were subjected to statistical analysis became (70) questionnaires, i.e. with a response rate of (93.3%), which is a high and acceptable rate.

###### **Study tool:**

This study relied on the questionnaire method as a main tool for collecting primary data from the study population and it consisted of two parts. The first part includes data on the demographic characteristics of the members of the study sample and includes: age, educational qualification, job title, and years of experience.

The second section includes (11) statements. The study sample members were asked to rate their response to what each statement describes on a five-point Likert scale consisting of five levels (strongly agree, agree, neutral, disagree, strongly disagree) according to weights (5, 4, 3, 2, 1) used to test the hypothesis of the study.

###### **Statistical validity and reliability:**

The reliability of the test is intended to give the scale the same results if it is used more than once under similar conditions. As for the validity of the tool, it is a measure used to determine the degree of sincerity of the respondents through their answers on a specific scale. The validity of the tool is calculated in many ways, the easiest of which is that it represents the square root of the reliability coefficient. The tool's reliability and validity ranges between zero and one. The researcher statistically found the construct validity of the questionnaire's axes statements by using the auto-validity equation, which is:





Reliability

The researcher calculated the reliability coefficient of the scale used in the questionnaire through the alpha-Cronbach equation and found that the reliability coefficient (0.941) and the construct validity coefficient (0.97) on the questionnaire's whole statements. The percentage was greater than (90%), which indicates that the study's questionnaire is characterized by great reliability and validity. This reflects positively on the study and makes the statistical analysis sound and gives high results.

**Statistical methods used:**

To obtain as accurate results as possible, the SPSS statistical program was used, which stands for Statistical Package for Social Sciences. One of its advantages is that it helps to conduct statistical analysis of data easily and quickly. It is considered one

**Second: Analysis of the study data**

**Description of personal data:**

**1. Age:**

**Table No. (1) Frequency distribution and percentages of the respondents according to the age variable**

Age groups	No.	Percentage
Less than 30 years	9	%12.9
From 30 to less than 35 years	10	%14.3
From 35 to less than 40 years	10	%14.3
From 40 to less than 45 years	25	%35.7
From 45 to less than 50	10	%14.3
50 years or more	6	%8.6
Total	70	%100

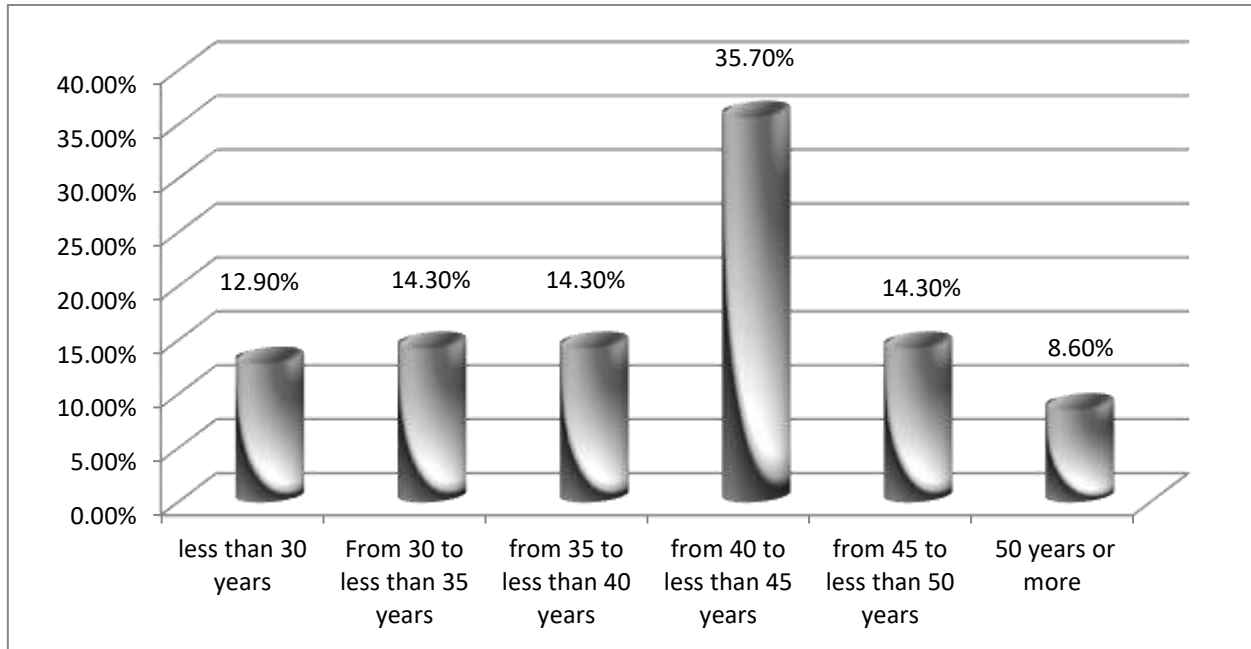
Source: Prepared by the researcher from the data of the field study, 2022

