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EFFECTS OF REINSURANCE  
ON AN INSURANCE COMPANY

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A Research Topic

Presented to Business Division  
Beirut University College

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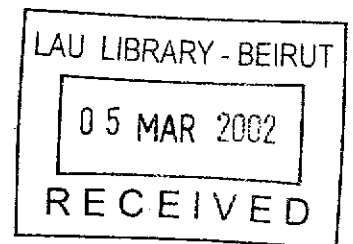
In Partial Fulfillment  
Of the Requirements for the Degree  
Master of Science in Business  
Management

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BY

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TITLE OF RESEARCH TOPIC: EFFECTS OF REINSURANCE ON  
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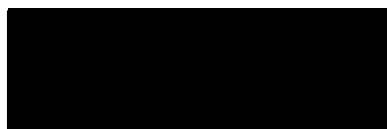
The following professor nominated to serve as the advisor  
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## CHAPTER 1

### INTRODUCTION

As the title suggests this research will highlight the importance of reinsurance to the insurance industry as a whole, and in order to do so a fair and extensive description of the nature and role of reinsurance business will be laid out in order to achieve the purpose of this study.

Reinsurance is a vital tool for the distribution or sharing of risks and it is also an important method of risk control and management. Reinsurance is required for all classes of insurance business and every insurance company in the world, whether small, medium or large requires some form of reinsurance protection in order to be able to function effectively. The service which reinsurers provide to insurers is similar to the service which an insurance company provides to its policyholders. In the same way as the modern economy cannot survive without an organized insurance system, so will a modern insurer not survive without reinsurance protection. Whereas a primary insurer undertakes, in return for a premium, to indemnify the insured in the event of a loss, due to an insured peril, a reinsurer in turn reinsures the reinsured subject to the reinsured paying to the reinsurer a proportion of the original premium which the insurer had received from the policyholder.

As the world economy becomes more and more sophisticated, risks have continued to assume large and almost unmanageable proportions, thus the demand for reinsurance will

continue to grow to meet the growing needs of insurance industry.

Statement of the Problem

The problem that faces every insurance company is making sure that it can pay the losses. It must watch that the amount of losses paid and outstanding does not exceed a certain proportion of its funds. Otherwise it might get into difficulties or even go bankrupt which would mean that it could not meet its obligations to its policyholders. The probability of frequency and size of losses to be expected in an insurance portfolio can only be measured with sufficient accuracy if the number of risks is large enough and if these risks are also of similar size and nature.

In practice, it is rarely possible for an insurance company to build up a portfolio which would be so well balanced that the loss ratio would fluctuate only little from one year to the other. In this respect the following questions arise:

- 1- Even if the insurer decided to limit his acceptance to a very small amount for each single risk, could he exclude the possibility of being hit once by a very large number of small losses all caused by one single event of a catastrophic nature, example ; earthquake, flood, wind-storm, etc.

- 2- Could be avoid the accumulation of several risks in certain areas, means of transport, etc., where they could be affected by the same event.
- 3- What is the primary function of the reinsurer in establishing this sense of protection and stability to the insurer? .

Statement of the Purpose

The primary objective of reinsurance is to provide facilities for the sharing out of risks on a wide and often international or world-wide basis thereby helping to strengthen the position of insurers. This wide sharing of risks ensures that large losses do not cripple the original insurer as such losses are spread over a number of insurers and reinsurers sometimes on an international basis. Reinsurance therefore, guarantees the existence and continuity of insurance companies and helps them to increase their capacity and consequently the capacity of the local market. Without reinsurance there would be no adequate cover for large industrial project. To illustrate the significance of the size of such projects, let us first cite few examples in the petrochemical field, especially within the Gulf countries, where the values have reached an astronomical level<sup>1</sup> :

1- ARIG REINSURANCE SIMINAR, 8-10 APRIL 1984

1- ARAMCO (SAUDI ARABIA)	
Total Sum Insured 1982	\$ 24,800,000,000
2- PETROMIN-RIYADH (SAUDI ARABIA)	
Total Sum Insured	S.R. 5,000,000,000
3- BAPCO (BAHRAIN)	
Total Sum Insured	\$ 1,436,000,000

By looking at these figures one can tell the significance of reinsurance, as no company or market, however strong their capacities are, could pretend to cover these risks without reinsurance on international basis.

Therefore, it is the purpose of this study to analyze the role and impact of reinsurance as a risk transfer mechanism on insurance companies and to determine whether reinsurance provides underwriting and financial capacities to direct insurance companies.

#### Performance Objectives

The approach followed to achieve the stated purpose and solve the outstanding questions when stating the problem, the research will undertake to fulfill the following objectives:

- 1- To discuss risk management, insurance and reinsurance.
- 2- To review the history of international reinsurance and the leading international markets in this field.

- 3- To describe the various methods of reinsurance.
- 4- To discuss the legal aspects of reinsurance; its principles and the legality of reinsurance contracts.
- 5- To illustrate by means of an example how reinsurance affects an insurance company and turns its results from loss to profit through an organized plan.

### Methodology

This research has special nature as the topic it is dealing with, i.e, reinsurance, is a highly technical business.

However, inspite of its importance and despite its highly technical nature surprisingly few books have been written on the subject. In fact, only five major books have been written in English on various aspects of reinsurance since the beginning of this century.

The data obtained can be classified into two categories: primary data and secondary data.

The primary data are collected from the seminars held in different countries on reinsurance and the available books at the library of Arab Reinsurance Company. The secondary data are derived from the various publications and business magazines.



A list of the names of books and magazines is to be found in the bibliography at the end of this study.

## Chapter 2

### PRESENTATION AND ANALYSIS OF RESULTS

#### - Risk Management, Insurance And Reinsurance

Risk has been the subject of study by scholars for many centuries and a great deal of thought and effort has gone into defining the concept. Although there is no one single definition of risk that can be universally accepted, we will confine our definition of risk as the uncertainty of loss as the factor of uncertainty is associated with any kind of risk a person faces in his life, both personal and business.

There is no doubt that the element of risk poses threats and consequently burdens the individual or the group with a cost if this uncertainty of loss materializes. To cope with such unpleasant events, the development of the concept of risk management has been highly considered as a process that can manage risks in a much more efficient manner. Techniques have been developed and refined where this management process is concerned with the identification, evaluation, and economic control of those risks that threaten our life especially on the business level.

2- Gordon C.A. Dickson, Introduction To Insurance, (London CII Tuition Services 1984) chapter 6, PP 1-2 .

The first step in the risk management process is the risk identification which highlights all the different areas that might cause or lead to a loss whereby making the subject matter to suffer. Thus the first stage of risk identification of the various areas of exposure in a certain situation is an essential step to carry out with some kind of physical inspection. The second stage in this process is evaluating the impact of the risks identified and involved in order to ascertain what the cost would be if the particular event occurred. In this context, evaluation can be of a qualitative nature where those involved in risk management rely on their own past experience of similar situations or events. At the same time, quantitative evaluation play an important part during this stage in analyzing the gathered statistical data and basing the decisions on a much more scientific ground. However, no broader line can be drawn between these two aforementioned methods upon consideration by the risk manager. Having identified and evaluated the risk under study, the third and final stage concerns itself with the objective of this process in controlling the risks involved. This step takes the form of either a physical or a financial control of risk 3 .

3- Ibid, Chapter 6, PP 4-5

The first divides itself into two parts: elimination and minimization. Elimination is the complete removal of the uncertainty of loss where that particular risk is incalculable and sometimes the answer to the problem is that the activity giving rise to this risk has to be abandoned. However, given the limitations of the human factor, it is not usual that a risk can be removed entirely but also it is a rare case where it can not be reduced. Therefore minimization is an essential factor in the physical control of risk either in the-loss period where the effect of the loss is being anticipated and necessary steps are taken to ensure that the severity and frequency of this loss are reduced and minimized to the most possible minimum level, or in the post-loss period where this uncertainty of loss has been materialized and thus ways are anticipated to reduce its effects .

