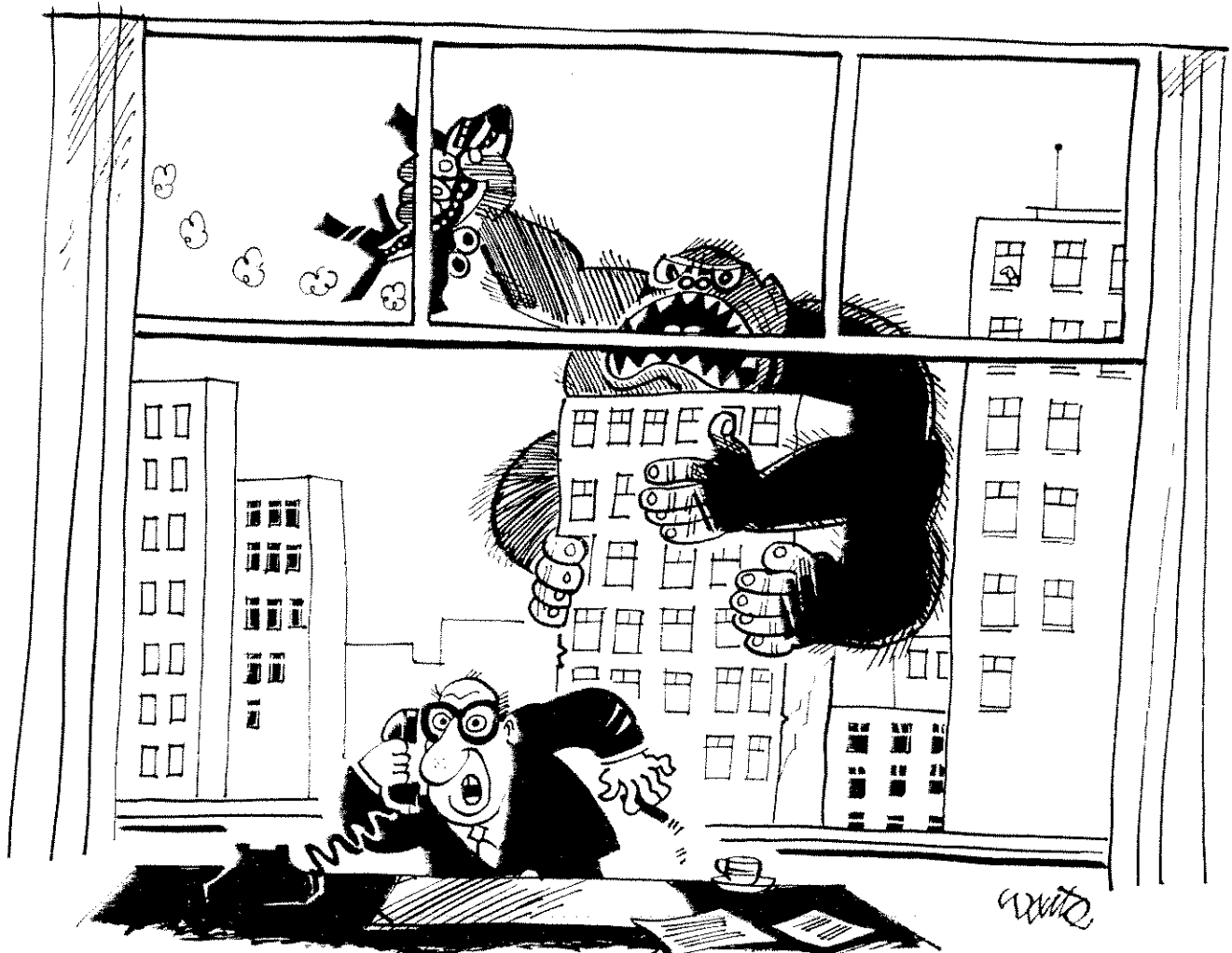


# Why have reinsurance?

It is not often that a week goes by without a report appearing in newspapers, on radio and television of an event occurring which will cost millions of pounds or dollars. We have always lived with and suffered from natural disasters, such as earthquake, fire and windstorm. All can cause tremendous suffering in human, material and financial terms. Since the Industrial Revolution we have created many risks which, potentially, carry the same catastrophic consequences.