Figure No. (1) Frequency distribution and percentages of respondents according to the age variable

of the common programs that are used in analyzing data related to research and human studies because of its capability in data processing despite its large size. The objectives of the study, statistical methods used: graphs, frequency distribution of answers, percentages, mode and chi-square test to indicate the differences between the answers.

**Implementation of the study tool:**

After verifying the validity and reliability of the questionnaire, the researcher distributed it to the target study sample members, who are (75) individuals. The data and information were unloaded in the tables prepared by the researcher for this purpose, as the qualitative variables (strongly agree, agree, neutral, strongly disagree, disagree) were transformed into quantitative variables (5, 4, 3, 2, 1). After that, the chi-square was used to find out the significance of the differences in the answers of the study community members to the statements of each hypothesis.



Source: Prepared by the researcher from field study data, 2022

It is clear from Table (1) and Figure (1) that the age group of the majority of the research sample falls under the age group (40 to less than 45 years), as their percentage reached (35.7%), followed by those in the age group (from 30 to less than 35 years), (from 35 to less than 40 years) and (45 to less than

50), as the percentage for each of them reached (14.3%), followed by those aged in the category (less than 30 years) and their percentage is (12.9%). As for the percentage of those in the category (50 and more), it is 8.6%.

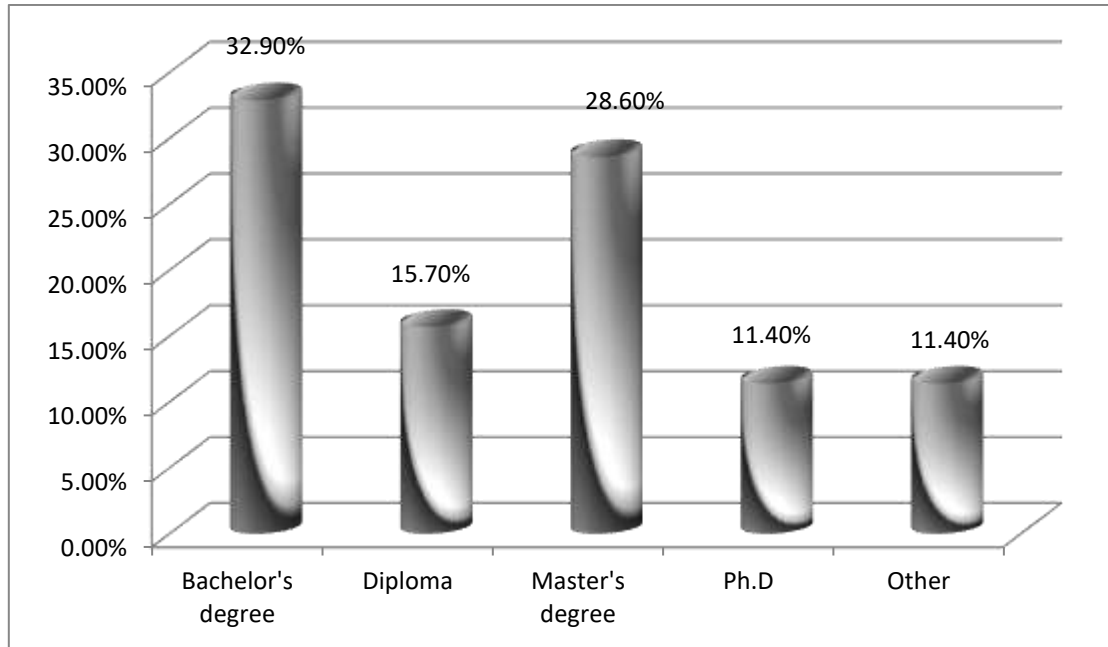
## 2. Academic qualification:

Table No. (2) Frequency distribution and percentages of respondents according to the educational qualification variable

Educational qualification	No.	Percentage
Bachelor degree	23	%32.9
Diploma	11	%15.7
Master degree	20	%28.6
Ph.D.	8	%11.4
Other	8	%11.4
Total	70	%100

Source: Prepared by the researcher from the data of the field study, 2022.

