REINSURANCE POLICY AND RISK MANAGEMENT

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Introduction

Insurance is a vital subject whose importance increases day after day according to the need for it by firms, companies as well as by individuals.

It is a service that helps in preserving the wealth of nations and increasing savings that are returned into the economy of the country through investments which in it turn expand and enhance economic growth. Furthermore, as a nation develops, its care of insurance increases and its citizens become aware of their insurance need and become insurance oriented.

This paper will discuss the insurance - reinsurance policy and the risk management involved.

Inspite of the severe deficiency in literature on this subject, I have managed to get information and references, through my job as a senior staff in the Arab Universal Insurance and Reinsurance - Reinsurance Department which gave me the encouragement and motivation to proceed with this subject.

We will start Chapter One by introducing the concepts of uncertainty and risk. We will examine some of the definition of risk and discuss several aspects of risk management. Next, we will look at three different schools of insurance : Insurance as a transfer, as a technique, and as a combination of both. The chapter will be ended by a brief discussion on reinsurance.

In chapter two, we will define, explain and discuss each branch of insurance and its development. We will mention the historical background, market composition, development and growth. The tables in the Appendix supplement this chapter by exhibiting written premium figures and displaying their growth and distribution among the insurance branches in Lebanon.

Chapter three will talk about the development of insurance in Lebanon and how it started. We will mention the factors that play a decisive role in this industry in Lebanon and the effect of the civil war on the insurance industry. We will proceed, by describing and analyzing the relationship between Lebanese Government and the insurance companies in general.

Moving forward, Chapter four will discuss the reinsurance background and need, its importance, applicability in practice, kind of insurance treaties and the specification of each of them and when we use or apply them. We will discuss its development.

Chapter Five will deal with the basic principles of risk analysis as applied to the insurance industry and it will emphasize the relationship between the reinsurance coverage and the risk management involved.

Chapter six exhibits the problems facing Insurance and Reinsurance Industry in Lebanon. We will try to look for adequate ways for solving these problems. In this last chapter I will present my comments, criticisms and conclusion.

I- Risk, Insurance and Reinsurance

Risk exists whenever the future is unknown. Because the adverse effects of risk have plagued mankind since the beginning of time, individuals, groups, and societies have developed various methods for managing risk. Since no one knows the future exactly, everyone is a risk manager not by choice, but by sheer necessity. Furthermore, risk and uncertainty are two common factors used to describe a man's environment. Both play an important role in the decision making process to a great extent. Risk and uncertainty are largely interrelated. "The fact that decisions are made in a world ruled by uncertainty brings risk into existance".[1] The word " Risk " has been defined in many different ways. Frank Knight defines risk as " measurable uncertainty ".[2] Allan Willet defines Risk as the " objectified uncertainty regarding the occurence of

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1- Fritz Redlich, "Towards a Better Theory of Risk", in Essays in the Theory of Risk and Insurance. J.D. Hammond, ed., p.37, (U.S.A., Scott Foresman and Company, 1968).

2- Frank Knight, Risk, Uncertainty and Profit, p. 233, (U.S.A. Prentice Hall Inc., 1960).

an undesirable event "[3]. Irving Pleffer defines Risk as a " combination of hazards measured by probability "[4].

Another way of looking at risk is by classifying it according to its consequences and effects. There are four basic forms of risk : pure, speculative, fundamental and particular. Pure risk results in either a loss or no loss situations whereas speculative risks can produce either a loss,a break even or a profitable output. Since the object of insurance is to put the insured in the same healthy situation before the occurance of loss and without making any profit, pure risk is suitable for insurance purposes, while speculative risks are not. Fundamental risks arise from losses that are impersonal in origin and in consequence. These losses are not caused by an individual, and their impact falls on an entire group. Particular risks, on the other hand, arise from losses that have their origin in individual events; the impact is felt in localized consequences . In other words, if the group on which the losses impact falls is large, the risk is called fundamental. If

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3- Allan Willet, The Economic Theory of Risk and Insurance, p.6, (Philadelphia: The University of Pennsylvania Press,1951).

4- Irving Pleffer, Insurance and Economic Theory, p.42, (U.S.A., Scott Foresman And Company, 1956).

it is small, then the risk is particular. Therefore, fundamental risks are generally regarded as unsuitable for insurance purposes while particular risks are.

The risk concept is such an important issue that nobody can by-pass without awareness. A person has to take it into consideration all times and to expect it at any time, and due to the pervasiveness of risk and its significant adverse economic effects, man is constantly searching for ways in which he can manage risk to his advantage. In a broad sense, risk management may be defined as the minimization of the adverse effects of risk at minimum cost through its identification, measurement, and control. All business and family decision makers are risk managers. Therefore, risk management aims at three main goals : Identifying the source of risk, analyzing risk and handling risk.

A - Identifying the Source of Risk :

The first step before handling any problem is to identify where it comes and what causes it. There are three basic sources of risk.

1- Natural hazards or acts of God such as storms, floods, earthquakes, volcanoes and the like.

2- Acts of man which are risks brought by man's actions depending on his behavior and on his ability to take precautions or not, if he is risk taker or risk averter. It is also done by malicious behavior, such as taking risk without any expected profit. An example is to throw cigarettes in a wood, causing a fire and catastrophic results.

3- Economic risks are risks attached to the economic situation of the country. The chosen act is not risky due to its nature but to the economic condition such as inflation, unemployment, depression, and stagnation.

B- Analyzing Risks

Risk is composed of two factors: severity and frequency, where :

- $\text{severity} = \dfrac{\text{amount of losses}}{\text{number of losses}}$

- $\text{frequency} = \dfrac{\text{amount of losses}}{\text{number of exposure units}}$

Any objective analysis of risk has to take into accounts these two factors in accordance with the law of large numbers.

C - Treatment or Handling of Risk

There are several Risk management techniques aiming at handling risk in an attempt to reduce potential losses. Four types of reaction to risk are follows :

1- Risk assumption or risk taking which entails absorption of risk whereby one bears the risk upon his shoulders.

2- Risk avoidance whereby the individual removes himself from exposure. A businessman of such mentality prefers to win a little bit or to make no profit and thus to minimize the degree of risk in his business.

3- Risk reduction which involves taking measures to reduce loss before and after its occurence through loss prevention and protection.

4- Transfer of risk which is a technique whereby all or part of the risk is transferred to another carrier, the best example is insurance.

Insurance was referred to as an institutional arrangement for handling risk. One is tempted to say that insurance is what insurers provide but such a statement is neither helpful nor complete.

Thus it is worthwhile to seek a broader definition. Most writers share the view that insurers provide insurance but do not agree on what insurance is. Some even indicate that insurance can exist without insurers. Three schools of thought have evolved:

1- Transfer school states that insurance may be defined as the transfer of pure risk from the insured to the insurer. The insured is the person or firm confronted by a risk and the insurer is a person or firm who specializes in the assumption of risk. The primary business of the insurer is risk assumption for a free. Thus, the heart of this view of insurance is that it is a transfer device.

2- Technical school ignores transfer and concentrates on techniques. A purer version of the non-transfer school is illustrated by the statement of Professors Mehr and Hedges that a " ... device will be deemed insurance if (1) it applies the law of large numbers so that the requirement for future funds to cover losses are predictable with reasonable accuracy, (2) it provides some definite method for raising these funds by levies against the units covered by the " scheme ".[5] This definition also places the emphasis on technique. The essential features of insurance are the manner in which losses are predicted and shared.

5- Robert I. Mehr and Bob A. Hedges, Risk Management in the Business Enterprise, p. 144, (Englewood Cliffs, Prentice Hall, 1966, 5th edition).

3- Combination or Pooling school declares that insurance is nothing but a combination of the previous two schools but in different percentages. Professor Willet defined Insurance as " That social device for making accumulations to meet uncertain losses of capital which is carried out through the transfer of the risks of many individuals to one person or to a group of persons. Wherever there is accumulation for uncertain losses, or wherever there is transfer of risk, there is one element of insurance; only where these are joined with the combination of risks in a group is the insurance complete."[6]

So, one can define insurance based on the previous information that : " Insurance is a social device which combines the risks of individuals into a group, using funds contributed by members of the group to pay for losses ". The essence of the insurance scheme is that it is a social device, that it involves the accumulation of funds, that it involves a group of risks, and that each person or firm who becomes a member of the group transfers his risk to the whole group.