On the other hand, the latter is defined as some kind of a financial mechanism by which risks are also reduced. The financial control can as well be sub-divided into two categories: retention and transfer of risk. Risk retention or risk assumption refers to the method where the individual or firm assumes the risk itself and bears its uncertainty. This method of handling risk is referred as self-insurance and the business firm makes internal provision for losses by establishing a contingency fund or a captive insurance company. The Captive is a company Created and owned by an organization, usually a Commercial Concern, which insures the risks of its parent.

Risk transfer involves one person guaranteeing another against the risk of loss. This kind of transfer means insurance as being a service that is offered to the community in transferring the economic losses associated with risks from the insured person to the insurer, usually an insurance company, in return for a pre-agreed payment known as premium and by effecting some kind of a contract; the insurance policy. In short, insurance is a risk transfer mechanism whereby the individual or the business firm can shift some of the uncertainty of life to the shoulders of others. Without insurance there would be a great deal of uncertainty experienced by the individual or enterprise as to whether a loss would occur and to what size its severity could be if it did materialize.

In view of the foregoing, the central idea of the risk management process taking place in the varying stages and phases can be seen in the fact that various hazards which constitute a risk are not considered in an isolated way. Integral examination of a risk situation is the starting point in order to take systematic decisions on risk handling via risk analysis, evaluation and treatment. These measures are to be coordinated within them insurance is merely one of the many possibilities where it is one part or sub-set of the broader picture of risk management process and not the contrary. In addition, it is worthwhile to add that the mechanism of reinsurance is another important instrument that belongs to the measures of risk transfer in the field of risk financing.

As far as their function is concerned insurance and reinsurance can be understood as a subsidiary measure in the context of an integral risk policy where reinsurance is defined as the insurance of the risk assumed by the insurer (the insurance company) and no legal bond exists between the insured person (the policy holder) and the reinsurer ( the reinsurance company).

Consequently a basic differentiation should be outlined between the concept of risk management process as a whole and its risk transfer sub-part, namely insurance and reinsurance. It can be said that risk management process deal with "all risks" that an enterprise is potentially exposed to, while the risk transfer sub-part is confined to deal with insurable risks only. These insurable risks are characterized by the following features:

- 1- The risk must involve a loss that is capable of financial measurement.
- 2- There must be a large number of similar-homogeneous risks.
- 3- Insurance and eventually reinsurance are only concerned with pure risks where the element of gain is totally absent and can not be insured.
- 4- The loss must be entirely fortuituous where it is not possible to insure against an event that will occur with certainty.
- 5- The person effecting the insurance policy should possess an insurable interest where he personally suffers some financial loss in case the risk materializes.

6- The final feature of the insurable risk is that the premium must be seen to be reasonable in relation to the likely financial loss.

- Historical Background of Reinsurance:

The exact origins of reinsurance are unknown, but it does appear that early insurers only accepted risks on their own account, up to a certain limit. Since Marine insurance is the oldest class of insurance, it is only logical that the first known reinsurance contract, dated 1370, was also concluded in this branch. In 1681, the decrees of the French King Louis XIV contained an indirect reference to reinsurance. Under a British Law of 1746, Marine reinsurance was banned unless the original insurer become insolvent, went bankrupt, or died. This prohibition remained in force until 1864. Fire reinsurance treaty appeared in 1778, and the first treaty was signed in 1821. Initially, reinsurance was contracted on a facultative basis only. Then, in the 19th century, industrial and commercial developments caused a rapid growth of insurance and created a need for more flexible forms of coverage. The automatic reinsurance treaty grew in importance, since it covers all of the risks accepted by an insurer in a particular branch. The established insurance companies also began to accept reinsurance business. As the demand for reinsurance cover gradually increased, Competition grew among reinsurers, a development which led to the founding of professional reinsurance companies.

The Cologne Reinsurance Company began operations in 1852, and the Swiss Reinsurance Company was founded in 1863. In England, the domination of the market by LLOYD'S underwriters created a different situation. The first British reinsurer, Mercantile & General, didn't begin business until 1907.

It soon became clear to reinsurers that a balanced portfolio could be guaranteed only by a wide distribution of risks. Thus, they worked to spread their business throughout the world.

However, before this modern development in reinsurance can be discussed, a brief review of the growth of direct insurance will be necessary.

According to Manes, only 30 insurance companies were in existence at the beginning of the 19th Century. Of these, 14 were in England, 5 in the U.S.A. 3 in Germany, 3 in Denmark, 2 in France, and 1 each in Austria, Holland and Switzerland. Other writers on insurance also mention a Company in Spain and one in Cuba. By 1850, the figure had grown to 306 Companies in 14 countries; by 1900, to 1272 in 26 countries; and by 1910, 2540 in 29 states. A study made by the swiss Reinsurance Company's economics department placed the figure at 9700 companies throughout 71 countries of the free world in 1968, without including the estimated 3000 foreign subsidiaries of these companies. Of these companies, 49% were in Europe, 42% in America, 3% in Asia, 2% in Africa, and 4% in Australia.



The increasing number of insurance companies alone does not sufficiently explain the growing importance of reinsurance over the past 50 years. It is itself due in part to the extraordinary economic development which has occurred during the period, a process which began with the Industrial Revolution and, far from being completed, is continuing at an accelerated pace.

A number of aspects related to this deserve discussion, and the first of these is the increase of value represented by modern objects. Building and equipping an office building around the turn of the century cost much less than erecting one of today's skyscrapers and installing sophisticated office equipment and computers.

A second factor was the founding of new states in the formerly colonial areas of the world. In time, many of these states nationalized insurance companies, limited the activities of foreign companies, or in some cases, even prohibited them from doing business. The new, local companies formed because of such restrictions usually have less capital than the foreign companies they replaced because in such countries, where capital is often scarce, investors choose more profitable investments than insurance. This low capitalization and the modest premium volumes of such companies prevent them from keeping high retentions and make it essential that they have reinsurance.

Both the population boom and industrial development caused growth in formerly poor and scantily populated areas. Because some of these areas are in hurricane or earthquake zones, they now contain enormous risks. Classical examples of such areas are Florida and some other parts of the United States, Central America, and Japan. Risks of this size require Reinsurance.

A fourth factor stimulating the growth of reinsurance is social tension, a frequent corollary of economic development. When such tension turns into social unrest, modern means of Communication spread the news much more quickly than in earlier areas. Today's greater Concentrations of population also tend to make reactions more violent and more destructive of economic goods, the latter primarily because the value of things has increased. The May 1968 disturbances in France are an example of this factor.

The modern trend toward concentration has influenced the growth of reinsurance in another way- through the mergers of direct insurance companies. Since in most cases the merged companies did not also combine their retention capacities, larger amounts remained on major risks to be ceded to reinsurers.

A tendency which affected reinsurers oppositely developed after World War II, when direct insurers began exchanging business on a worldwide basis, thus becoming significant reinsurers in their own right.

By now, however, this tendency has been almost completely reversed, because bad underwriting results have virtually eliminated these so-called reciprocity cessions.

Consequently, we can say that the sum of these factors is a growing demand for coverage, which is meeting with a decreasing number of active reinsurers and a smaller coverage potential. Moreover, both direct insurance and reinsurance covers have grown more sophisticated and thus more demanding technically.

Therefore, it is fair to conclude that the future of the business belongs to companies with adequate financial strength and highly qualified personnel.