Figure No. (2) Frequency distribution and percentages of respondents according to the educational qualification variable



Source: prepared by the researcher from the data of the field study, 2022.

It is clear from the table and figure (2) that the majority of the study sample has a bachelor's degree, as their percentage reached (32.9%), followed by this with a master's educational qualification, as they constituted (28.6%), followed by those whose educational qualification is a high diploma, as their percentage reached (15.7%). Moreover, the

percentage of individuals with a doctorate qualification was (11.4%). Those whose academic qualifications (others) also got the same percentage. The largest proportion of holders of a master's degree was entrusted with the task of underwriting and distributing the insurance surplus to policyholders.

### 3. Job title:

Table No. (3) Frequency distribution and percentages of respondents according to the job title variable

Job title	No.	Percentage
Financial Manager	-	%0
Managing Director	1	%1.4
employee	37	%52.9
accountant	10	%14.3
Other	22	%31.4
Total	70	%100

Source: Prepared by the researcher from the data of the field study, 2022

Figure No. (3) Frequency distribution and percentages of respondents according to the job title variable



Source: Prepared by the researcher from field study data, 2022

It is clear from the above table and Figure (3) that the majority of the study sample has their job position (employee), where their percentage is (52.9%), followed by the individuals whose job position is (other) as their percentage reached (31.4%), followed by individuals whose job position is

(accountant) and formed percentage (14.3%). The percentage of (administrative manager) is 1.4%. This indicates that the majority is the employees and they are concerned with the underwriting order and the process of distributing the insurance surplus to the policyholders.

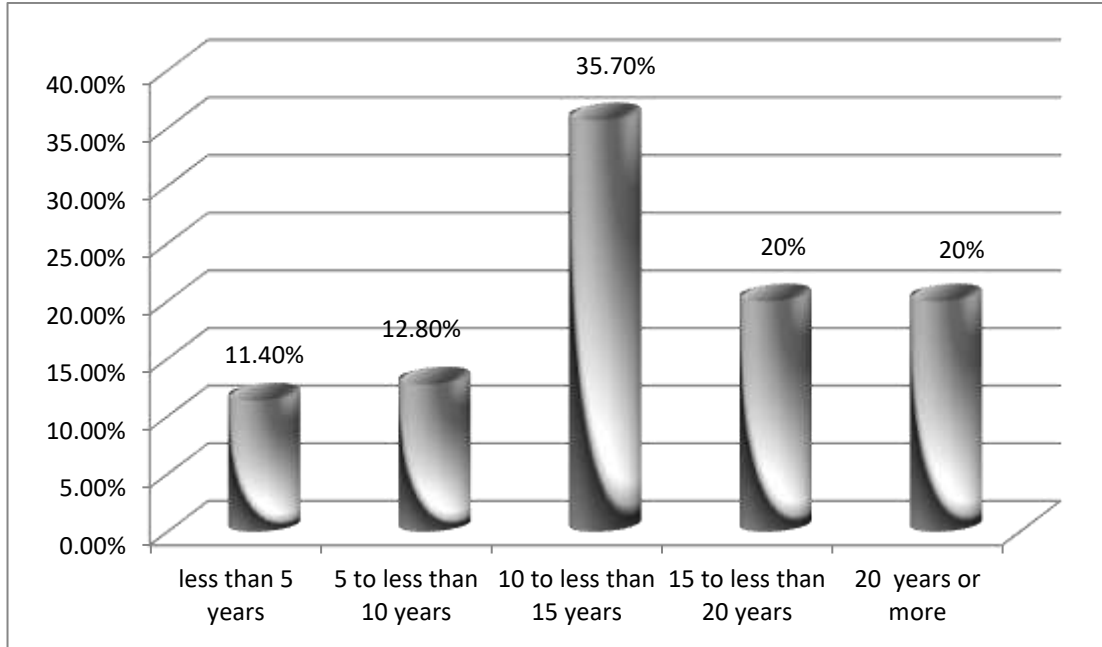
#### 4. Years of Experience:

Table No. (4) Frequency distribution and percentages of respondents according to the variable years of experience

Experience	No.	Percentage
Less than 5 years	8	%11.4
From 5 to less than 10 years	9	%12.8
From 10 to less than 15 years	25	%35.7
From 15 to less than 20 years	14	%20
From 20 years or more	14	%20
Total	70	%100

Source: Prepared by the researcher from the data of the field study, 2022.