Most risks, both natural and man-made, are insured and yet the likely losses are often beyond the capacity of any single insurance company or even insurance market. Reinsurance is the means by which insurance companies obtain the necessary protection. It is not just the large individual risk against which the insurer has to obtain protection; the increase in the number and size of potential liabilities, and the increase of court awards all combine to affect the potential claims which an insurer may have to pay.



*"Reinsure everything - and hurry."*

Furthermore, the period from the date of an occurrence to final settlement of the claim often extends to a number of years whilst it is impossible to judge to any accurate degree the maximum possible loss in advance.

There are many reasons why an insurer buys reinsurance protection, the principal ones being to:

- a* Protect the capital of the insurance company and its shareholders.
- b* Stabilise its results from year to year by levelling claims fluctuations.

- c* Increase its capacity to handle larger and more complex risks in various classes of business.
- d* Maintain any statutory minimum solvency requirement and provide security.
- e* Spread risks throughout the world markets, not just locally, to lessen financial impact on any single economy.

Having established the need for reinsurance, we will look at the principles and practice of reinsurance in the chapters which follow.

# Who provides reinsurance?

## Insurance and Reinsurance

### *INSURED*

Public, Individuals, Organisations, Collective Bodies

### Insurance

### *INSURERS*

Companies, Lloyd's Syndicates, State Insurance Corporations

### Reinsurance

### *REINSURERS*

Insurance Organisations as specified above, Specialist Reinsurance Companies, State Reinsurance Corporations, Pools

### Retrocession

### *RETROCESSIONAIRES*

Other Insurance and Reinsurance Organisations

As with the insurance market, the reinsurance market involves dealings between sellers, buyers and intermediaries. However, whereas in the insurance market the buyer or insured is rarely an expert in insurance matters, the reinsurance buyer or insurer will normally be well informed about reinsurance.

Reinsurers themselves also need to spread some of the risks which they assume and will therefore be both sellers and buyers.

## Sellers of Reinsurance

### Professional Reinsurance Companies

The term professional, when applied to reinsurers, indicates that they only transact reinsurance and do not undertake direct insurance business. Reinsurance is an international activity and most of the major professional companies have subsidiaries or branch offices in different countries. Others are located in only one market, but usually provide a full international service either directly or through brokers.

The majority of professional reinsurance companies are owned by, or have strong links with, large direct insurance companies, but largely operate independently from the parent company.

The major professional reinsurance companies are to be found in West Germany, Switzerland, the United States, France, Scandinavia, Japan and the United Kingdom.

### Insurance Companies

Both United Kingdom and overseas companies with large direct portfolios have been involved in writing reinsurance business for many years, but in the past often on a reciprocal exchange basis. Such arrangements involve two companies exchanging a proportion of their respective reinsurance requirements, with the aim of spreading risks and obtaining a more balanced portfolio by geographical region and branch of business without reducing premium income. The reinsurance departments of many of these companies became very large and were involved in the handling of both inwards and outwards

non-reciprocal reinsurance business.

For a variety of reasons, a number of the companies then established subsidiaries which solely transacted reinsurance. Although some of these reinsurance subsidiaries curtailed their activities in recent years many have maintained a viable existence.

### Lloyd's Syndicates

A majority of Lloyd's syndicates have been involved in writing both insurance and reinsurance business for centuries, although the development on the reinsurance side has only increased in volume terms since World War II. At the present time more than 50 per cent of the premium income written by individual syndicates, through Lloyd's brokers, is reinsurance. Some of the syndicates now specialise in reinsurance and are often called upon by Lloyd's brokers to lead a reinsurance risk.

### Insurance/Reinsurance Exchanges

In recent years a number of exchanges were established in the United States and other countries based on syndicates and registered brokers, although there was a major difference from Lloyd's in that the participating groups, both corporate and individual members, did not have unlimited liability. Many of the syndicates in the exchanges wrote both insurance and reinsurance business, some with indifferent success which has led to support being withdrawn.