- International Markets of Reinsurance:

The growth both in the sizes of individual industrial, Commercial and transport risks, and in the concentrations of risks force direct insurers to rely heavily on reinsurance to provide the necessary underwriting capacity where the portfolios are increasingly becoming unbalanced. Consequently, a wider spread of risk is required especially on geographical basis. Thus the principal international reinsurance markets of the world are to be found mainly in London, Continental Europe, and U.S.A.

1- The London Market:

This market is a mixed of direct insurance and re-insurance business comprising of LLOYD'S underwriters and companies with limited liability accepting insurance and re-insurance, overseas professional reinsurers operating through branches or U.K. registered subsidiary companies, as well as overseas business which are not authorized to write insurance business but rather maintain contact offices in London. The international reinsurance market in London has developed from the direct international insurance market operating there. The portfolio of LLOYD'S syndicates and British Companies have for a long time had a large content of overseas acceptances and hence possessed the necessary experience and technical expertise to handle any international business. Thus the reinsurance market in London has been able to develop internationally on sound lines of a large and widely spread portfolio and experienced staff.

2- Continental European Markets:

The European reinsurance markets are comprised of the professional reinsurance companies where they are in Germany, Switzerland, France, and almost all other Western European Countries. Direct writing companies participate in international reinsurance in Europe but the importance of their involvement is due to the presence of the largest re-insurance companies, namely the Munich Reinsurance Company and the Swiss Reinsurance Company.

In the former, the domestic business remains a relatively large proportion of the company's total portfolio which later it has spread into international business. On the other hand, the latter has developed a small domestic insurance account and is mainly based on a widely world-wide portfolio.

3- New York Market:

The enormous domestic insurance business in the United States has attracted many overseas reinsurers to the New York Market which does not only consist of domestic reinsurance companies, but also representative companies of all the major foreign reinsurance brokerage firms. Because of the importance of the domestic portfolio and in order to widen and increase the spread of the portfolio, the major American reinsurance companies have opened offices in other reinsurance centres of the world. Also, American brokers have developed international reinsurance connections despite the expenses and administrative difficulties involved in comparison with those working locally.

Furthermore, ownership links have been established in recent years between American and British brokers through various mergers and acquisitions which reflect the desire to expand internationally and to benefit from the substantial business volume placed in London, particularly at LLOYD'S .

- Methods and Techniques of Reinsurance:

There are broadly two methods of reinsurance, namely, the facultative method and the treaty method. The treaty is then further divided into the proportional and the non proportional treaties.

1- Facultative Reinsurance

The facultative method is the oldest form of reinsurance. Despite its many disadvantages, the facultative method of reinsurance is still used extensively especially in the new insurance markets.

Under the facultative method of reinsurance, each risk is considered separately. When the primary insurer has decided on his own retentions, he approaches reinsurers he believes would be willing to accept a share of the risk. Each reinsurer then examines the risk, applying his own intelligence, skill and faculties in determining whether or not to accept the risk and on what terms and proportions the ceding insurer in offering the risk to reinsurers usually does so by using a slip which contains all the vital details of the risk indicating the sum insured on the original policy, the name and other particulars of the insured, the policy number, the amount retained by the Ceding Company and the premium and Commission rates applied.

The reinsurer after studying the slip and details of the risk decides whether to reject or accept the offer.

Advantages and Disadvantages of Facultative Reinsurance:

The main advantage of facultative reinsurance is that each risk is underwritten individually and rated on its own merits on terms acceptable to both the Ceding Company and the reinsurers. This ensures the preservation of the basic principle of insurance underwriting which requires that each risk must be rated on its merits to ensure that an adequate and fair premium rate is applied thereby preserving the mutual interest of both the insurer and the reinsurer.

Another advantage of the facultative system of reinsurance is that the system can be used in special circumstances where the treaty method may not be suitable or adequate. For example, it could be used to reduce the exposure on the treaty when the risk is heavy or exceptionally hazardous; or for new types of policies where the Ceding Company has little experience.

In spite of these advantages, the facultative system of reinsurance has a number of disadvantages. It was as a result of these disadvantages that the treaty system of reinsurance was developed in an attempt to replace the facultative method. The main disadvantage of facultative reinsurance is that the procedure is Cumbersome and Time Consuming and a lot of administrative effort is Consumed in the placing of a single risk . Because of the Time Constraint and the need to Conclude the placing of a risk promptly, the Ceding Company is compelled to place its risks facultatively only with reinsurers within

its vicinity. In addition Communications problems should be mentioned specially in developing Countries. Another disadvantage is that the insurer is not able to give immediate cover to a policyholder on risks in excess of his own capacity as he must first complete the placing of the amount of the risk in excess of his capacity before granting cover to the insured. Because of the high administrative costs involved, the facultative method of reinsurance is more costly to operate than the treaty method and reinsurers generally, give lower reinsurance Commissions for facultative reinsurances than they are willing to give for treaties. There is also uncertainty about the facultative method as the ceding company is not always sure that he will find reinsurers willing to accept the risk.

The question which most new comers to the reinsurance scene seem to ask is why is it that the facultative method of reinsurance is still actively employed in spite of its many disadvantages. The simple answer is that the insurance industry still finds the method very useful in specific circumstances and it is in these circumstances that the facultative method is used. These circumstances would include the following:

- a) Where a particular risk or class of risk proposed for insurance is outside the insurer's treaty facilities.
- b) Where the risk is so large that the amount at risk is larger than the treaty facilities of the reinsurer can accomodate.
- c) Where the risk is of such a nature, for example extra hazardous risk, that the Ceding Company does not consider



it prudent to cede it to its treaty because of its hazardous nature and the adverse effects that a claim could have on the treaty experience.

d) Where the risk is outside the experience of the Ceding Company.

## 2- Treaty Reinsurance.

As mentioned earlier, there are different types of reinsurance treaties, but broadly the different types are grouped into two main categories known collectively as proportional and non-proportional treaties. The main proportional treaties are:

- a) Quote Share Treaties
- b) Surplus Treaties

The non-proportional treaties include the following:

- a) Excess of Loss Treaties
- b) Stop Loss Treaties

### The Quota Share Treaty -

The quota share treaty is a binding reinsurance agreement whereby the Ceding Company is bound to cede and the reinsurer must accept an agreed percentage of every risk written by the ceding company on an agreed class of insurance business. The same proportion of the original premium collected by the direct company must also be paid over to the quota share reinsurer less the agreed reinsurance commission.

The operative clause in the treaty will indicate the percentage of the risk to be reinsured. For example, where under a quota share treaty it is agreed that 60% of all engineering risks would be reinsured, the Ceding Company would retain 40% of all engineering risks and reinsure the remaining 60% with the reinsurers who would also be responsible for 60% of all claims and the ceding company will be 40% of all losses.

The main feature of this treaty is that the proportion of the risk to be taken by both the reinsurer and the Ceding Company is clearly stated in the treaty. It must be noted that the reinsurer participates in each and every risk however small. One of the main features of the quota share treaty is that it puts the reinsurer in almost the same position as an original insurer since he participates in all the risks underwritten by the direct insurer. It is also usually more profitable to the reinsurer than the surplus treaty because the reinsurer shares in each risk on the same terms as the direct insurer and there is therefore no selection against the reinsurer. This feature which constitutes an advantage to the reinsurer becomes a disadvantage to the ceding company. Under a quota share treaty the ceding company must pay away premiums to the reinsurer in respect of small good quality risks which it could quite easily have absorbed without much difficulty. This treaty is very useful to a new insurance company or for an insurer just about to enter a new class of business and requires time to buildup its capacity and expertise.

It is always advisable for a small company to use a quota share treaty at its early stages until it has built up a sizeable volume of business, when reinsurers will be disposed to allow it to change to a surplus treaty.