After defining the insurance term, one can wonder of the purpose of insurance. The fundamental purpose of insurance is neither

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6- Allen H. Willet, The Economic Theory of Risk and Insurance, p.72., (U.S.A. The University of Pennsylvania Press, 1951).

the spreading nor the prevention of losses. Rather, it is reduction of the uncertainty which is caused by awareness of the possibility of loss. An insurance scheme provides certainty for the individual members of the group by averaging loss costs. The individual pays a certain premium instead of facing the uncertainty of the chance of large loss. In reality, the insurance term is referred to as a contract between two parties, namely the insured and the insurer. This contract is characterized by five components :

A- The insured should have an insurable interest in the subject matter insured. This insurable interest should have a monetary value.

B- The insured should be exposed to a risk of loss if his interest is subject to damage or destruction by a certain peril.

C- The insurer undertakes to bear the risk of loss upon his shoulders.

D- This assumption of risk is part of a plan of action that aims at distributing losses among a large number of people who bear similar risks.

E- In return for the insurer's assumption of risk and promise to pay losses in case they occur, the insured should pay a certain compensation called the premium.

Although the above definition is a little bit long, it mentions some important concepts of insurance such as the insurable interest which be measured in monetary terms.

So much for the definitions of insurance, we shall now move to another important concept which is reinsurance. Reinsurance is simply insurance of insurance companies. It enables the direct insurer to protect himself by transferring all or parts of the risk or the expected loss to another company. While the direct insurer is called the cedent, the company assuming the transferred risk is called the Reinsurer. Where the amount on any one risk or risks which form one hazard is such that it is beyond the limits which it is prudent for one insurer to carry, it is necessary to effect reinsurance. Therefore, reinsurance can be arranged either with another direct insurer or with a specialist reinsurance office, that is, one which accepts no direct business.

Large risks are encountered in all sections of insurance business and for this reason reinsurance is required in all departments with the object of providing a greater spread of risk so that a heavy claim, while made upon the one insurer who issued the policy, is in fact borne by a number of insurers. The general principles of reinsurance are common to all sections of insurance, subject, of course, to modifications in their adaptation to individual classes of business.

It is essential that the utmost good faith be observed at all times between the direct insurer and the reinsurer. Insurable interest is also vital in all contracts of reinsurance, and it has been held that the issue of a policy with the acceptance of liability thereunder by the direct insurer is sufficient to constitute such insurable interest. At the same time, the original insured acquires no right under a reinsurance contract which operates solely between the direct insurer and the reinsurer. If the direct insurer should become insolvent, recoveries under reinsurance form part of the general assets available for distribution among all creditors. If a reinsurer fails to meet his obligations, the direct insurer is still liable in full to the insured. All contracts of reinsurance are contracts of indemnity only, whether or not the policy issued by the direct insurer is one of strict indemnity. This is because the reinsurer undertakes to indemnify the direct insurer in respect of a proportion or the whole amount of liability incurred to the policy holder.

Thus in the reinsurance process, we might have several companies participating in the same risk. In the case of loss, each company will only pay a part of it in proportion to its previously accepted share. An important point worth mentioning here is that the damaged can never go directly to the reinsurers asking them for payment as there is no legal relationship between him and them. The policy holder can only lodge a claim with his insurance company. Coinsurance is very similar to reinsurance in the principle of sharing risks. However the client can have direct contacts with each and every participating company since each one of them has put its signature on the policy.

From what has been discussed, strong ties exist between the concepts of Uncertainty, Risk, Insurance and Reinsurance. Uncertainty gives risk which in turn gives validity to the concept of insurance since it is not reasonable to insure something if it is not endangered by a certain risk. Similarly, insurance gives meaning to reinsurance as we can never have reinsurance without having insurance first. Therefore, we can conclude that uncertainty, risk, insurance and reinsurance are series of interelated concepts linked together by an unbroken chain in an ordered manner.

II- Branches of Insurance and their Development.

Insurance provides protection against a wide variety of risks, and the scope of the business is considered according to the three-fold classification : Insurance of the person, of property and pecuniary loss, and of liability.*

A- Insurance of the person

1 - Life assurance has many different kinds of contracts which could be obtained. These contracts have been devised to meet the varying needs of individuals in their endeavours to provide for the future, either for themselves or for their dependants. The business is indivisible into two main sections - ordinary life assurance and industrial life assurance. The main distinction is that under industrial life policies the premiums are usually payable at more frequent intervals than under ordinary life policies, and the sum assured is smaller.

2 - Personal accident and sickness insurance is only covered when the occurence of claims results from an accident, otherwise it is not covered. This kind of insurance has weekly, monthly, or yearly

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* Source: Lucas G.R. George & Wherry H. Ralph, Insurance Principles And Coverages, pp. 31-45, (U.S.A., Rinehart & Company Inc. 1954).

compensation by the insurance company when death, total or partial disability, permanent or temporary disability occured. Many sport clubs, industrial factories, buildings under constructional terms are the famous clients to the insurance companies.

3- Permanent health insurance is designed to replace earned income for disability arising from sikness or accident on a longer term basis than that offered under (B) above. Disability in the context means that the insured is completely unable by reason of sikness or accident to perform any part whatever of the duties of his occupation. The insurance is permanent in the sense that it cannot be cancelled by the insurer before the normal terminating age which is usually 65 years for males and 60 for females. There is normally a deferred period of 4, 13, 26, or 52 weeks before the benefits commences to accrue. The premium payable depends upon the deferred period selected.

B- <u>Insurance of property and pecuniary loss:</u>

1- Marine insurance is a protection against loss or damage by perils of the sea or through the hazards of transit generally. The same is true of ships, and insurance on hulls and machinery is an important part of the security provided for mortgages. Ship insurance is a section of marine insurance which relates to the insurance of the ship itself, namely, the hull and the ship's machinery. Such an insurance is effected by the ship owner to protect him against loss by the operation of the perils of the sea, such as heavy weather, stranding or collision, fire and similar perils of a fortuitous nature. War risks can also be insured on special terms, ships may be insured against " all risks " or against total loss or partial damage.

It is necessary not merely to insure the ship but also the valuable goods carried; hence cargo insurance relates to cover in respect of goods, produce, and / or merchandise imported from, or exported to, various parts of the world. Freight insurance is a part of marine insurance in such a manner that if the shipment is lost, freight will likewise be lost. The ship owner, in this case, bears the risk of damage affecting the shipment and hence the freight during the voyage. The same applies to the charterers who have hired the vessel wholly or in part.

2- Fire insurance policies are issued to indemnify owners of property, whether buildings or contents, against destruction or damage caused by fire and lightning. It covers a very wide range of property, varying from small buildings and their contents to huge factories extending over many acres of ground and insured for millions of pounds. Special perils are known also as extra or additional perils, such as " water damage " which is always treated as fire damage, e.g., storm, tempest, flood and bursting or overflowing of water tanks, apparatus or pipes. There are special policies covering destruction or damage caused by hail. This kind of policy is specified for agricultural purpose.

3- Theft insurance cover is divided into several sections as follows:

- Private dwellings : It covers the contents of private dwellings, although seperate theft policies are rarely issued nowdays in view of the popularity of the household policy.

- Business premises : This section covers a wide variety of risks such as retail shops, offices, warehouses, sports clubs and the like.

- All Risk : This class of insurance is designed to cover specified valuable items against all risks while the property is anywhere in the country or abroad such as furniture in transit.

- Money : The insurance can be arranged in respect of money drawn from, or paid into, the bank, while in transit or in safe, and the holds up.

4- Livestock insurance

Animals are insured against death by accident or disease, and other special policies are issued. The main kind of animals usually insured are horses, cattle, pigs and anthrax. The insurance covers also the transit risk and any consequential loss following foot and mouth disease.

5- Fidelity guarantee and contingency cover is divided into four main sections, with other miscellaneous types of policies, also dealt with by the fidelity department. The first one is commercial guarantees which are designed to provide an employer with an indemnity against loss of money or loss of stock by the defaults of his employee(s). The second one is local government guarantees which is wider than the above mentioned one. It protects the local authority not merely against dishonesty but also against any loss arising from error, intentional or otherwise. The third one is court guarantees related to court of bonds protection. This court protects the holder of a new bond when the invalidity of the bond is proved, in which case the insurer indemnifies the bondholder for losses incurred. Positions of trust to which individuals are appointed by the court, whether as receiver or manager, involves the handling of money and other assets. The last one is government bonds which are required in somewhat similar circumstances such as for special managers in bankruptcy, trustees under deeds of arrangement, liquidators, and those concerned with dutiable goods.