### National Reinsurance Companies

In many developing countries and socialist states, the governments have established state reinsurance corporations to control all or part of the reinsurance needs of local insurers. The state reinsurance organisations have emerged principally as a means of saving on valuable

foreign exchange rather than transacting reinsurance for its own sake. The state companies sometimes fulfil the role by controlling the activities of the local direct insurance companies in the terms and capacities they offer to the local market.

Arrangements usually take the form of compulsory cession of the local companies' business either in total or in part. Generally, the local reinsurer will pass back to the local insurance market a certain percentage of the total portfolio before transferring any desired portion to foreign markets or obtaining protection from those markets for the business which they retain.

In recent years a number of regional reinsurance organisations have been established to enable countries in the same region to pool their reinsurance business or certain parts of it, particularly where the specialist knowledge to underwrite specific risks is limited.

### Underwriting Agencies

For those companies which do not wish to establish their own reinsurance operation in a particular country, but who wish to gain access to that particular market, an underwriting agent may be appointed to accept business on their behalf in the territory concerned. The underwriting agencies are often managed by brokers who arrange for underwriters to write selected business for their clients. In the United Kingdom, however, recent legislation requires brokers to divest themselves of such responsibilities.

### Pool Operations

In a similar way to the state-controlled national reinsurance companies mentioned above, local pools are established to minimise the total reinsurance necessary outside a local market. The pool operations are generally limited in scope in that they are intended to fill a specific need. For

example, in aviation business the capacities required and the volatile nature of loss experience may preclude the placement of such business with any one company; similarly in other classes the nature of the business may be too undesirable or hazardous for the market to handle in a normal competitive way, for example earthquakes. Normally, the underwriting is performed by a specialist underwriter or underwriters from one of the leading reinsurance organisations on behalf of the members participating in the pool. The pools are generally divided into two categories, 'specific' which deal with a particular type of risk, for example oil rigs, and 'catastrophe' which deal with the accumulation of risks under any one event, for example an earthquake or hurricane.

### Captive Companies

Many large manufacturing or trading organisations have established insurance subsidiary companies to look after some of the parent organisation's insurance needs. However, a number of captive companies have now broadened their sphere of activities to the writing of open market insurance or reinsurance business.

### Buyers of Reinsurance

The following organisations need reinsurance cover:

#### Direct Insurance Companies

All members of the direct insurance market, from small specialist companies to large composite ones, require reinsurance protection in some way. These reinsurance requirements depend on the factors which were covered in chapter one.

#### Lloyd's Syndicates

There are over 400 Lloyd's syndicates, all of which require reinsurance protection similar to the direct insurance companies.



... "Bristol City ... Bristol Rovers ..."

Each syndicate consists of individual underwriting members, with unlimited liability for any underwriting losses. Some names have, in recent years, bought reinsurance cover to limit their personal potential losses.

#### State Insurance Corporations

Many of the developing countries and socialist states have established state insurance corporations as well as those for reinsurance. Much of the reinsurance needs of such organisations are met by the local state reinsurance organisation, but in many countries the insurance corporations are allowed to place some of their business on the open reinsurance market after they have fulfilled any compulsory obligations.

#### Reinsurers

In addition, all of the sellers of reinsurance covered in the first part of this chapter need to obtain protection for their accounts and they in turn reinsure with other insurance and reinsurance organisations.

### Intermediaries

#### Reinsurance Brokers

One of the particular features of London as a reinsurance centre is the role played by the reinsurance brokers. Historically, the broker has been a key figure in the London insurance market because of the necessity to use registered brokers to place business at Lloyd's. This has led to the brokers playing a vital role in the placement of international reinsurance business with Lloyd's and in the remainder of the reinsurance markets in the United Kingdom and overseas.

In the past twenty-five years, brokers have travelled extensively throughout the world to service their existing accounts and to seek new business. At the same time, overseas companies

have shown an increasing desire to write a reinsurance account in London and the brokers have been active in enabling them so to do.

Most international reinsurance brokers provide a full service to their clients, thus relieving them of the administrative burdens associated with writing business in a different country in return for a commission based on a percentage of the premiums for such business.