#### The Surplus Treaty -

Under a surplus treaty reinsurance agreement, the Ceding Company only reinsures those amounts surplus to its own retention. It is called a surplus treaty because the amount reinsured in the treaty is the surplus amount which the Ceding Company does not want to retain for its own account. Therefore if a risk is of a size that the Ceding Company may retain all of it for its own account, then there is no surplus to be reinsured in the treaty. From this description, a surplus treaty may be defined as an automatic reinsurance contract under which the reinsurer is bound to accept, and the ceding company is bound to cede any surplus liability which is in excess of a predetermined limit stated in the treaty. The retention of the Ceding Company is the amount of liability which the Ceding Company is bound to retain for its own account on any risk before it allots any liability to its surplus reinsurer. The total capacity of a surplus treaty is usually described or referred to as the number of "lines" that the treaty contains. The technical term "line" refers to the ceding company's retention. A line is equal to the ceding company's retention. For example, let us assume that the ceding company's retention under a surplus treaty is L.L. 10,000 .

If the treaty is a ten line surplus treaty, the total capacity of the treaty is L.L 100,000, i.e L.L. 10,000 multiplied by ten or (10 lines x 10,000).

One unique feature of the surplus treaty is that it can be arranged in layers. A direct insurer may have several surplus treaties in different layers for examples, there might be a first surplus treaty, a second surplus treaty and a third surplus treaty with different reinsurers participating in <sup>c</sup> cash treaty. All the different surplus treaties operate in exactly the same way as the first surplus treaty except that each treaty assumes liability only after the preceding one has run out. This is because the first surplus treaty, being the first in terms of priority must first be interested to its full capacity in each individual risk before the next surplus treaty is interested. An illustration of this point by an example would make it more understandable. Assume that Arabia Insurance Company has a first, second and third surplus treaties. Each of the three treaties has a total capacity of L.L. 100,000 . A risk with a surplus liability in excess of the ceding company's retention of L.L. 150,000 would be allotted as follows:

- a) The 1st surplus treaty would be allotted its full capacity of LL 100,000
- b) The second surplus treaty would be allotted the balance of LL 50,000 but this is still LL 50,000 less than its full capacity of LL 100,000 .

c) The third treaty would receive no share of this risk as there is nothing more left to be allotted to it.

The same procedure is followed each time there is a risk to be allotted. When the full capacity of all the three treaties have been utilized, any surplus would have to be placed by the Arabia Insurance Company on a facultative basis.

There is in fact a third type of proportional treaty which is the Facultative/Obligatory Treaty under which the reinsurer is under an obligation to accept all risk within the scope of the treaty but not obligatory for the ceding company to cede risks to the treaty. This type is not in common use and avoided by many reinsurers due to the obligatory nature of this treaty and is considered by some reinsurers as the "waste basket" of some insurance companies.

- The Excess of Loss method of Reinsurance:-

The non-proportional methods of reinsurance, such as the excess of loss and the stop loss methods have been developed in recent years and are regarded as one of the greatest achievements in the art of reinsurance and have now assumed great importance.

Excess of loss reinsurance may be defined as a form of reinsurance contract under which the reinsurer undertakes to reimburse the ceding company for all losses in excess of a relatively high limit fixed by the contracting parties and known as the ceding company's net limit, and in consideration of which the reinsurer will receive a percentage of the Ceding

Company's net premium income for the class of business reinsured under the excess of loss treaty. In this form of reinsurance arrangement, the reinsurer is not called upon to contribute to a loss until it has exceeded the ceding company's net retention; but once the loss exceeds the net retention, the reinsurer becomes liable to pay the excess amount in full up to the reinsurer's limit of liability as agreed under the particular treaty. Thereafter any amount in excess of the reinsurer's limit of liability reverts back to the ceding company.

In defining the excess of loss treaty form of reinsurance, the important point to remember is that it is basically a form of treaty reinsurance under which the direct insurer (who is the reinsured) decides or fixes a monetary limit to the amount he is prepared to lose as a result of any event on the class or classes of business concerned. Having determined the amount that he is prepared to lose, the direct insurer then arranges, by way of reinsurance, to be relieved of the amount of loss he sustains as a result of any one event, which is in excess of that limit.

The excess of loss reinsurance concept can best be described by the following simplified example. Let us assume that the Ceding Company's net retention is LL 10,000 and the excess of loss contract provides that the reinsurer would bear all losses in excess of LL 10,000 up to a limit of LL 100,000 (this coverage would be expressed as LL 100,000 excess of LL 10,000).

In the event of a loss amounting to a total of LL 100,000, the ceding company would bear LL 10,000 whilst the reinsurer would pay LL 90,000.

If however there is a total loss of L.L. 15,000, the Ceding Company would pay the first L.L. 10,000 and the reinsurer would pay the remaining L.L. 5,000. On the other hand , if a loss amounts to L.L. 200,000 occur, then the Ceding Company pays the first L.L. 10,000 and the reinsurer pays L.L.100,000 leaving a balance of L.L. 90,000 which would revert to the Ceding Company unless he has a second layer excess reinsurance protection to absorb any losses in excess of the total capacity of the first excess cover. In case there exists more than one layer then we have layering which is a term used to describe the division of Excess of Loss protection sought, in a number of layers, which usually operate consecutively in the event of a heavy loss. For example, a reinsured wishing to have catastrophe protection for L.L. 5 million might succeed in obtaining this cover in four layers, thus:

1st Layer L.L. 400,000 excess of L.L. 100,000 (Underlying retention)  
2nd Layer L.L. 500,000 excess of L.L. 500,000  
3rd Layer L.L. 1,000,000 excess of L.L.1,000,000  
4th Layer L.L. 3,000,000 excess of L.L.2,000,000

Stop Loss Reinsurance -

The Stope Loss method of reinsurance, as mentioned earlier, is a form of excess of loss reinsurance cover. It is also known as excess of loss ratio reinsurance method.

As the name suggests, a stop loss reinsurance contract in effect "stops" the aggregate losses of the reinsured account at an agreed point. It is quite possible for a Ceding Company to reduce its net liability on risks to a figure within its own resources by using proportional treaty facilities and the normal excess of loss reinsurance protection, but it could happen that as a result of the unusual incidence of claims the Ceding Company in question suddenly finds itself saddled with a high claims ratio at the end of the accounting year. In that sort of situation, a stop loss reinsurance Contract would be the most appropriate form of protection which would ensure that the losses to be borne by the Ceding Company are limited to an agreed percentage. Under the stop loss method, the loss ratio of the ceding company is stopped at an agreed percentage, and if in any calendar year the Ceding Company's loss ratio exceeds that percentage, the stop loss reinsurer pays the difference.

Furthermore, most contracts always stipulate that the Ceding Company shall retain for its own account a proportion of the stop loss cover, (usually 10%) so that the reinsurer's liability is always about 90%. This ensures that the Ceding Company retains an interest in the stop loss cover.



- Legal Aspects of Reinsurance:

A reinsurance transaction is of a contractual nature, and being a contract, in order to be valid in the eyes of the law, it must possess all the features of a binding contract. Furthermore, since its validity rests primarily on a contract of insurance, it must possess, in addition, all the peculiar features of a valid insurance contract. For example, an insurance contract is not valid in the absence of an insurable interest; there must be utmost good faith and the principle of indemnity and its corollaries of subrogation and contribution must be observed. Therefore an examination of each of these fundamental principles of insurance and the extent to which they apply to reinsurance contracts would be necessary.

- Insurable Interest

It is a fundamental principle of insurance law that an insurance contract is not valid in the absence of an insurable interest. Similarly, a contract of reinsurance must be supported by insurable interest in order for such a contract to be valid. If the original insured has no insurable interest in the risk insured, then his insurer would have no insurable interest to justify his effecting a binding reinsurance contract and any purported reinsurance contract in this respect would be illegal for want of insurable interest. The moment an insurer issues a valid insurance policy and thereby enters into a contract of insurance, the insurer automatically acquires an

insurable interest which gives him the legal right to reinsure the risk.