6- Consequential loss insurance is the insurance of the damages occuring to the benefits of the firm if its business is suspended. Many businessmen are still content with an ordinary material damage fire policy on the buildings and contents of their premises because they do bot realise the heavy uninsured loss they would sustain in the event of fire by reason of the interruption or complete stoppage of business. The cover of such policy might be:

- The temporary loss, partial or complete, of normal revenue.
- The necessity of maintaining various payments, e.g., mortgage interest, salaries or wages to certain employees, while revenue has ceased or diminished.

7- Aviation insurance is insurance with third party liability whether airplanes, gliders, or helicopters are concerned.

C- Insurance of liability :

1 - Marine collision liability cover is usually limited to collision liability. This is not to say that a ship owner is unable to cover

liabilities, such as those which arise under contract in connection with cargo or liabilities to passengers or employer's liability in respect of the crew.

2.- Employer's liability: This class of insurance provides an indemnity to employers against their ability to employees for personal injuries or disease sustained in the course of their employment.

3- Public liability is alike, employer's liability is as above but the compensated person might not be an employee. He might be an actor, a sportman, a pedal cycle, a politician or others.

4.- Products liability is the insurance against claims arising from goods sold, supplied or installed, erected, altered or treated by the insured elsewhere than at his own premises. The insured may be the manufacturer, repairer, importer, exporter, wholsaler, or retailer.

5. Motor third party liability : motor insurance business is the largest single section of accident insurance, if judged by premium income, but this relatesto motor business as a whole. Under a comprehensive policy liability insurance is combined with " own damage " (property insurance) while under a private car policy, injury of

persons in the car may be covered.

6- Engineering insurance covers the damage of the third parties or the damage to their property arising as a direct consequence of explosion or collapse of the boiler or other plant specified.

III - Development of Insurance in Lebanon.

Although the branches of insurance discussed above are worldwide known, the local market in Lebanon deals with a portion of these branches, mainly the marine, life and medical, fire and burglary, and motor or vehicule insurance including personal accident. All other kinds are known but are little dealt with, including the engineering insurance because this branch requires huge projects and long term executive operations which are unfeasible in such a small country like Lebanon. It is worthy to mention that during the civil war, war and strikes risks became much known and dealt with.

Let us now discuss in brief the insurance development in Lebanon. In Lebanon, the insurance industry started in the thirties through branches of foreign companies and agencies. After the independance of Lebanon, the national insurance companies started taking place in the market. The spread out of national companies increased in a wandering manner by the seventies when the number of the lebanese companies exceeded ninety companies and agencies.

We can divide the era of insurance activity ih Lebanon into two periods :   - The period before 1984

- The period after 1984

In the first period, although the civil war prevailing in the country, but the insurance industry was still strong due to the trust in the Lebanese Pound. The government control and supervision over the insurance companies through the Ministry of Economy and Trade was vital and the courts of justice were ready to take verdicts in cases of dispute between the insurance companies and their clients.

After 1984, many things changed and the most important factor that plays a decisive role in a company's future life was inflation. In fact, the deterioration of the Lebanese Pound led many companies to " dollarize " their premiums as well as their reserves. More than that, many companies declared their bankruptcy due to their inability to accomodate themselves with the new critical situation. If we take the premiums produced before 1984, of the same companies, and compare them with the premiums earned in 1989, we find that the situation now is much worse than before, in spite of the increase in policy prices.

In Lebanon, as well as in other countries, the insurance industry serves the citizens, the insurance companies themselves and the government. For the citizens the main benefit of insurance is that businessmen can free major parts of their capital which are dedicated as reserves for contingency and emergency cases. By insuring themselves and their property, they can use the frozen parts of their capital for other purposes. For the insurance companies, the accumulation and retention of premiums add to the resources of these companies enabling them to promote certain national targets through investment in government treasury bills. This in turn increases the liquidity of the government and enables it to fulfil growth and citizen welfare.

The insurance problems and the claims resulting especially in factories such as fire, personal accident, and public liability claims aid the administration of these factories to know, forecast and eventually prevent the claims or reduce the probabilities of their occurence. The government benefits from the insurance industry by increasing the GNP through the premiums paid by foreign insurance companies or individuals to local insurance companies. Also, the government may partially depend on insurance companies in its struggle against poverty, sikness, indemnity of death and disablements.

Let us now move to another important issue which is the way the Lebanese government organizes its control and supervision over the insurance companies. The Lebanese law requires that insurance companies be organized as corporations with special clauses regarding the capital of the company, its reserves, and the investment of its premiums. Other clauses provide the following :

- It is not allowed for an insurance company to have capital less than three million lebanese pounds which is its paid - in capital.

- An insurance company has to take permission from the Ministry of Economy and Trade to be able to operate.

- All insurance companies have to put aside two types of reserves. The first is the technical reserve which constitutes a part of the collected premium to be paid in indemnities within a specific period. The second is the legal reserve which is obligatory to put aside ahd it consists of : 40% of net premium for fire, burglary and vehicules insurance branches, and 20% for marine, aviation and land transit insurance branches. The purpose of this act is to guarantee liquidity as well as indemnity capacity for the insureds.

The control of the Lebanese government over the insurance companies is organized through professional accountants who have the authority to examine and review the documents and the process of operations of every insurance company at any time and without previous permission or warning. This governmental staff has the right to investigate the malicious acts of companies against law or against the international organization of the individual company.

It is worth mentioning that the governmental control and organization of the insurance industry in Lebanon was not sufficiently effective during the war period. Due to the nature of the Lebanese market (a free market), market competition exists strongly among the insurance companies which leads to two contradictory results. The first positive outcome is that the level of service improves, the price of policies decreases, the demand for insurance increases, investments of companies increase because they collect more money now and the national GNP increases which leads in turn to economic growth. The second negative outcome is that competition in the market blinds the insurance administrations regarding the real price of the policy that would be set in . The consequences of various claims proved that the strategy of setting the prices of policies was nothing but a total failure. Many insurance companies think that they could hide their backs by reinsuring their operations abroad, forgetting that by reinsuring the majority of their products they loose the source of their survival which is the liquidity and reserves for expansion and growth. Expansion is very important in the long run to strengthen capital in the future, to have the ability to invest and to gain from this investment in the short run as well as in the long run. For this reason, the Lebanese insurance companies or most of them behave and act as brokers. Many of them are waiting to insure the clients in the markets, reinsure them taking advantages of the need of the reinsuranee company for liquidity and to get some benefit from the difference in the exchange rate.

This phenomenon leads us to a very important subject, namely, reinsurance which is detailed in the next chapter.

IV - Reinsurance Treaties and Their Development.

Reinsurance is closely related to insurance. Wherever insurance is wanted, a need for reinsurance exists. Although the first reinsurance treaty was concluded on the 12th of July 1370 in Genoa, reinsurance was mainly effected on individual policies until the present treaty forms came to the fore in the 19th century. The world's first reinsurance company is the Weseler Re which was established in 1843 by a direct insurance company with the aim of accepting risks exceeding its parent company's capacity.[7] However, the world's first independent reinsurer is the Cologne Re founded in 1852 and is still in operation. Presently, there are over 400 professional reinsurers worlwide. Examples of major reinsurers are Munich Re (1880), Swiss Re (1863) and the Mercantile and General (1907). A final point to be mentioned is that reinsurance was prohibited by the British law till 1864.

In chapter one, we defined the reisurance term, but we did

7- Swiss Re, Questions and Answers, 1985, p.12.

not talk about the purpose and the reason for reinsurance. It might appear surprising that any insurer, having been at some pains to write an insurance policy, should be willing to transfer a portion of this business to another; but good reasons for this practice frequently exist. Although there are many reasons for reinsurance, the following are the most important ones:

- Distribution of risk:

All forms of insurance are based upon the law of large numbers, that is upon the idea that a combination of a large number of exposures will produce greater certainty. This idea implies, however, that all the exposures are of approximately the same amount and that their probabilities are independent. Large exposures may exercise an influence upon the underwriting results completely out of their number. For example, the sinking of a ship in the sea would cause a marine insurance company to show a deficit for the year; a fire in an insured factory would cost liability of hundreds of thousands of pounds. Even if the large losses do not completely wipe out the profits of a given year, they nevertheless cause results to fluctuate greatly from year to year. The insurance company may meet this problem in one or more of four ways, all of which are employed to some extent. (1) The company may, and usually does, establish a reserve and surplus to prepare for large claims. (2) The company may refuse to insure hazardous exposures that involve large possible losses. (3) The company may accept the exposure but limits its liability. (4) The company may accept its full liability but transfer part of this liability to other insurance companies - in other words, reinsure. In this way, the company can write more business than it would otherwise be able to do.