#### Management Companies

The growth of captive insurance companies has led to a new kind of organisation, the management company. Such companies look after the day-to-day running of a number of insurance companies, particularly captives, thereby reducing the operating costs of each company under their management. In addition to looking after the administration, the managers will also place the required reinsurances sometimes by using a broker or alternatively by placing the business direct with specialist reinsurers. In return for such services the management company receives a fee or commission, usually a percentage of the premiums involved.

### The London Reinsurance Market

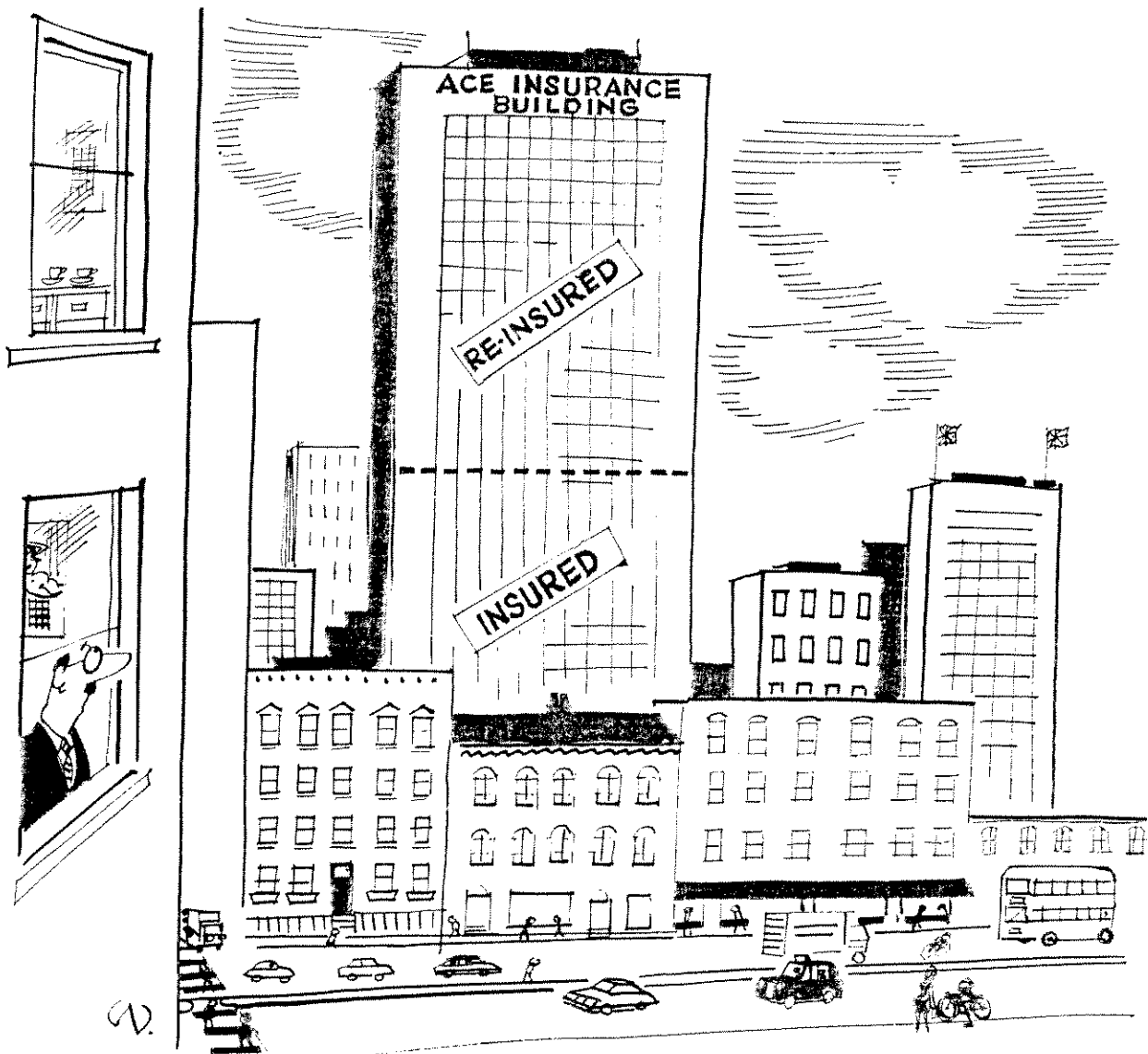
The different organisations described in this chapter combine to form the London reinsurance market. Each component has its own terms of reference, philosophy and practice and it is this variety which gives the market both flexibility and enormous capacity as well as expertise for virtually all classes of business. Successive governments have always appreciated the vital role played by London as an international financial centre and therefore have not interfered unduly in either the insurance or reinsurance markets.