Figure No. (4) Frequency distribution and percentages of respondents according to the variable years of experience Source: prepared by the researcher from the data of the field study, 2022.



It is clear from the table and figure (4) that the majority of the study population have experience (10 to less than 15 years), as their percentage reached (35.7%), followed by those with experience (15 to less than 20) and (20 years and more) as their percentage reached (20%), followed by those with experience (5 to less than 10) who constituted (12.8%), while the percentage of those with experience (less than 5 years) was 11.4%.

**Study hypothesis test:**

To answer the study's questions and verify its hypothesis, a mode will be calculated for each of the questionnaire's statements. It shows the direction of the study sample's opinions. A score of (5) was given as a weight for each "strongly agree" answer, a score of (4) as a weight for each "agree" answer, a score of (3) as a weight for each "neutral" answer, a score of (2) for each "disagree" answer, and a score of (1) as a weight for each "strongly disagree" answer. Then

the chi-square test will be used to find out the significance of the statistical differences in the answers of the study sample members to the hypothesis statements.

**Third: Presentation and discussion of the results of the study hypothesis:**

(There is a statistically significant relationship between the distribution of the insurance surplus and the total written premiums).

The objective of this hypothesis is to show the existence of a relationship between the distribution of the insurance surplus and the total written premiums. To verify the validity of this hypothesis, it is necessary to know the direction of the study sample's opinions regarding each of the hypothesis statements. This is done by calculating the arithmetic mean and mode of the answers of the study sample members to each statement and then to the whole statements, as shown in Table (5).

Table No. (5) Descriptive statistics (ratio and frequency) of the answers of the study sample members to the hypothesis statements

Statements	Response scale									
	Strongly agree 5		Agree 4		Neutral 3		Disagree 2		Strongly disagree 1	
	T	%	T	%	T	%	T	%	T	%
1 .The principle of distributing the insurance surplus to the insured	25	35.7	29	41.4	8	11.4	5	7.1	3	0.43



contributes to reducing the actual value of the contributions.										
2. The policies of distributing the insurance surplus have a role in underwriting	1. 19	2. 27.1	3. 13	4. 18.6	5. 21	6. 30.0	7. 14	8. 20.0	9. 3	10. 4.3
3. Retaining part of the insurance surplus distributed to form technical reserves strengthens the solvency of the participants' funds.	1. 21	2. 30.0	3. 29	4. 41.4	5. 14	6. 20.0	7. 2	8. 2.9	9. 4	10. 5.7
4. Distributing the insurance surplus to the subscribers reduces the value of the premiums.	1. 12	2. 17.1	3. 23	4. 32.9	5. 23	6. 32.9	7. 5	8. 7.1	9. 7	10. 10.0
5. Distribution of the insurance surplus to policyholders is considered an increase in written premiums.	1. 12	2. 7.1	3. 28	4. 40.0	5. 16	6. 22.9	7. 4	8. 5.7	9. 10	10. 14.3
6. Distribution of the insurance surplus develops a good behavior of policyholders towards maintaining the insured things.	1. 21	2. 30.0	3. 29	4. 41.4	5. 8	6. 11.4	7. 6	8. 8.6	9. 6	10. 8.6
7. Distributing the insurance surplus to policyholders reduces artificial accidents, which in turn affect the subscription.	1. 18	2. 25.7	3. 23	4. 32.9	5. 13	6. 18.6	7. 9	8. 12.9	9. 7	10. 10.0
8. There is a relationship between risk measurement and insurance surplus distribution.	1. 16	2. 22.9	3. 25	4. 35.7	5. 13	6. 18.6	7. 9	8. 12.9	9. 7	10. 10.0
9. There is a relationship between the volume of investment and the total written premiums.	1. 21	2. 30.0	3. 13	4. 18.6	5. 15	6. 21.4	7. 15	8. 21.4	9. 6	10. 8.6
10. Employing investment funds effectively has an impact on the subscription.	1. 22	2. 31.4	3. 28	4. 40.0	5. 10	6. 14.3	7. 7	8. 10.0	9. 3	10. 3
11. The market share of insurance companies contributes to the increase in underwriting.	10	102	10	104	1	10	1	1	1	110
<b>Statements directions</b>									<b>Strongly agree agree</b>	

Source: prepared by the researcher from the data of the field study, 2022.