Nearly all companies in all lines of insurance set formal restrictions known as limits upon the size of exposure to be retained. Only because of reinsurance can larger exposures be insured. The most common form is a limitation upon the face value of an individual policy. For example, a life insurance company sometimes sets a limit of 500 000 U.S. Dollars on any one life. The insurer does not refuse to write policies larger than its limit, but when it accepts such policies it promptly reinsures the excess. Normaly, companies will set the limits as high as is conservatively possible, in order to retain as much business as they can.

- Retirement from business :

The insurance company collects from the policyholder a premium in advance, promising to cover him for a definite period of time according to the kind of insurance branch he is interested in. But what will be the case when the insurance company could not execute its promise for some reason or other. To induce the reinsuring company to assume these liabilities, the original carrier will have to pay a large or all of its reserve amount and in some cases even its capital, to pay claims. If these are not sufficient, the policyholders will not receive all the indemnity they have been promised and must compromise their claims. The reinsurer's job in this case is to honor the commitments of the ceding company and fully cover the risk as per the contract between the two parties.

- Stronger Guarantee :

When the insurance arragement provides for more than one company signing the policy issued to be insured, the strength of the protection is increased, as is the case where the reinsurance arrangement provides for the issuance of joint-and-several policies. However, a company with adequate reinsurance is stronger than one without it.

- Stabilization of profit :

Although better distribution was historically the first object of reinsurance, year by year stabilization of profits has become the primary consideration. Treaties are often arranged that ensure satisfactory underwriting results on a particular class of business for an entire year, and yearly results over five-year periods are employed to calculate reinsurance premiums. If reinsurance were not practiced and companies endured alone the large losses that sometimes result from great risk, the underwriting results tend to fluctuate greatly from year to year.

- <u>Reduction of Reserves :</u>

For an insurance company's benefit, it is better to reinsure its cover for the sake of avoiding a drain on its surpluses. In other words, instead of using the reserve of the company, or borrowing from banks for the growth and expansion of the company or for paying catastrophic claims or an accumulation of natural losses, reinsurance provides liquidity to insurance companies through commissions received for each reinsurance operation. These commissions differ according to the nature of the risk, the kind of business and the size of operation, and through profit sharing schemes between the insurer and the insured. These schemes involve agreement between insurer and customer, or between reinsurer and ceding company, whereby the customer or the ceding company is entiteld to a share in the net profit resulting from his premiums after deducting indemnities paid.

- <u>Evaluation of Exposures :</u>

Small and new companies are frequently not in a position to accept exposures of an unusual type without advice, because they have insufficient underwriting experience with such exposures and are not larger enough to run the danger of a large loss. By submitting the exposure to a reinsurer, they may obtain the advice and judgement of a larger and more experienced organization. Service, therefore, is a part of the stock in trade of a reinsurance company.

Although the objects to be attained are in the main the same in all cases, the arrangements with respect to reinsurance are very diverse. The methods that are employed divide themselves into two main groups - those that are automatic in operation, and those are not. The nonautomatic arrangements must be made when necessity arises; the automatic are made in advance and are available when needed. The nonautomatic arrangements are known as " facultative " arrangements, and the automatic arrangements are " treaties ". Facultative arrangements are sporadic, vary greatly in their provisions, are practiced in many branches of insurance and are used mainly (1) as stopgap provisions, to take care of situations not covered by treaties, and (2) by reinsurance companies to cede business to other reinsurance companies - that is to say in the retrocession business. Treaties are frequently broad in scope, are more standardized in provisions, supply the great bulk of the reinsurance, and are used by both primary-writing and reinsurance companies.

Faculty is " the privilege to do a particular thing "[8], hence, facultative reinsurance is an arrangement made with respect to a particular insured at a particular time. Assume that a marine insurance company has accepted a 700 000 U.S. Dollars policy upon a cargo and concludes that the amount is more than it cares to carry, It communicates the particular concerning the cargo to another company and requests the latter to reinsure, say, 300 000 U.S. Dollars of it. The latter company takes into consideration the nature of the risk, the chances of loss, the character of the company making the request, and so forth, and names the rate of premium that it will accept.

The advantages of facultative reinsurance are fairly obvious. Because there is no prearrangement, the conditions may be fixed to fit almost any kind of case. Facultative reinsurance is a useful device to meet any unanticipated emergency. It is also a method by which the primary-writing company may obtain the benefit of the underwriting judgement of another company, because before the primary-writing company accepts the applicant, it may investigate the possibilities of reinsurance. There are certain apparent disatvantages in the facultative form of reinsurance. For onse thing, not being

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8- Robert Riegel, Insurance principle and pratices, 6th edition, p.128. (U.S.A. Prentice Hall Inc., 1960).

prearranged, the primary-writing company does not know whether reinsurance is possible or not and delay may lose the business, while acceptance may produce an undesirable insured. The agency force of a company is displeased when it is not in a position to accept promptly the applications that are offered. These disatvantages lead companies to enter into automatic reinsurance arrangements. The automatic reinsurance arrangements lead us to a parallel subject which is the reinsurance treaties.

The reinsurance contract or treaty usually follows the terms of the primary-writing company's contract with the original insured. Some arrangements are made between the companies, however, with respect to rates of premium or expenses. Usually the reinsurer receives the premium for the share of the insurance taken,and gives back a percentage of it as a " Ceding Comission " to the originating company. It is also customary for the two companies to agree to exchange reports from time to time regarding the business covered by the reinsurance treaty. The great advantage of the reinsurance treaty is the fact that it is automatic and makes provision in advance for the reinsurance of a certain type of business. The primary-writing company, the insurance company, is not delayed in the acceptance of business and is assured of reinsurance protection. On the other hand, the treaty has certain shortcomings,

(1) it may cover only a limited portion of the writings, thus leaving facultative or other arrangements to cover the balance. (2) The reinsurance treaty may prove to be unprofitable and yet the reinsuring company is bound to accept business. (3) The primary-writing company may not observe good faith; or its agents, for the sake of the commissions, may write business without discrimination.

Under reinsurance treaties, there are four major types of sharing agreements, in two principal categories. Most of these agreements are also possible under facultative arrangements. Quota-share and surplus-line treaties are agreements to share insurance. Excess of loss and stop loss treaty are agreements to share losses.

- Quota-share treaty :

Under this type of treaty, a fixed proportion of a given class of insurance as a whole is ceded. If, for example, reinsurance is arranged on a 50 per cent basis, the reinsurer accepts half of each risk, obtains half the premiums less commissions, paid by the reinsurance company to the insurance company, and bears half the claims, while the ceding company retains the balance of 50 per cent. Commission is a matter of mutual arrangement . This type of reinsurance has the advantage of simplicity, but its disadvantage is the necessity of paying away premiums on small risks instead of retaining the whole of the direct insurer's own account. There is no risk of selection against the reinsurer, all business coming to the treaty.

- Surplus Treaty :

The direct insurer merely places on the treaty any part of the risk, i.e., the surplus, which is not desired to retain. It follows that there is a certain risk which is wholly retained and there is no surplus to place on the treaty. If a treaty is arranged so that three, four, or more lines* are secured in this way, the insurance company can thus accept automatically a risk which is four or more times the size of his own holding, but for any larger risk, the balance must be reinsured facultatively. Let us take an example to facilitate the idea. Assume that the retention of the insurance company is a fixed amount of 50 000 U.S. Dollars, so the company may organize a surplus treaty of 20 lines in which every line equals 50 000 U.S. Dollars so the treaty's capacity is 1000 000 U.S. Dollars. (i.e. 20 x 50 000 = 1000 000 U.S. Dollars). This means that the insurance company can cover all risks which may reach a maximum limit of 1050 000 U.S. Dollars (1000 000 + 50 000).

* A line is the amount of the direct insurer's retention.

- Excess-of-loss treaty :

An insurer decides the maximum amount he is prepared to bear on any one loss and seeks reinsurance under a treaty whereby the reinsurers will be responsible for the amount of any losses and above the amount retained by the direct insurer. There may be an upper limit to the treaty so that if the insurer, for instance, is content to bear the first $3000 of any loss, the treaty reinsurers will bear any loss over $3000, but not exceeding, say, $100 000. For cover beyond that limit, a further excess of loss treaty may be negotiated, or the direct insurer may be content to bear the possibility of a claim exceeding $100 000.