- Indemnity

Another important principle of insurance law is that of indemnity. In all those contracts of insurance which are recognized as contracts of indemnity it is illegal to give the insured more than an indemnity in the event of a loss. The insurer must indemnify the insured in full and no more. This simply means that the insured should be paid the exact market value of his lost property and should be put in the same financial position after the loss (to the extent that this possible) as he was before the event that brought about the loss. Although all contracts of insurance are not contracts of indemnity, for example, life policies and personal accident policies on the life of the insured are not contracts of indemnity, all reinsurance contracts are contracts of indemnity as the Ceding Company can only recover its outlays from the reinsurers and no more, subject of course to the terms of the reinsurance contract. In all reinsurance contracts, only the Ceding Company can claim under the contract. The insured or the original policyholder can only claim from the primary insurer and has no right whatsoever to claim on the Ceding Company's reinsurers, where for example, the ceding company has gone into liquidation or bankrupt for one reason or another. The reinsurance contract is between the reinsurer and the reinsured and the doctrine of privity of contract will not allow a third

party to the contract to acquire any rights or incur any liabilities under the contract.

- Utmost Good Faith

The doctrine of utmost good faith which applies to insurance contracts is also an essential feature of reinsurance contracts. This doctrine, which is strictly applied to all reinsurance contracts, required the Ceding Company to disclose to the reinsurer every material fact which relates to the risk to be reinsured. It applies equally to both treaty and facultative reinsurances. In facultative reinsurance, each risk is submitted specifically to the reinsurers by means of a slip on which all the relevant and material details of the risk is stated. No material information must be withheld otherwise the contract may be voided. Any previous losses and the retention of the Ceding Company together with all other material particulars of the risk must be disclosed in the slip. Treaty reinsurance operates in a different way from facultative reinsurance. This has resulted in a slight modification of the application of the principle of utmost good faith and the doctrine of full disclosure of all material facts. In reinsurance treaties there is no need for the Ceding Company to submit slips or details of each risk to the reinsurer for specific acceptance. With the growing decline in the use of bordereaux 4 , the reinsurer receives very little information about the individual risks reinsured, but in spite of this the principle of utmost good faith applies equally to treaty reinsurances.

Whereas in a direct insurance or to some extent in a facultative reinsurance the duty to disclose ceases when the insurance contract is entered into, in the case of a treaty reinsurance the duty to disclose continues even after a treaty has been effected. The duty of disclosure and the principle of utmost good faith applies to each and every risk ceded under the treaty.

Therefore if the Ceding Company is guilty of a break of this duty in respect of any individual risk, by not disclosing a material fact, the reinsurer becomes entitled to repudiate liability.

Having talked about the principles of an insurance contract and consequently a reinsurance contract in order to be valid we can now proceed to discuss the legal aspects of reinsurance contracts.

In contrary to a policy wording which, in order to protect the policyholder, is governed to a great extent by statutory regulations between the original insured ( the policyholder) and the insurer (the insurance company), the parties to a reinsurance contract are generally free to draft a contract as they think fit.

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4- The word bordereau has a French origin. It is a form prepared by a Ceding Company and usually sent to the reinsurer giving brief details of the reinsurances transacted over a period of time.

The drafted treaty wording between the insurer and the reinsurer should reflect the intent of the parties as clearly as possible.

Legally speaking, a reinsurance contract is an insurance contract, more specifically a contract by way of indemnity between the company and the reinsurer. The reinsurer is liable to pay its contractual share if the insurance company is liable to pay under its insurance policy which is covered by the contract. Therefore, a reinsurance contract is an independent contract between the direct insurance company and the reinsurer to which the policyholder is no party and hence creates no legal relationship between the original policyholder and the reinsurer.

As a matter of fact the literature on the legal aspects of reinsurance treaties is relatively rare, for several reasons. The contents of treaties are seldom discussed publicly, and reinsurance is an international business, so that it is difficult to obtain enough material for a general survey. Additionally, disputes between insurers and reinsurers are as a rule not submitted to litigation, but are settled amicably, by negotiation or arbitration. In either case, publicity about such disputes is avoided. However, the German insurance specialist prölss has also analyzed many aspects of this problem, and the following outline is based on his discussion.

A system of reinsurance law as such, based on certain fundamental principles and harmoniously constructed, does not

exist internationally or even in any single country, according to Prölss. However, contracts of reinsurance can be affected by the stipulations of literal or multilateral international agreements, by national legislation and regulations governing the relations of private or legal persons among themselves, and by national law regulating the relationship between individuals and the state.

When a reinsurance contract is concluded between two parties of different nationalities, one of the principal legal questions is that of determining into which of the two countries jurisdiction the contract should fall. In current practice, the deciding factor is the will of the contracting parties, whether this will is expressed or implied.

In case of disputes where this cannot be established, the contract is to fall under the jurisdiction of the country, in which the ceding company is domiciled, according to Prölss . One can distinguish six broad areas of legislation and regulation of relevance for reinsurance contracts.

These six categories, and in some cases specific aspects included in them, are:

- 1- Regulations on the organization and supervision of the insurance industry.

They govern the activity of domestic and foreign reinsurers by requirements such as licenses, restrictions, obligatory cessions to state institutions, state monopolies in certain branches, guarantee deposits, deposits of

technical reserves, specifications for the contents of re-insurance contracts, etc.

2- Currency regulations.

This category includes points such as currency exchange rates and transfer requirements, sometimes specifically for cash losses or the settlement of balances.

In some cases there are relevant international agreements on payments, either in general or specifically for reinsurance.

3- Taxation regulations.

It must be pointed out here that double taxation agreements-or their absence-are especially important to the reinsurer.

4- Bankruptcy regulations.

5- Regulations on arbitration

6- Miscellaneous regulations.

Examples of such regulations are:

- a- Prohibitions on trade with hostile states
- b- Stipulations in surrender agreements or peace treaties, e.g. following World War II.

It is necessary to mention here that the reinsurance business is subject to continuous change, which influences reinsurance techniques, contracts and practices.

Many practices are in fact based on tacit rather than written agreements. This is one of the primary reasons that, in the case of disputes between ceding companies and reinsurers, a solution is sought through arbitration by leading, experienced insurance and reinsurance executives rather than in the courts. The arbitration procedure is also one of the main causes for the scarcity of material on the legal aspects of reinsurance contracts.

The reinsurance contract is drafted into individual clauses where at the beginning of each contract wording the parties usually define the object of reinsurance i.e the business covered by the reinsurer, and the parties should clearly express their intentions as to the business under coverage. Also the duty of the insurer is to keep a retention of the total business covered for its own account unreinsured. However, where no retention is kept by the company and 100% of the risk is passed to the reinsurer the company is said to be merely acting as an intermediary and thus no valid reinsurance contract does exist. In case of fixing retention, no legal problem arises thereof but rather a technical and economical one.

The determined retention is of great importance to the reinsurer considering the risk and a guarantee that the risk will continue to be of concern to the insurance company, especially in the event of a loss. On the other hand, the reinsurer, according to the stipulations of the contract, is bound to follow the fortunes of the company.



This duty applies to those fortunes that are within the scope and terms of the reinsurance contract but not affected by losses that the direct insurer suffers as a businessman, such as the fraudulent or negligent activities of employees or agents which is not something grounded in the specific nature of insurance and would happen in any other line of business.

In almost every reinsurance treaty it is agreed that an Accounts' Clause is included to set up and regulate the accounting system between the parties involved. In brief, it is concerned with the items of premiums, commissions, loss payments, etc. that are not effected in cash immediately, which would be rather complicated and time consuming procedure but by debiting and crediting the corresponding items in the relevant books. At the end of the accounting period, on a quarterly or a half-yearly basis, the resulting balance is settled by remittance to the creditor party. Another clause is the "Errors and Omissions" clause which is associated with inadvertent or unwilfull mistakes or omissions.