# Classes and methods

## Classes

General business in the insurance industry is conventionally divided into four main classes (life business is dealt with separately in chapter six) as follows:

- a *Fire or Property* – Fire reinsurance covers many different perils in the same way as the insurance market for original business, the principal ones being: fire, explosion, riot, malicious damage, windstorm, flood, earthquake, and business interruption or loss of profits resulting from one of these perils (sometimes called consequential loss).
- b *Marine* – Marine reinsurance covers all forms of hull, cargo, oil rig and war risks, and marine liabilities.



- c *Aviation* – The main branches covered are hull, cargo, and various liabilities including public and passenger.
- d *Accident (Casualty or Miscellaneous) including Liability* – The accident class normally covers all types of reinsurance not covered by the three classes above. It includes risks such as personal accident, motor, theft, engineering, credit, livestock, and various liabilities.

Whilst the above classes are used extensively in the reinsurance industry an alternative division is more appropriate in considering the uses of reinsurance. This is the division into 'short-tail' and 'long-tail'.

### Short-Tail

Short-tail business is, essentially, that on which the duration of claims settlements (the tail) is relatively short. An example is the insurance of property business. If the property, for example a factory or a computer installation, is damaged by an insured peril, the claim is usually quickly apparent to the insured and advised to the insurers. This means that the damage is assessed and repaired, if possible, and the claim settled within a short period. Only in the most severe cases will a claim remain unsettled after a year.

### Long-Tail

Long-tail business is that on which the duration of claims settlement (the tail) extends a very long time and normally after the end of the period of the original policy or the reinsurance contract. The contrast between long-tail and short-tail business is best seen in motor insurance, which contains elements of both.

Let us imagine a serious motor accident. The damage caused is two-fold. There is, firstly, the property damage to the vehicles. This is clearly capable of quick assessment; the cars are repairable, at a defined cost, or they are not, in

which case the claim is settled at write-off values. An argument about whose fault the accident was will, of course, tend to prolong settlement thus already beginning to lengthen the tail.

However, if we take this a stage further and consider the injuries which may have been caused to some of those involved, not only will settlement of the claim be delayed whilst arguments over liability are pursued, but also the injured persons will not unreasonably wish to wait until they see the final effects of the injuries on their lives before they decide how much they should accept by way of compensation. It is not uncommon for five years or more to pass before such a claim is finally settled.

With a motor accident, we are dealing with circumstances where generally the occurrence of a loss is quickly apparent. The tail becomes much longer, however, where this is not the case. A ready example of this is provided by industrial diseases which only become apparent to the sufferer after a period of many years has elapsed and, perhaps, after the employee has left the harmful employment.

Such losses, then, are not apparent for some years after the original policy or reinsurance contract may have expired. The insurer and the reinsurers must, therefore, put aside funds to cover the risk of claims of this nature which will not be notified to them until many years later.

## Forms of Reinsurance

### Facultative Reinsurance

This expression is used to describe the method of reinsuring risks on an individual basis where the original insurer has no obligation to cede a risk, and the reinsurer has the option of accepting or declining each risk. Originally, all reinsurance was transacted facultatively, but, because of the high administrative costs, this method has largely been replaced by the second form, treaty reinsurance. When reinsuring facultatively the insurer should obtain reinsurance coverage

before accepting the insured's proposal. This is done for two reasons; firstly to ensure that reinsurance is available and that the terms do not exceed those applied to the direct insurance and secondly to back up the judgement of the original underwriter, who will often benefit from the reinsurer's knowledge of a particular risk or class of risk.

### Treaty Reinsurance

This method consists of an agreement between the original insurer and the reinsurer whereby the reinsurer automatically accepts a certain responsibility for all the risks falling within the scope of the agreement. This is an obligatory contract which binds both parties. The reinsurer

can not decline risks falling within the scope of the agreement and the insurer must cede all the risks coming within the scope to be reinsured under it. A formal treaty wording is usually drawn up by the parties to describe the monetary limits and mode of operation, the classes of business covered, the territory or scope and the risks excluded, the calculation and payment of claims, the calculation and payment of premiums and commissions, and the period of agreement.