- Stop-loss treaty :

This a modern variation of excess of loss whereby the loss ratio of the ceding insurer is stopped at an agreed percentage of total claims during a year and the reinsurer bears the difference. Stop-loss reinsurance can be arranged in addition to a surplus treaty.

Of the foregoing methods of reinsurance, Quota-share and surplus treaties are proportionate in that the premiums are shared and the losses are paid by the insurers and the reinsurers in proportions agreed before the loss. Excess of loss and stop loss treaties are known as non-proportionate in that the premiums are not necessarily divided between the insurer and the reinsurer in the same proportion as they pay claims.

Let us now move to the second part of this chapter which is the Development of Reinsurance in general. The world of reinsurance has changed considerably over the past thirty years or so. Not only did the political map look rather different in those days, but in many parts of the world the number of reinsurance companies was far smaller than today. The comparatively simple insurance needs of the underdeveloped world were in the main met by agencies or branches of a handful of British, European or American internationally-oriented direct-writing insurance companies, famous names in those days but today they are frequently merged into even larger entities.

The national interests of the newly-emergent countries replaced, or partly replaced, this agency and branch system with one or more national insurance companies, sometimes alone or sometimes in conjuction with private or foreign companies. This was augmented, by a national reinsurance company Whilst all this was happening, it should be remembered that the objects or liabilities to be insured were growing more valuable and more complex. This is particularly true in the Arab World.

So, whereas insurance demand had in the past been largely provided by the agencies or branches of major international insurers who ceded the surplus to their worldwide or overseas reinsurance treaties, comparatively suddenly this demand was turned to be met by newly-established national companies. This development has had two major effectes onthe world of reinsurance. The first was an intense and continuing need for various services from the established markets and in particular from established reinsurers. These services include :

- Staff training and, sometimes, selection.
- Advice on accounting and computer systems.
- Loss prevention techniques.
- Assistance in the underwriting of major and complex risks, especially in the engineering classes.
- The introduction of new forms of insurance.
- Advise on reinsurance procedures and programmes.

The second effect upon the reinsurance world is the tremendous growth in facultative reinsurance. At first sight this may seem surprising, but the reason is that the automatic treaty capacity of the national company or companies, which generally would have a monopoly of the large government or quasi-government risks, often does not equate the capacity which used to be available from international insurance companies and open markets. Furthermore, there has been a huge upsurge of insured values, especially in this part of the world. This means that the major risks which were once written by one single foreign company, are now written by one or more national companies, in part ceded to the national reinsurance company if there is one, and then offered to markets abroad in the form of facultative reinsurance. Other risks of smaller size but greater hazard would now be offered to world markets as reinsurance rather than insurance or co-insurance.

The same risks come to the market today as yesterday, only today they are a little more expensive than they were because of reinsurance overriding commission. This is a very simple analysis because it completely ignores the reasons for the creation of national insurance and reinsurance companies, especially the retention of substantial premiums within the country in question. We can see that the reinsurance market has, over the last thirty years or so, undertaken a new function, which is the fragmentation of major risk, which used to be performed by the direct writing market. The reinsurance fundamental task is to provide the conditions under which insurance companies can grow and prosper. This reinsurance function is thus of supreme importance to the insurance industry as a whole.

During the last thirty years, the reinsurance phenomenon developed in an amazing way to such a limit that we can sub-divide reinsurance into four categories :

1- The professional reinsurance companies which are those companies that write only reinsurance business. The major professional reinsurers write all forms of reinsurance business and they normally have very large acceptance capacity. They usually prefer to accept reinsurance business on a direct contract basis from ceding companies and establish direct relationship, rather than dealing through brokers.

2- Insurance and reinsurance companies which perform the two functions in specialized departments, i.e., insurance and reinsurance. They deal with the other parties either directly or through brokers. It is estimated that direct writing companies write about 40% of world reinsurance premium.

3- Underwriting organizations, reinsurance pools, associations and syndicates who are similar to professional reinsurers in handling reinsurance only. However, the associations differ from underwriting organizations and pools in that the management which provides the underwriting and loss handling expertise for organization members is generally independent of the companies which actually assume the risk. Companies participating in such organization are usually primary insurers and may or may not maintain seperate reinsurance departments within their operations. Syndicate type clauses may be used to bind the reinsurance contracts and treaties written by the group.

4- LIOYD's at London. It is unique among the world's insurance organizations in that it is neither an insurance company nor a corporation. It has no share holders and accept no joint-liability for the insurance business transacted by its members, although it maintains a close watch on their financial standing and lays down strict regulations regarding membership. From being essentially a marine market, non-marine business has grown steadily in the last one hundred years. They write business from all over the world including U.S.A. and Canada. LIOYD's provide one of the largest markets in the reinsurance field. It is estimated that 50% of total premium income of LIOYD's is derived from reinsurance. Its market has shown adaptability to meet the needs for insurance protection as dictated by social, political and economic changes. LIOYD's underwriters do not accept business directly from companies but accept only through LIOYD's brokers.

As per a survey, at the end of 1979, there were 240 professional reinsurers and at the end of 1982 the number went up to 417, representing 74% growth. The distribution of 417 reinsurers with a similar data for the 20 largest companies in terms of market is mentioned in the Appendix at the end of this research. It should be noted that there was a significant increase in thenumber of reinsurers in the market between 1979 and 1982, compared to 196 in 1972 and 213 in 1975.[9]

So much for the development of the reinsurance business in the world; we should move to a new, important and sophisticated subject which is risk managementand reinsurance coverage discussed in chapter V.

9- S.R. Parikh, " Criteria to be Considered in the Selection of a Company's Reinsurers", (Arig Reinsurance Seminar, 8-10 April 1984, Bahrain).

V- Risk Management and Reinsurance Coverage.

1- Risk Management :

Risk management has become an essential and important management tool for control of production and risks. Complete risk management services are now being provided by independent risk managment consultant firms. Parts of risk management programme services are provided through leading broker firms and form major industrial insurance companies where the emphasis obviously is given to insurance purchase and programmes.

The successful implementation of a risk management programme is to a large extent dependent on inter-action between risk management specialists and in-house specialists at various levels within a company. The risk management consultant can be employed through the whole risk management programme or in part of it.

Inherent in the concept of risk management lies a variety of disciplines. Basically, risk management is an outflow from insurance buying and reflects the increase complexity of modern business life. Due to the obvious concentration on technology, resources, and capital in modern industries, increased attention has been given to the risks facing them. Risk management can also be seen as a part of the development of modern management science and corporate business theory. Risk management is thoroughly a multi-disciplinary science and emphasizes a comprehensive approach to risks and their treatment. The degree to which risk management is developed and implemented in the overall corporate management is strongly correlated to the degree of technical sophistication and management attitude rather than different development trends in different parts of the world. It becomes more necessary with the increased degree of complexity, size, and modernisation of the operation.

Before we proceed, let us first distinguish between two types of business risks : the first type is known as "Dynamic Risk", i.e., risks of management decisions which may result in profit or loss to the firm. The second type is known as "Static Risks" which are risks that only result in losses, such as a fire out-break, interruption of supply or utilities, earthquakes and other catastrophies. In other words, undesired or unpredictable events which produce no gains but only losses are called "Static Risks".

The purpose of establishing a risk management policy is to set out rules which will provide ways to optimally make use of the risk financing cost to minimize the loss potential. This objective must be in line with the financial strength of the insurance company and its capacity to face risks. For efficient loss control practices, risk management departments and standards should therefore be developed and carried out. The risk managment function is an integrated part of the company's management organization. Its functions are inter-related to the ones of production, marketing and finance. In order to fully utilize his bargaining position, the risk manager should be a member of the corporate management and his responsibilities should be far reaching in order to efficiently carry out planning, execution and control of the company's risk protection work. The risk manager will be responsible for the development and implementation of the risk management policy, the insurance plan and the standard loss prevention policy. The risk manager should also ensure efficient use of the company's bargaining position in regard to insurance purchase.

An important section in the risk management policy is the insurance plan. The insurance plan means a structured order and uniform insurance cover. The insurance plan should contain :

- Guidelines for insurance payment.
- Routines for premium payment and reporting of losses.
- Terms and length of insurance agreement.
- Renewal dates and responsibilities for various types of insurance.