Its purpose is to avoid the company in being deprived of reinsurance Cover as a result of clerical or accounting error or oversight. "Right to Information" Clause is also laid in nearly every reinsurance contract in a more or less uniform wording. This clause enables reinsurers to inspect, upon their request, all the detailed information on the risks re-insured.

"Commencement and Termination" Clause stipulates the period for reinsurance contracts to run and terminate. Usually contracts are run for a specific period, normally a year, others are continuous with a provision that either party can seek termination by giving notice before the anniversary date of the contract's inception date. However in addition to the normal termination procedure, reinsurance treaties incorporate provisions relating to termination in certain abnormal or extraordinary circumstances. For instance, an automatic termination arises upon the occurrence of either the following events:

- 1- The act of becoming insolvent whereby either party can no longer meet or honour its contractual obligations.
- 2- The break-up of War not only between the countries of which the parties are nationals, but also between major powers.
- 3- Change of ownership including changes of control and management.

In any case, it is essential that written notices are to be exchanged as a rule to effect termination.

Finally, reinsurance agreements are essential in effecting any reinsurance coverage and these contracts must comply with the basic requirements of a simple contract where (1) the parties have a capacity to make a contract (2) there is an intention to create a legal relationship and (3) there has been an offer and acceptance 5 .

In practice, every reinsurance contract is embodied into a documentary form signed by both parties in token of their agreement.

How Reinsurance affects the Underwriting and Financial Capacities of an Insurance Company.

At its simplest, underwriting capacity is the maximum amount of money an insurer is willing to risk-as maximum permissible limits of liability per policy, per insured, or per risk, per event, or even for the entire insurance portfolio itself. The determination of this amount involves many considerations more appropriate to a work on the theory of insurance risk. That is to say, the determination of a suitable per-risk underwriting capacity involves: the particular risks themselves as they may be exposed to loss from other risks insured, the loss exposures as they may affect the anticipated underwriting experience from all risks insured, and the financial resources of the company available to cover unusual or catastrophic loss behavior of risk portfolios.

Reinsurance cannot make a good risk out of a bad one. All reinsurance can do in this context is to lessen the impact of a loss, whether the risk was good or bad.

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5- R.L. Carter, Reinsurance, (Brentford, Middlesex: Kluwer publishing Limited, 1979), Page; 120 .

Thus reinsurance can reduce the chances of an insurer's overall underwriting loss in a given period of time when too much underwriting capacity is developed by the insurer in the first place. On the other hand, reinsurance by its nature is well used to control an insurer's severity of loss. As such the gross underwriting capacity of the reinsurer may be said to have been added to that of the ceding insurer, allowing it to accept more liability than it could otherwise safely assume alone. The underwriting capacity of the reinsurer becomes the channel through which more even distribution of risk is achieved for the insurer.

As a practical marketing matter, most insurers are obliged to accept sums insured which exceed the net retained limits within which the law of large numbers will work, at least over periods as short as one year or less. Viewed this way, reinsurance is a commercial activity that permits an insurer to do what it wants: to issue policies in the amounts required by its insureds. This increased capacity provides the basis for two significant underlying characteristics of the relationship between insurer and reinsurer: the continuing need for the reinsurer's capacity, and the concurrency of business interests between them as a result.

This use of reinsurance as a marketing capacity is the reason why shopping one's reinsurance among reinsurers for short-term advantage is often unwise.

Fundamentally, the choice of a reinsurance program is in the context of an underwriting and marketing support function. When reinsurance is ceded primarily for other purposes, that is financial reasons, or as a source of profit by itself, the role of the assuming reinsurer is changed and a host of new considerations intrude. A full explanation of these possibilities is a subject in itself, but the most common example is found when a primary insurer reinsures so much of its business that the reinsurer is in fact, if not form, an insurer. The use of reinsurance for purposes other than to support direct underwriting capacity has many pitfalls. For example, the overuse of reinsurance should be avoided by reinsurer and reinsured alike, either because it places too heavy a burden on the profitability of the primary portfolio or because serious distortions in the ceding insurer's financial statements can occur.

As previously stated, increasingly today the values at risk of industrial enterprises are such that no one insurer can underwrite more than a percentage of the risk. This means that as the need for capacity increases, the insurance company is being involved more and more in its national market in such risks. The company must therefore have adequate and flexible reinsurance covers to meet this need for protection. For this purpose the case of an insurance company is taken where this company is planning a return to profit after a bad underwriting result. The consolidated revenue account of this company might follow the following pattern:

	L.L. 000's	
Earned premiums	3279	
less incurred claims	<u>2046</u>	62.4% loss ratio
	1233	
less commission	<u>728</u>	
underwriting surplus	505	
less expenses	<u>465</u>	
operating profit	40	

This account will represent the established company where each year the unearned premiums for the previous year are carried forward to the benefit of the current year, thus building up the earned premiums available after allowing an unearned premium reserve for the current year.

However, in the example, a 1% worsening of the loss ratio (incurred claims/earned premiums) represents L.L. 32,000 less underwriting surplus, and a 2% worsening will produce an operating loss of approximately L.L. 25,000. The importance of reinsurance becomes readily apparent.

- (1) To prevent a catastrophically high loss ratio caused by one or more disasters.
- (2) To prevent a non-catastrophic but general deterioration in experience from increasing the loss ratio too far.

For this company, its first and early years present several problems:

- (1) The build up of earned premium is slow because its rate

of growth of written premium will be steep in the early years.

- (2) Commissions however are a percentage of written premium, and so, unlike earned premiums, are immediately at their maximum. (i.e. the percentage rate of commission the company offers).
- (3) Similarly, the claims will start to occur immediately following the underwriting pattern and will be of the same frequency and average cost as those of a similar but longer established account.
- (4) The expenses of the company will be higher than they will be later, because of the effort of getting established.

To sum up, outgo (commission, claims, expenses- is as high, or higher, than it will be later, while income (earned premium) is still consolidating.

Thus the company needs reinsurance to protect the account and to enable it to grow in safety.

In table 1 it will be noted:

- (1) That in year 1 and subsequent years, the outlay on reinsurance is low, and is in the main providing catastrophe Cover only.
- (2) The assumption has been made that the loss ratio trend can be improved from 71.7% to 69.7% , but no provision has been made for non-catastrophic deterioration of the loss ratio.

- (3) If expenses and commission remain the same, but the claims ratio worsened 2% the operating profit/loss line alters to:

Year 1	Year 2	Year 3	Year 4	Year 5
(1208)	(1128)	( 730)	(664)	(531)

Thus the needs of the company are:

- (1) To avoid over Commitment on an account too large in gross terms for the resources of the company to cover. This is achieved by proportional reinsurance, where the company cedes to the reinsurer an agreed proportion of the risks it writes. This can be done either by Quota Share reinsurance, where a fixed percentage of every risk, including original commission is ceded, or by surplus reinsurance, where the maximum line the insurer is prepared to carry out is the multiple for cessions to the reinsurer in reinsurance lines.
- (2) To protect both himself and often the proportional reinsurer (the so called "common account") against catastrophe losses, by means of non proportional, or excess of loss, treaties, which cover any one loss over a lower net figure.
- (3) In the early stages of development, to guarantee that the loss ratio will not exceed a given maximum on net account. This is achieved by step loss cover, which covers the rise, in Loss Ratio above the desired maximum; usually up to 10% points above.