Thus, it is noted that the study hypothesis was initially achieved for each of the related statements, as we find that all the statements of the hypothesis axis fall within (strongly agree) and (agree), which indicates the presence of positive attitudes towards the statements of the axis of the hypothesis.

Table No. (6) Descriptive statistics (arithmetic mean, standard deviation, mode) of the responses of the study sample members to the hypothesis statements

Statements	Arithmetic means	Standard deviations	Mode
1. The principle of distributing the insurance surplus to the insurers contributes to reducing the actual value of the contributions.	2. 3.97	3. 1.08	4. 4
2. The policies of distributing the insurance surplus have a role in underwriting	5. 3.44	6. 1.21	7. 5



3 .Retaining part of the insurance surplus distributed to form technical reserves strengthens the solvency of the participants' funds.	<b>8. 3.8 7</b>	<b>9. 1.0 6</b>	<b>10. 4</b>
4 .Distributing the insurance surplus to the subscribers reduces the value of the premiums.	<b>11. 3.4 0</b>	<b>12. 1.1 6</b>	<b>13. 4</b>
5 .Distribution of the insurance surplus to policyholders is considered an increase in written premiums.	<b>14. 3.4 0</b>	<b>15. 1.2 6</b>	<b>16. 4</b>
6 .Distribution of the insurance surplus develops a good behavior of policyholders towards maintaining the insured things.	<b>17. 3.7 6</b>	<b>18. 1.2 2</b>	<b>19. 4</b>
7 .Distributing the insurance surplus to policyholders reduces the artificial accidents that in turn affect the subscription.	<b>20. 3.5 1</b>	<b>21. 1.2 8</b>	<b>22. 4</b>
8 .There is a relationship between risk measurement and insurance surplus distribution.	<b>23. 3.4 9</b>	<b>24. 1.2 6</b>	<b>25. 4</b>
9 .There is a relationship between the volume of investment and the total written premiums.	<b>26. 3.4 0</b>	<b>27. 1.3 4</b>	<b>28. 5</b>
10 .Effective investment of investment funds has an impact on the underwriting .	<b>29. 3.8 4</b>	<b>30. 1.1 1</b>	<b>31. 5</b>
11. The market share of insurance companies contributes to the increase in underwriting	<b>32. 3.3 2</b>	<b>33. 1.0 1</b>	<b>34. 5</b>

Source: prepared by the researcher from the data of the field study, 2022.

It is noted from Table (6) that the arithmetic mean ranges approximately between (3.32-3.97) and the standard deviation ranges between (1.0-1.3). This result indicates the homogeneity of the hypothesis statements with each other. As for the mode, it is equal to (4) in the majority of the hypothesis statements, and this indicates that all the axis statements were approved. This indicates positive attitudes towards the differences in statistical significance between the distribution of the insurance surplus and the total written premiums.

The above results, as shown in Table No. (6), does not mean that all respondents agree on this. To test the existence of statistically significant differences between the answers of the study sample members (strongly agree, agree, neutral, disagree, strongly disagree) for the above results, Chi-square test was used to indicate the differences between the answers to all the terms of the study hypothesis. Table No. (7) summarizes the test results.

Table No. (7) Chi-square test for all study hypothesis expressions

Study hypothesis statements	Chi-square value	Freedom degrees	Probability value	Result interpretation
	70,571	14	0,000	Significant

Source: prepared by the researcher from the data of the field study, 2022.

From Table No. (7) above, it is noted that the value of the chi-square for all the statements of the study hypothesis was (70,571), with a probability value of (0.000) which is less than the level of significance 0.05 and at the level of significance (5%). This indicates that there are statistically significant differences between the distribution of the insurance surplus and the total written premiums. This proves the validity of

the hypothesis of the study, which states (there is a statistically significant relationship between the distribution of the insurance surplus and the total written premiums).