The insurance plan should contain a complete list of various insurance covers, copies of all policies, and the like, which the company is covered for. In regard to property insurance and loss of profit insurance policies the following should be set out : valuation principles of buildings, machinery, stock, drawings and documents, insured perils, period of indemnity, deductibles and contracts. The risk management should be kept at various levels within the organization, in all financial and purchase departments and production units. The policy should contain a list of companies and branch offices to which the policy applies and also include a list of all sums insured at the various locations and estimated maximum loss (EML) at each location. The next step in the risk management procedure is to identify the risks and to analyse them.

Risks are expressed as a function of expected probabilities and their consequences. Risk analysis deals therefore with the risks in regard of their probabilities and corresponding size. The risk analysis has to be carried out in a systematic way. The main intention of a risk analysis is therefore, to arrive at probabilities for a set of unwanted events or consequences enabling the risk manager to set out priorities and classifications in order to optimally treat them. Assessment of risk for loss of property and loss of production are the major objectives in the risk analysis. The human factor plays an important part in the risk analysis. The prediction of human performance under normal operation as well as emergencies is hard to foresee. The only way to improve human risk factor is education. Risk analysis forms one part of that education through risk awarness.

2- Risk Identification :

Risk identification comprises the identification of events which may develop into a loss. There are three main categories of accident initiating events :

- Events orginating from external input systems such as raw material supply, semi-finished products supply, utilities like electricity, gas, water, telex, telephone and transportation.
- Events originating within the plant, that is the risk management specialists have to go together with the internal staff to identify the hazards and risks involved and analyze all systems which include the survey of the entire production flow, storages, safety installations, monitoring procedures, security routines and emergency planning .
- Events originating from external output systems, which means that the design criteria have to be analyzed in view of abnormal environmental conditions such as high temperature and humidity, sand storm, flash flooding and earthquakes.

After having identified and evaluated the risks, these are, through joint weight of frequency and consequence, classified in quantitive terms. The classification contains a grouping phase in order to manage the amount of information involved and to achieve priority groups. The priorities take into consideration the company's overall planning, future expansion, running investment programme and maintenance planning. The risks can be plotted in a diagram in order to obtain a set of feasible risks and within them the various priorities. The usefulness of risk analysis and risk identification does not materialize unless it is applied to practical decisions. The courses of action accordingto established priority strategy will identify the major steps to take in the areas such as production, organization, utilities, external raw material supply, safety systems and insurance cover.

As a result of the findings of the above mentioned risk analysis and risk identification works, a standard loss prevention policy is developed. The objective of a standard programme for loss prevention is to establish a common denominator to the various loss prevention measures in order to achieve optimization of risk improvement costs. It will also provide a code book for the continuing risk management work in regard to safety, security and risk limitation work. The location of the plant and its protection against external environmental impacts or risk threats should be consideredat the positioning and the design stage of the plant. Special attention should be given to earthquakes, storms ., flash floods, heat, ground water and soil movements. Routines and written instructions should be developed for security and watchmen services, inspection rounds, security checks of personnel safety. A plan for handling sabotage, security organization and emergency organization should be developed including written action programmes for all staff. Permission must be given and rules must be established for material design criteria in regard to fire resistance, design of explosion safe walls and fire walls. Risks along the production flow should be evaluated and identified, " tailor-made for each plant ". Computer centers and offices should have design and safety standards. Requirements in regard to reserves and supply of utilities like electricity, water and gas, sewage systems, should be determined according to the risk exposure and vulnerability and dependency for production. Written instructions should be developed for the following activities : smoking regulations and smoking prohibition, welding and cutting regulations, sub-contractors work, loss control, emergency organization, maintenance of fire fighting installations, maintenance of security installations, fire and explosive protection, automatic fire alarm systems and hand extinguishers.

A catastrophic plan should be formulated and should contain

15 element which are[10]:

- objective, alarm, emergency organization, evacuation plan, resources, section plan, plan schedule, telephone check-list, memorandum to the management, reconstruction plan, plan for emergency training, personnel, revision of emergency plan, reserve supply for raw materials and semi-finished products, distribution of production to associated plants in case of catastrophe. Routines for general loss prevention inspection as well as for regular inspections of various safety and security installations must be determined. Reports must be submitted after all inspections to the appointed responsible authority within the company.

3- Reinsurance coverage :

So much for risk analysis and its relation to insurance cover. Let us now move to reinsurance coverages, and the relationship between the ceding insurance company and the reinsurer. Like insurance companies, reinsurance companies have risk managers also to evaluate the availability of an operation and if it is risky or not. The overall responsibility for reinsurance should be at a very senior management level in every company. It is not

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10- Hans Eric Engelbrekts, "The Right Insurance Cover", (Arab Industry Review), vol.IV, Dec.1986, pp.34,35.

necessary for the managing director or general manager to assume his role, but it should certainly be at an assistant general manager level or whatever equivalent title in the company. It is also essential that the senior person responsible for finance in the company, particularly, the control and use of funds, should play a consultative part in the reinsurance management at this level. Reporting to this senior manager, comes the role of the company's reinsurance manager who is totally responsible for the implementation of the reinsurance programme. A number of factors must however be taken into consideration when preparing a reinsurance programme. These factors are the following[11]:

- Management and underwriting capacity.
- Size and structure of the portfolio.
- Frequency and size of losses.
- Geographical location of operations.
- Future marketing plans.
- Paid-up capital and free reserves.
- Investment and liquidity policy.
- Reciprocal exchanges.
- Reinsurance philosophy.
- State of the reinsurance market.

11- W.A. Dinsdale & D.C. McMurdre, "Element of Reinsurance", 5th edition, 1983, p.159. (England, Unwin Brothers Ltd., 1983).

The first step in the preparation of the programme is to ask oneself : " what does the general management want to achieve during the year to come?". It is very important to find out the philosophy of general management. It changes when the General Manager or Managing Director changes. If the aim is to retain as much premiums as possible, then retention would have to be high, excess of loss or surplus treaties would be preferred to Quota share treaties[12], If however the aim is to achieve a better result irrespective of size of net premiums, then a totally different programme is needed. How much is management confident of the ability of its underwriters of a particular class of business?. This should affect the way the reinsurance programme is designed, greater use of facultative reinsurance can be recommended to make use of the expertise of the reinsurer. A quota share treaty could also be arranged to reduce the net exposure. Some managers are committed to reduce administrative expenses. The reinsurance department's contribution towards that aim may be to replace surplus treaties which are complicated and expensive to administer, by either quota share or excess of loss treaties.

Having decided what the interests of management are, the

12- See Chapter IV, pp. 37,38,39.

next step in the preparation of the programme is a thorough study of the portfolio of the company in the various classes of business. In the property, marine and aviation classes the typical portfolio consists of a large number of small and medium risks and of a small number of a very large risks, whether the size of the risk is measured in terms of sum insured or limits of liability. The appearance of the profile of the portfolio determines what type of reinsurance is most suited for that portfolio. In this case, a quota share reinsurance would not be suitable since the large number of small risks would be reinsured whithout convincing justification since the ceding company's objective is to reinsure more serious types of risks. A surplus treaty would be more suitable since the highly risky operations would be shared but at a pre-determined limit.

Sometimes a combined quota share and surplus treaty[13] is arranged simultaneously, so that the bulk of the medium risks are placed easily and cheaply by the quota share treaty, leaving only the small proportion of the higher risks to be reinsured by the surplus treaty. The distribution of risks does not follow the same pattern for liability insurances. In that case a quota share or a surplus treaty would not be suitable as the ceding company

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13- See chapter IV, pp. 37,38.

would still retain a proportion of an unlimited amount. In these circumstances therefore, non-proportional reinsurance[14] must be used.

It is obvious that a reinsurance programme must take into consideration the loss pattern of the portfolio and its past results. Frequency and size of losses are important in deciding the level of retention and the type of programme. If the losses affect more the small and numerous risks rather than the large ones, the company may be better off by arranging a quota share. This might not be feasible however in practice as the reinsurers might not be willing to give such cover. In that case even if a surplus treaty must be used the company would have a lower retention than it would if the loss pattern was different. If on the contrary the losses are principally on large risks but are very few and far in between, the company might prefer to arrange facultative reinsurance on the very risks to balance the portfolio.

It is important that the programme be suited to the area where the company operates particularly with respect to perils and legislation change. One has to find what are the risks which

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14- See chapter IV, pp. 39,40.

cause more problems in the area such as earthquake, typhoon, volcanic eruption. The accumulation in any one sone or area must be determined. The probable maximum loss for those areas and zones must also be found out as one has to decide based on that information how much of catastrophe excess of loss cover must be purchased to protect the net account.