TABLE 1

REVENUE ACCOUNT	5 YEAR PLAN					CLASS OF BUSINESS-ALL			
	YEAR1	YEAR2	%+OR- PREV YEAR	YEAR3	%+OR- PREV YEAR	YEAR4	%+OR- PREV YEAR	YEAR5	%+OR- PREV YEAR
PREMIUMS									
1-GROSS WRITTEN	17168	23653	+ 37.8	28991	+ 22.6	43427	+ 18.8	40210	+ 16.8
2-R/I WRITTEN	( 1100)	(1605)	+ 45.9	(2009)	+ 25.1	( 2389)	+ 19	(2942)	+ 23.2
3-NET WRITTEN	16068	22048	+ 37.2	26982	+ 22.4	32038	+ 18.7	37268	+ 16.3
4-NET EARNED	13739	19544	+ 42.3	24890	27.4	29889	+ 20.1	35001	+ 17.1
CLAIMS									
5-INCURRED	( 9853)	(13872)	+ 40.8	(17467)	+ 25.9	(20910)	+ 19.7	(24411)	+ 16.7
RATIO (5)/(4)	71.7	71		70.2		70		69.7	
6-COMMISSION	( 2816)	( 3925)	+ 39.4	( 4813)	+ 22.6	( 5733)	+ 19.1	( 6651)	+ 16
RATIO (6)/(3)	17.5	17.8		17.8		17.9		17.9	
7- REINSURANCE									
OVERRIDING COM	19	26	+ 36.9	34	+ 30.8	39	+ 14.7	49	+ 25.6
8-EXPENSES	( 2023)	( 2511)	+ 24.1	( 2877)	+ 14.5	( 3352)	+ 16.5	( 3819)	+ 13.9
RATIO (8)/(1)	11.8	10.6		10		9.7		9.6	
9-OPERATING									
PROFIT/(LOSS)	( 934)	( 738)	- 21	(233)	68.1	( 67)	- 71.2	169	-

SOURCE:

FIFI INSURANCE COMPANY

IT IS THE ANONYMOUS NAME OF A REAL INSURANCE COMPANY

If the company plans a Gross Premium Income of, say L.L. 500,000 in year 1, then its earned premium at the end of that year will be approximately L.L. 500,000 less 45% unearned premium reserve = L.L. 275,000 .

In year 2, if income were doubled, we have Gross Written Premiums L.L. 1,000,000 less 45% unearned premium reserve = L.L. 550,000 plus reserve from year 1 brought forward = L.L. 825,000. The earned premium available in year 2 is proportionately higher than in year 1 , and so on as the company develops to the point where each year's growth maintains the equilibrium of earned premium related to written premium.

The claims frequency however will be more or less constant, as will the Commission and expense outgo, so we might choose to cede 50% of the gross written premiums in Quota Share thus halving our outgo on commission and claims, and possibly receiving an overriding commission of say 5% to contribute towards expenses.

The next few years might then look like this :

TABLE 2

YEAR 1	GROSS	REINSURED 50% QUOTA SHARE	RETAINED 50%
GROSS WRITTEN PREMIUM	500,000	250,000	250,000
EARNED PREMIUM	275,000	137,500	137,500
INCURRED CLAIMS 70%	192,500	96,250	96,250
	82,500	41,250	41,250
COMMISSIONS 15%	75,000	37,500	37,500
	-	3,750	3,750
EXPENSES 15%	75,000	-	75,000
	( 67,500 )	3,750	( 71,250 )
O.C. 5%		( 12,500 )	12,500
PROFIT/LOSS	( 67,500 )	( 8,750 )	(58,750)

Source: Ibid

We notice that both the reinsurer and the Ceding Company are in loss, as is the gross account, but the Earned Premium is low and development is expensive.

Efforts will be made to reduce the claims and expense ratios, but protection against Catastrophe is needed.

TABLE 3

YEAR 2	GROSS	REINSURED 50%	RETAINED 50%
		QUOTA SHARE	
GROSS WRITTEN PREMIUM	1,000,000	500,000	500,000
EARNED PREMIUM	775,000	387,500	387,500
INCURRED CLAIMS 67%	519,250	259,625	259,625
	225,750	127,875	127,875
COMMISSION 15%	150,000	75,000	75,000
	105,750	52,875	52,875
EXPENSES 15%	150,000	-	150,000
	( 44,250)	52,875	( 97,125)
OVERRIDING COMM 5%		( 25,000)	25,000
PROFIT/LOSS	( 44,250)	27,875	( 72,125)

SOURCE: Ibid

The earned premium is consolidating, and the loss ratio reduced, but with expenses still running at 15% .

However, the reinsurers have gone into underwriting profit, extinguishing the previous years loss but not yet covering their own expenses.

TABLE 4

YEAR 3	GROSS	REINSURED 50% QUOTA SHARE	RETAINED 50%
GROSS WRITTEN PREMIUM	1,250,000	625,000	625,000
EARNED PREMIUM	1,137,000	568,500	568,500
INCURRED CLAIMS 65%	739,050	369,525	369,525
	397,950	198,975	198,975
COMMISSION 15%	187,500	93,750	93,750
	210,450	105,225	105,225
EXPENSES 15%	187,500	-	( 187,500)
	22,950	105,225	( 82,275)
OVERRIDING COMM 5%		( 31,250)	31,250
PROFIT/LOSS	22,950	73,975	( 51,025)

SOURCE: Ibid

There is a further improvement in loss ratio, and the reinsurers are now making sufficient profit to cover their own expenses, if these are assumed to be about 10% of their proportion of the Gross written premium (i.e. 50% of L.L. 625,000) .

The Gross Account is now in profit.

TABLE 5

YEAR 4	GROSS	REINSURED 45% QUOTA SHARE	RETAINED 55%
GROSS WRITTEN PREMIUM	1,500,000	675,000	825,000
EARNED PREMIUM	1,387,500	624,375	763,125
INCURRED CLAIMS 65%	901,875	405,843	496,032
	485,625	218,532	267,093
COMMISSION 15%	225,000	101,250	123,750
	260,625	117,282	143,343
EXPENSES 12.5%	187,500	-	( 187,500)
	73,125	117,282	( 44,157)
OVERRIDING COMM 5%		( 33,750)	33,750
PROFIT/LOSS	73,125	83,532	( 10,407)

Source: Ibid

This year it has been possible to trim the expense ratio, whilst maintaining the improved loss ratio. The insurer now decides to retain proportionately more for net account, thus retaining more of the underwriting profit without disturbing the profitability of the reinsurer:

However, in doing this, his overriding commission is reduced proportionately.

TABLE 6

YEAR 5	GROSS	REINSURED 45% QUOTA SHARE	RETAINED 55%
GROSS WRITTEN PREMIUM	1,750,000	787,500	962,500
EARNED PREMIUM	1,637,500	736,875	900,625
INCURRED CLAIMS 64%	1,048,000	471,600	576,400
	589,500	265,275	324,225
COMMISSION 15%	262,500	118,225	144,375
	327,000	147,150	179,850
EXPENSES 12%	210,000	-	( 210,000 )
	117,000	147,150	( 30,150 )
OVERRIDING COMM 5%		( 39,375 )	39,375
PROFIT/LOSS	117,000	107,775	9,225

Source: Ibid

In this year a final consolidation of expenses and the achievement of the desired loss ratio enables the insurer to reach net underwriting profitability.

We should note two important factors that exist in this five year planning cycle; and if they differ from forecast assumptions, the plan will fall.

(1) The improving trend of loss ratio may be multified by the occurrence of one or more catastrophes in all or any of the company's underwriting accounts. A large storm or flood, or a serious third party accident may involve very high amounts. There will be the need therefore for suitable protection over and above an acceptable amount per claim by means of excess of loss Reinsurance, the nature and amount of which will vary according to the class of business.

(2) There may be a deterioration in the market trends in some or all portfolios. Motor car claims frequency may increase, or in hard economic times fire claims tend to increase.