Since treaty reinsurance provides automatic cover, the insurer is guaranteed a definite amount of reinsurance protection on every risk accepted. The administrative costs are therefore much lower per risk than those applying to facultative reinsurance.



*"We shall continue to call it 'Reinsurance' if you don't mind - NOT 'Pass the parcel'."*

## Methods of Reinsurance

The methods whereby an insurer reinsures individual risks (facultative) or a block of business by automatic arrangements (treaty) with a reinsurer fall into two broad categories, proportional and non-proportional. The various methods for treaty business are described below.

### Proportional Treaties

Under proportional treaties the original insurer (the ceding company) decides what part of the original insurance it wishes to retain for its own account (its retention) and reinsures (cedes) the balance with a reinsurer or reinsurers. Premiums and losses are shared in the same proportion as the ceding company's retention and the reinsurer's cession bear to the sum insured of the original insurance. The three most common forms of proportional treaties are described below.

**Quota Share** The quota share treaty is an automatic reinsurance whereby the ceding company is bound to cede a fixed percentage of every risk written by it. The same *percentage of every risk* in the class of business covered is reinsured, no matter how large or small the sum insured and irrespective of whether the risk is 'good' or 'bad'. This is the main difference between surplus and quota share.

Usually the treaty contains a monetary limit for the cover, for example, *The reinsurer shall accept 50 per cent of each and every risk insured, subject to a maximum acceptance of £10,000 any one risk.* This is to ensure that the ceding company cannot write 'bad' business and pass all their poor risks onto the reinsurer and avoid suffering financial loss itself.

**Surplus Reinsurance** Under a surplus treaty the ceding company decides the limit of liability which it wishes to retain on any one risk or class

of risk. This limit, called the ceding company's retention, will be the *maximum* which it will retain, but it may retain such lesser amount as it may wish though usually subject to a minimum level. The surplus over and above the retention will be allotted to one or more reinsurers.

The limits will be scaled down according to type of risk and set out in a table of limits. The amount ceded to a surplus treaty is normally expressed in the number of 'lines' it contains. A 'line' is equal to the ceding company's retention. Thus, where a ceding company has a 10-line surplus treaty on the basis of a maximum retention of £10,000, the maximum capacity of the treaty to absorb liability over and above the retention would be £100,000 (10 lines at £10,000), and the ceding company would have treaty protection for policies having sums insured up to £110,000. If, for a particular risk, the company decides to retain only £5,000, the amount ceded to the treaty for that particular risk may not exceed £50,000 (10 lines at £5,000).

Examples of this method of reinsurance and the others described below are given at the end of this chapter.

An alternative form of surplus reinsurance is the obligatory surplus contract. Before the advent and growth of excess of loss protection, this form of surplus contract was very much in use in the marine reinsurance world – both hull and cargo. The contract would have definite retentions applicable to different classes of vessel with limits in each class up to which the reinsured would cede its surplus. As it was obligatory with no options such as contained in a 'line' treaty, the contract would respond to a claim even if the casualty occurred prior to documentation taking place. The big disadvantage with an obligatory surplus treaty was the administrative costs in running it – particularly on cargo risks – as every incoming advice had to be recorded: first to see whether the retention was exceeded and then to cede the surplus to treaty reinsurers.

*Quota Share and Surplus Combined* Quota share and surplus treaties are often arranged in conjunction with each other to cover a particular class of business. When this is done, cessions are first made to the quota share treaty and further amounts are ceded to the surplus treaty. The ceding company keeps a retention under the quota share treaty and usually this retention then becomes the 'line' on which the surplus treaty is based. The ceding company does not keep two retentions, one under each treaty. However, it is now becoming more common to consider the whole of the underlying quota share treaty as the 'line' and this should then be termed more accurately as the *gross line* as opposed to the *net line* (the ceding company's retention under the quota share treaty). The difference between gross and net lines is shown in the following example.