**FINDINGS AND RECOMMENDATIONS:**  
**First: Findings**



1. There is a statistically significant relationship between the distribution of the insurance surplus and the total written premiums.
2. Underwriting avoids risks against the interests of the insurance company or reduces it to the maximum degree.
3. The underwriting places each risk in the category that is commensurate with the degree of special risk.
4. The insurance surplus forms the company's technical reserves.
5. Distribution of the insurance surplus develops a good behavior of policyholders towards maintaining the insured things.

### **SECOND: RECOMMENDATIONS**

1. It is necessary to reduce the actual value of the contributions to the company and to work on the principle of distributing the insurance surplus to the insured.
2. Those in charge of the insurance order should work to increase the market share of the insurance companies.
3. Work to increase subscription to insurance companies.
4. Motivating and encouraging policyholders in insurance companies.

### **REFERENCES:**

#### **First: Arabic references**

- 1) Ahmed Abdel-Fattah Ali, Using discriminant analysis in analyzing the profitability of underwriting public insurances, 32<sup>nd</sup> Conference on Statistics, Computer Science and Operations Research, Institute of Statistical Studies and Research, Egypt, December 15, 1997
- 2) Mr. Abdul Muttalib Abdo, Principles of Insurance, Cairo, Dar Al-Nahda Al-Arabiya, 1986.
- 3) Salama Abdullah Salama, Risk and Insurance, First Scientific and Practical, 4<sup>th</sup> Edition, Cairo, Arab Renaissance House, 1974.
- 4) Abbas Al-Obaidi, Underwriting, publishing house; Culture House for Publishing and Distribution, 1998.
- 5) Moamen Atif Muhammad Ali, Principles of Underwriting in Insurance Companies, Cairo, The Arab Group for Training and Publishing, 1<sup>st</sup> Edition, 2014.
- 6) Abdel Halim Abdullah Al-Qadi: The Agreement on Liberalizing International Trade and the Insurance Industry in Developing Countries." New Horizons Magazine, Faculty of Commerce, Menoufia University, Q4, p.1, 1993
- 7) Alaa al-Din Abu Bakr bin Masoud al-Kasani (d. 587 AH / 1191 AD), Badaa' al-Sana'I in the arrangement of the laws, investigated by: Muhammad Khair Halabi,

Beirut, Dar al-Maarifa, 2000, (I 1), part 4, p. 296. Shams Al-Din Muhammad bin Ahmad Al-Khatib Al-Sherbiny (d. 977 AH / 1569 AD), the sufficient in need of knowing the meanings of the words of the curriculum, supervised by Sidqi Al-Attar, Beirut, Dar Al-Fikr, 1998 AD, (I 1, part 2).

8) Mamdouh Hamza Ahmed, Foundations of Underwriting in Insurance, Dar Al Thaqafa for Publishing and Distribution, 2010.

9) Mohamed Abdel Mawla Othman, Ahmed Abdel Fattah Ali, Insurance, Tanta Library, Cairo, 1991.

10) Sabbagh, Insurance Surplus, Abdul Sattar Abu Ghuddah, Islamic Fatwas of Al Baraka Banking Group, Dallah Al Baraka Group, General Secretariat of the Sharia Board.

11) Karima Eid Omran - Islamic Insurance and Economic and Social Development, Dar Osama, Amman, Jordan, 2014

12) Haitham Muhammad Haider, the insurance surplus in Sudanese insurance companies, Riyadh, Saudi Arabia, (d, c)

13) Abdel Bari Meshaal, Experiences of Disposing of the Insurance Surplus, the Muslim World League, the International Commission for Economics and Finance, the Second Cooperative Insurance Forum, 10/24-25 1431 AH - 2-3/10/2010 AD.

### **SECOND: ENGLISH REFERENCES**

- 1) Frederick G. Grane , insurance principle and practice" 2<sup>nd</sup>ed,( New York: john wiley& sons, Inc. 1984)
- 2) Bernard Benjamin underwriting and the selection of liability portfolio@ in Stephen Diacon(ed)@ A guide to insurance management @ London : Macmillan an Press LTD. 1990.