Looking at the past results helps to adjust the thinking on what should be done. But looking only at past results to arrange a reinsurance programme is not good enough. One has to consult with the underwriters and marketing people to see what plans they have for expansion, what are their expected loss ratios, what are the sizes of individual losses they expect to have and what is the expected frequency of these losses. No portfolio is static. An important point to find out is : how will the structure of the portfolio which has been seen earlier on, change during the coming year? More capacity may be needed to cope with aquisition of another company's portfolio or for the opening of a new branch or lauching of a new product.

When the regulatory bodies look at the viability of a company in a market, they look at its solvency ratio. Countries establish minimum ratios below which they would consider a company as insolvent. Since the solvency ratio is the ratio between capital and reserves on the one end and net premium earned on the other, the higher the capital and reserves the larger will the retention of the company be. In view of the underwriting results of companies, cash flow produced by the business written has become very important. If the type of business written produces a high cash flow, the company would on the basis of its high liquidity carry a higher retention than it would for a similar portfolio with lower cash flow, otherwise it would pass some of that liquid money to its reinsurers. Liquidity also affects the fixing of cash loss limits. If the company holds a lot of funds in cash and short-term investment, thus having high liquidity, it can have a high retention and a high cash loss limit. If however funds are invested on longer term securities, the retention would be lower. Although reciprocal exchanges are no longer what they used to be, a company may decide to enter into reciprocal exchanges. It may either have a low retention and cede more of the smaller risks to its reinsurers in order to attract business from them in reciprocity.

Whatever plans are developed by a company, these must be acceptable to the reinsurers. The company must therefore, keep in touch with the realities of the market. The insurance-reinsurance subject is well developed in industrial countries: The American terminology for a department as a " profit centre " has now become part of the language of insurance-reinsurance companies. In practice all this means is that a predefined section of the company is made responsible for its trading result. There is nothing really new in this, except that a stronger emphasis is being placed on profit centre managers, which is highly commendable, but when considering reinsurance, this should not be the dominating factor but rather a discipline since reinsurance is based on mutual confidence and ethical principles. To manage effectively the reinsurance of a profit centre, it is essential that the peaks and the random fluctuations are identified; these will vary from one centre to another but in every case identification is not only essential but possible. The levels will be different depending upon many factors which include the number of units, the unit values, frequency of insured perils occuring,and not least, the volume of premiums net of inflation. Very often the content of the profit centre so identified will evolve the level of reinsurance required. Continuity and communication are vital ingredients, both in management of people and the management of monies.

The insurance-reinsurance relationship, like any other relationship, should be on the basis of mutual adjustments, co-operation and in the spirit of " give and take ". If the parties to the reinsurance contract act on this basis, and always remember the marriage vows, there should be no case for " divorce " between the reinsured and reinsurer, but on the contrary, the marriage should bring happiness by proving mutually beneficial to all the parties in the insurance-reinsurance relationship.

VI - Evaluation, Comments and Recommendations.

As any other country in the Third World, the problems of insurance and reinsurance industry are alike as in Lebanon. There are many difficulties facing this industry in Lebanon which increased during the civil war. The most important problems are:

1- The lack of specialization in insurance and reinsurance field. There are no colleges or schools to offer this major.

2- The insurance companies in Lebanon act and behave as brokers. They take advantage of the reinsurance companies by ceding to them all operations and are merely rewarded by a percentage of the premiums as commissions.

3- As a consequence of the above mentioned act, the Lebanese insurance companies lose the source of liquidity and thus, the expansion of their companies becomes nearly impossible.

4- By following this policy, most Lebanese insurance companies become partially or totally unable to make investments which is the primary financial inflow to their business.

5- The inflation factor demolishes the hope of many insurance companies to survive and to compete with other insurance companies. Many insurance companies declared their bankruptcy due to the fact that their administrative and financial responsible personnel did not act promptly as buyers of U.S.Dollars and other hard currencies at the first stage of the Lebanese Pounds' deterioration.

6- During the civil war, the Lebanese Government's supervision and control over the insurance companies shrank consequently and created many problems and disputes between the insured and the insurer. This situation put more monies in the hand of insurance companies because they did not pay fully their liabilities to the insured when claims occurred. In other words, insurance companies with such character behave totally different from their real message. They have more money now and they are proud of this result, but in reality, this money belongs to their clients who submitted claims.

7- The number of insurance companies in Lebanon increased not only due to the market need, but because the law which organizes the establishment of such companies is not active nowadays.

8- The insurance industry in Lebanon as well as in the Arab countries and in the Third World countries in general, is still considered by their citizens as a luxury and not as a necessity such as it is considered in the developed countries in the West.

These major problems might be resolved or cured by many direct and indirect actions such as :

1- It has became necessary to establish colleges and schools that are specialized in the insurance and reinsurance field, since most of the students who study this major abroad do not came back to Lebanon due to the existence of better opportunities and offers abroad.

2- The insurance companies in Lebanon have to change their attitude regarding this industry by dealing with this business as professionals not as brokers only. By applying this attitude, the citizens' view toward this industry would change and they would feel that this industry is very important for the continuity of their business.

3- The managers of the insurance companies should know that the role of being brokers only is fatal to their business future. Investment must be the primary objective of any insurance ompany to enhance more business and job opportunities thus promoting the economic welfare of the country and supporting along with other economic sectors, the growth of the GNP in the country.

- The inflation factor would be solved by the "dollarization" of policies covers as well as the premiums. This factor has two side-effects. The first one is the betterment of the company's position when the U.S.Dollar currency improves vis a vis the Lebanese Pound. The second one is the deterioration of the assets and investments of those companies which did not act promptly during that mess.

- The role of the Lebanese Government as an organizer and controller f the insurance companies changes positively or negatively according o the political situation. However, the National Council for Inurance already exists, but it is not active in this period. For his reason, a sense of responsibility among insurance companies ust take place and here comes the role of the insured. He could ncourage the good and respectful insurance companies by dealing with hem, and discourage and humiliate the purely commercial ones.

Our recommendation to this industry is to improve and build tself on a solid ground, and this can be summarized by a few points:

1- There is no doubt that for the continuity of the insurance industry, national reinsurance companies should be founded. The lack of such reinsurance companies would present a threatening factor to the national insurance industry . The creation of such reinsurance companies will result in increasing the amount of retained premium within the country thus restricting the outflow of foreign currency and contributing a positive impact on the overall balance of payments. It will also lead to the growth of the amount of insurance reserves and will increase the Lebanese underwriting capacity.

However, underwriting capacity is not the only problem that insurance companies seek to resolve. Since there are many insurable interests with complex and special patterns of risk, the direct insurance companies need the support of the reinsurer to assess the risk properly. They also need his advice regarding loss prevention and protection, rating, setting the special terms of the insurance policy, and finally managing loss adjustment.

2- Awarness and education of staff are very important to improve the insurance-reinsurance industry in Lebanon. If these obstacles are removed, then this industry would achieve a major break-trough towards the status they aspire. If people become more aware of insurance, then the volume of premiums generated will definitely increase, which means more growth of the insurance companies and consequently the whole sector. Moreover, the portfolio of these companies will become composed of a large number of small risks instead of the small number of enormous ones. Thus the companies will have more stability and will be protected against fluactuations.

3- It is necessary to possess proper insurance education in Lebanon. It is very important to have joint training centers. In addition to providing sound technical background, the center has a great advantage in grouping students from different backgrounds and introducing them to each other. The students who spend a great deal of time together, get the chance of knowing each other and understanding their different mentalities and backgrounds. They can also learn how to work together and think and act as a team.

4- Since insurance involves risk taking decisions, and decision making is best when backed up by a sufficient amount of information, there is a great need to establish a powerful information center. This information center should be able to issue statical reports related to the various aspects of insurance in Lebanon, in the Arab World and worldwide as well. It should also be able to provide the Lebanese insurance companies with information about their international reinsurers and recommend whether they should deal with them or not from a strictly technical and financial point of view.

It will be of great advantage if this center could issue other non-insurance reports example of which are the expected gross national product figures, economic trends, employment levels and investment opportunities. Such reports can help top management in their strategic management processes.

From what has been discussed, we conclude that the insurance and reinsurance sectors should be given every care and attention to pass from childhood to a growing manhood. Efforts should be made to push this industry forward and remove obstacles from its way so as to face the difficulties challenging it with firmness and courage. There is a long and hard way for this industry to go through; however, with good intentions, strong will, patience and determination, this child can survive with a glamourous and prosperous future.