The company may therefore wish to ensure that the loss ratio does not rise above the figures shown in the plan. For this purpose "stop loss" reinsurance may be concluded, whereby for every percentage point above the planned loss ratio the reinsurer will indemnify the insurer to an extent sufficient to maintain the desired loss ratio, but not exceeding a deterioration of say, 10 percentage points above.

Normally, the excess of loss premium will be borne pro-rata by the reinsurer and the Ceding Company, as the cover will protect gross account, but stop loss cover will normally protect the Ceding Company's net account only, and thus the reinsurance premiums of these covers should be inserted in the plan.



The fifth year therefore would in fact resemble the plan shown below, and the ceding company will be relying for overall profit in this year on its investment portfolio.

TABLE 7,

YEAR 5	GROSS	REINSURED 45% QUOTA SHARE	RETAINED 55%
GROSS WRITTEN PREMIUM	1,750,000	787,500	962,500
EARNED PREMIUM	1,637,500	736,875	900,625
EXCESS OF LOSS PREMIUM (NET OF COM)	52,500	23,625	28,875
STOP LOSS PREMIUM	9,000	-	9,000
	1,576,000	713,250	862,750
INCURRED CLAIMS 64%	1,048,000	471,600	576,400
	528,000	241,650	286,350
COMMISSION 15%	262,500	118,125	144,375
	265,500	123,525	141,975
EXPENSES 11%	( 192,500)	-	( 192,500)
	73,000	123,525	( 50,525)
OVERRIDING COMM	-	( 39,375)	( 39,375)
OPERATING PROFIT/LOSS	73,000	84,150	( 11,150)

Source: Ibid

Thus when taking into consideration the reinsurance premium which protects the Ceding Company's net account, the result was a loss.

The type of treaty used in the example was the Quota Share, we could have used the surplus treaty, this method is more flexible than Quota Share reinsurance in that the underwriter can decide for each risk how much he wishes to retain and how much to cede. However, the expenses are high, and it may overtax the underwriting resources of the growing company whose staff have not yet reached their full technical potential.

CHAPTER 3

CONSLUSIONS, RECOMMENDATIONS AND SUMMARY

Conclusions:

Reinsurance is the creature of insurance. It exists to support and expand the practice of insurance as a means of reconciling and rationalizing the demands and characteristics of the three concerns of the insurance industry: a) the public need for insurance in widely differing kinds and amounts to be satisfied in a free, commercial marketplace, b) the amount of capital and flow of premium available to carry the assumption of risk, and c) the actuarial realities in the predictable operation of the law of large numbers applied to discreet portfolios of risk over arbitrary period of time. In short, reinsurance is a necessary and advantageous means by which small insurers may effectively compete with large ones, and large ones grow larger. In the same process both large and small insurers can use free resources (capital) effectively, and achieve a viable spread of risk out of an otherwise unbalanced and untenable portfolio or risk as may originally be presented to each insurer by the insuring public.

Insurance cannot exist without reinsurance and vice versa and the wise insurance company is the one which tries to maintain a balanced portfolio and to keep its loss ratio always under control and try to choose the best reinsurance programme that best fit and satisfy its needs and guarantee its continuity against any financial misfortunes.

Recommendations:

Reinsurance supports insurance companies by means of providing them with a large underwriting capacity; however care should be taken in selecting the limit of this underwriting capacity from both parties the reinsurer and the reinsured. As to the reinsured he prefers to have a large underwriting capacity and be able to include in his portfolio large risks which ensure large amounts of premiums. However; the reinsurer wants to be sure that this capacity is used in an efficient manner by qualified personnel by the reinsured. Depending on the type of market this capacity will be determined. The international market has witnessed a period of softness in the transaction of business between 1979-1984 afterwhich it started to tighten where most of the professional reinsurers in the leading insurance and reinsurance markets have exerted stricter terms and conditions, specially in markets where underwriting results pvoed to be poor and unpromising.

Insurance companies should do their best to achieve an underwriting profit and not a financial profit only.

Despite the importance of financial profit for its continuity and progress, an insurance company should also make underwriting profit in order to secure the continuous support of its reinsurers otherwise reinsurers are not ready to support when they notice that insurance companies make profits and their underwriting results are bad.

Insurance companies should retain a good proportion of the risks accepted in an effort to prove to reinsurers that they are underwriting good business and not acting as brokers only where they do not retain any proportion of the risk but receive commission for the business ceded to the reinsurer.

Reinsurers should provide technical advice and assistance to insurance companies and arrange training programmes to new insurance companies exposing them to new methods and techniques of handling risks and of loss prevention.

The overuse of reinsurance should be avoided by the reinsurer and the reinsured alike, either because it places a heavy burden on the profitability of the primary portfolio or because distortions in the Ceding Company's financial statements can occur.

Summary:

The nature and role of reinsurance business has been discussed in detail and its importance to the insurance industry has been clearly identified. The methodology adopted, to recapitulate, was to explore the risk management process where risk was identified and evaluated and the distinction was made between insurable risks and non-insurable risks by featuring the characteristics of insurable risks.

After having talked about the subject matter of insurance and reinsurance; i.e risk, it was necessary to go through the history and development of reinsurance.

As stated earlier, reinsurance was contracted on a facultative basis only, and it was not until the 19th century that reinsurance began to grow and the demand for it gradually increased until it became an indispensable tool for every insurance company. A review of the growth of direct insurance was also discussed. As the demand for reinsurance increased, competition grew among reinsurers, a development which led to the founding of professional reinsurance markets which are to be found mainly in London; Continental Europe, and U.S.A. The leading reinsurers in these markets were mentioned as these companies have contributed effectively in the progress of reinsurance business and have laid rules and recommendations to enhance the business internationally.

The next step was to describe in detail the various methods and techniques of reinsurance where both methods the facultative and treaty methods were discussed extensively and specifying the various types of reinsurance treaties available in the international markets.

In an effort of covering all aspects of reinsurance business in this research, we found it essential to include the legal aspects of reinsurance and thus an examination of the fundamental principles of reinsurance contract was prevented. The conditions for a reinsurance contract to be valid were also mentioned together with the areas of legislation and regulation. Some of the most important clauses in reinsurance contracts were also worthwhile mentioning.

The final step was to show, by means of an example ,  
how reinsurance affects a certain insurance company through  
a five year plan and how results changed from loss to profit  
by controlling a very important variable the loss ratio.

BIBLIOGRAPHY

General

Arpel, John David and others. Principles of Reinsurance.  
London: CII Tuition Service, 1981 .

Carter, R.L. The Reinsurance Market. London: CII Tuition  
Service, 1981 .

Carter, R.L. Reinsurance. Brentford, Middlesex: Kluwer  
Publishing Limited, 1979 .

Clark, T.G. and Others. Practice of Reinsurance. London:  
CII Tuition Service, 1981.

Dickson, Gordon C.A. Introduction to Insurance. London:  
CII Tuition Service, 1984 .

Faris, Bassim A. Insurance and Reinsurance in the Arab  
World.

Greene, M.R and Trieschmann, J.S. Risk and Insurance  
5th edition., Cincinnati, Ohio: South-Western Publishing  
Co., 1981 .

Gerathewohl, Klaus, . Reinsurance: Principles and Practice.  
Vol. 1, Karlsruhe: Verlag Versicherungswirtschaft e.v., 1980 .

Kenneth R. Thompson. Reinsurance. 4th edition, Published  
by the spectator.



Parkinson, J.R. The Role Of the Risk Manager in Industry and Commerce. St. John's House, Minorities, London:

Keith Shipton Developments Limited, 1976 .

Strain, Robert W. Reinsurance:New York,The College of Insurance, 1980.

Magazines and articles.

The Review 25th February 1985.

Reinsurance Volume: 16.No.11 March,1985

Sigma NO. 3/March 1984 .

ROA No. 1/85 February 1985