Appendix

Tables : 1- 5

Table : 1

WRITTEN PREMIUM 1983-1988

MILLION LEBANESE POUNDS

me of the ompany	1983	1984	1985	1986	1987	1988
ION NATIONALE	15,-	20,-	30,105	90,10	340,904	610,-
NKERS ASSURANCE	17,146	18,602	25,870	75,-	210,420	380,-
ION DES ASSURAN- S de PARIS (UAP)	10,699	10,823	15,900	50,-	190,-	260,500
BANO-ARABE	10,215	10,808	14,240	49,-	200,-	310,-
OPE	7,883	8,778	21,310	60,-	190,-	265,601
-PAUL	6,968	8,763	25,305	19,419	140,110	160,150
-MASHREK	4,350	8,337	22,015	54,-	N.A.	N.A.
BANO-SUISSE	8,265	8,295	21,-	46,-	110,105	201,101
PHENICIENNE	6,585	7,360	10,100	25,-	N.A.	N.A.
ERICAN LIFE	5,884	7,350	15,100	88,900	290,-	415,-
CIETE NATIONALE ASSURANCE	6,586	6,941	19,009	39,019	190,-	213,-
COMPANIE LIBA- ISE D'ASSURANCES	5082	6,731	13,019	34,010	N.A.	N.A.
CIETE LIBANO-FRAN- ISE D'ASSURANCES	5,544	6,100	10,014	24,900	110,141	180,150
-NISR	6,423	5,542	10,133	55,180	177,-	201,-

Table : 1 (continued)

ame of the Company	1983	1984	1985	1986	1987	1988
OMMERCIAL INSURANCE	6,125	5,302	7,770	27,155	102,401	189,13
ETRA	4,344	5,210	8,190	18,130	90,015	N.A.
ISIR	4,188	5,208	N.A.	N.A.	N.A.	N.A.
ENERAL GUARANTEE ROUP (3G)	3,211	4,355	10,190	33,980	150,-	210,-
VERSEAS INSURANCE	3,254	4,236	6,710	14,600	N.A.	N.A.
OFRACE	4,290	4,159	18,188	60,199	155,304	219,60
OGINAR	3,322	3,909	5,999	15,111	90,100	141,10
ABIA INSURANCE	4,280	3,675	6,189	13,140	N.A.	N.A.
SSUREX	2,774	3,634	6,100	21,900	N.A.	N.A.
OSPERITY INSURANCE	3,281	3,445	17,100	60,018	130,-	179,-
AB UNIVERSAL INSU-NCE	1,418	3,441	18,-	90,018	340,-	595,-
TERNATIONAL INSU-NCE	2,675	3,439	7,900	101,000	90,-	116,101
GAL & GENERAL	3,495	3,100	6,100	18,600	N.A.	N.A.
RTH ASSURANCE	2,570	2,376	77,110	29,998	89,100	177,100
ANA INSURANCE	1,440	2,364	6,017	31,066	102,-	198,-
TY ARABIAN INSURANCE	0,261	1,843	2,300	14,500	N.A.	N.A.
-SALAM	1,826	1,482	3,700	20,600	1140,-	90,-
NTINENTAL INSURANCE	1,782	1,372	2,100	16,700	N.A.	N.A.
I	1,692	1,368	2,013	N.A.	70,-	N.A.

Table : 1 (continued)

ame of the Company	1983	1984	1985	1986	1987	1988
EDIT LIBANAIS D'AS-RANCE	N.A.	1,342	1,370	3,900	40500	N.A.
FRA INSURANCE	N.A.	1,212	3,100	15,102	N.A.	N.A.
MUTUELLE GENERALE ASSURANCE	0,406	0,943	1,100	N.A.	N.A.	N.A.
EA	1,289	0,915	N.A.	N.A.	N.A.	N.A.
OVENCIAL INSURANCE	0,822	0,854	3,100	6,200	5560	7,777
PINA	1,342	0,842	2,100	5,900	60,-	N.A.
SHUDA	0,566	0,672	N.A.	N.A.	N.A.	N.A.
ECAM	1,666	0,660	N.A.	N.A.	N.A.	N.A.
NERAL ARABIAN	0,284	0,581	0,900	5600	15900	N.A.
DELITY	0,629	0,546	1,600	8,100	55,-	102,-
IC	0,292	0,513	1,900	3,400	33,-	N.A.
TRA D'ASSURANCE	1,390	0,493	--	--	--	--
SSIR D'ASSURANCE	0,108	0,358	0,900	2,500	14,-	N.A.
-MANAR D'ASSURANCE	0,943	0,292	0,800	3,050	66,-	101,-
BLOS	0,166	0,163	N.A.	N.A.	N.A.	N.A.
YAL INSURANCE	0,123	0,49	N.A.	N.A.	N.A.	N.A.
RDIAN ROYAL	0,163	0,177	N.A.	N.A.	N.A.	N.A.

ource : Al-Bayan Magazine, NO. 170,171, 185, 187, 190, March 84, April 86, June 88, pp. 36,45, 47.

Table : 2

LEBANON WRITTEN PREMIUM 1981-1986

LEBANESE POUNDS

BRANCH	1981	1982	1983	1984	1985	1986
MOTOR	33613781	45003157	57333527	55621905	82006266	140992639
FIRE	21359878	22957659	34148186	39600293	54778783	102705818
MARINE	34296707	36659390	35958584	50321984	68464673	143061688
GENERAL ACC.	52061633	63740139	88298977	97672469	121889669	238719260
TOTAL NON-LIFE	141331999	168360345	215739274	243216651	327139391	625479405
LIFE	46909746	59694454	78021068	93073251	152191586	225690055
TOTAL	188241745	228054799	293760342	336289902	479330977	851169460

Source : Societe Centrale De reassurance, Annual Report And Financial Statements, 1984, 1986, pp. 25, 26.

Table : 3

LEBANON WRITTEN PREMIUM 1981-1986

SHARE PER BRANCH

BRANCH	1981	1982	1983	1984	1985	1986
MOTOR	17.86%	19.73%	19.52%	16.54%	17.11%	16.56%
FIRE	11.35%	10.07%	11.62%	11.78%	11.43%	12.07%
MARINE	18.22%	16.07%	12.24%	14.96%	14.28%	16.81%
GENERAL ACC.	27.66%	27.95%	30.06%	29.04%	25.43%	28.05%
TOTAL NON-LIFE	75.08%	73.82%	73.44%	72.32%	68.25%	73.48%
LIFE	24.92%	26.18%	26.56%	27.68%	31.75%	26.52%
TOTAL	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source : Societe Centrale De Reassurance, Annual Report And Financial Statements, 1984, 1986, p. 27.

Table : 4

WRITTEN PREMIUMS IN ARAB COUNTRIES

1984 - 1985

MILLION U.S. DOLLARS

COUNTRY	1984	1985
ALGERIA	703,10	782,90
BAHRAIN	50,40	54,90
JIBUTI	N.A.	N.A.
EGYPT	399,80	447,40
IRAQ	541,90	578,80
JORDAN	45,90	53,40
KUWAIT	212,50	194,10
LEBANON	26,70	19,20
LIBYA	202,40	163,80
MAURITANIA	0,70	6,20
MOROCCO	204,30	219,10
OMAN	35,20	40,10
QATAR	52,80	49,20
SAUDI ARABIA	628,10	554,80
SOMALIA	6,70	11,30
SUDAN	34,60	22,30
SYRIA	107,30	115,-

Table : 4 (continued)

MILLION U.S. DOLLARS

COUNTRY	1984	1985
TUNISIA	117,90	150,-
U.A.E.	209,,50	203,70
YEMEN (A.R.)	15,80	15,20
YEMEN (P.D.R.)	14,,90	14,60
Total	3,610,50	3696,--

Source : Arab Insurance Group, Annual Reports And Financial Statements, 1984, 1985, pp. 34, 35.

Table : 5

DISTRIBUTION OF REINSURANCE COM-
NIES IN THE WORLD

	All Companies		20 Largest Companies
	Number	%	
United Kingdom	64	15	1
Europe	110	26	12
Middle East	15	4	--
Africa	16	4	--
Asia and Far East	42	10	1
U.S.A. Canada and Bermuda	112	27	6
Lattin America and Caribbean	28	7	--
Australia	30	7	--
	417	100	20

Source : Societe Gentrale De Reassurance, <u>Annual Report And Financial Statements,</u> 1984, p. 16.

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