#### QUOTA SHARE TREATY

Limit (Gross line)	= £100,000 any one risk
Ceding company's retention 10% (Net line)	= £10,000 any one risk
<b>Surplus treaty</b>	
9 net lines = $9 \times £10,000$	= £90,000 any one risk
9 gross lines = $9 \times £100,000$	= £900,000 any one risk

Under this example, all risks up to £100,000 sum insured may be ceded to the quota share treaty and the ceding company will retain 10 per cent of the amount ceded. The balance over £100,000 will be ceded to the surplus treaty up to £90,000 if the surplus is 9 *net* lines or up to £900,000 if 9 *gross* lines are used. In any event, the ceding company is never committed for more than £10,000 for its own account. It can be seen from this example that it is extremely important to determine whether a surplus treaty, when arranged in conjunction with a quota share is based on net or gross lines as the difference in capacity can be considerable. In practice it would be unlikely that reinsurers would be willing to

provide quota share and surplus capacity totalling £990,000 on a gross basis when the insurer is only retaining £10,000 net.

#### Non-proportional Treaties

Non-proportional treaties do not apply to specific risks but to losses, by limiting the amount of the original insurance company's loss for any one event. The company does not cede risks; the reinsurer agrees to pay that amount of the loss over and above, or in excess of, a certain amount called the company's retention.

There are two basic forms of non-proportional reinsurance and these are explained below:

*Excess of Loss* Under this form of reinsurance the reinsurer does not become liable until a loss occurs and exceeds the retention of the ceding company. Once this retention has been exceeded, the reinsurer pays that amount in excess of the retention up to the limit of the treaty. The amount of times the reinsured is able to collect losses under the treaty will be governed by how many reinstatements he has been given by the reinsurer – for instance, if he has three reinstatements he will be able to collect up to four times the contract limit in all during the contract period after which he must either buy more cover or be prepared to keep the losses nett for his own retained account. The retention of the ceding company is often referred to as the deductible or excess point under the Excess of Loss contract.

Where a company finds that it is sustaining losses which exceed the limits of its excess of loss treaty, it may either bear the balance for its own account or effect further excess of loss reinsurance (that is, further layers of excess of loss protection). A facultative reinsurance may be effected on an individual risk where a large loss may be expected to occur or a further treaty may be arranged. Thus, the company may effect first, second, third, fourth, and even fifth excess treaties should the need arise. The first excess (first layer) would cover losses in excess of the

ceding company's retention up to a fixed sum before any other excess cover becomes operative. The second excess (the second layer) would commence where the first ended and continue to a further limit and so on.

For certain classes of business, such as motor, there may be a legal requirement for original policies to give unlimited indemnity, in which case the excess of loss treaties may also be of unlimited indemnity.

A reinsurer may not wish to be liable for the whole of the excess in any one layer but only for a percentage, for example 90 per cent, and the ceding company may be liable for the balance. This may be expressed as "treaty covers 90 per cent of £45,000 in excess of £5,000 of each and every loss arising out of any one event with a maximum liability to the reinsurer of £40,500".

*Stop Loss (Excess of Loss Ratio)* Under stop loss reinsurance, the reinsurer covers losses incurred by the ceding company on a particular class of business when its annual loss ratio, that is the ratio of claims paid to premium income, exceeds an agreed percentage of the premium income for that class. All the ceding company's losses are totalled and the balance over and above the agreed loss ratio is covered. The reinsurer's limits and the ceding company's retention are expressed as percentages, though minimum and maximum monetary limits may be inserted. For example to cover 80 per cent of all losses in excess of a loss ratio of 90 per cent up to and including a loss ratio of 120 per cent with a maximum loss to the reinsurer of £60,000.

Losses over 120 per cent revert to the ceding company. The reinsurer often requires the company to act as co-reinsurer for a part of the cover, in the above example 20 per cent, as an additional incentive to maintain a sound underwriting policy.

An essential consideration is that the level of the ceding company's retention is such that it does not guarantee a profit to the ceding company.

## Examples

### Surplus Treaty

*EXAMPLE I* A ceding company has a 10-line surplus treaty with a maximum retention of £5,000 on fire insurances covering flour mills. The maximum amount of cover, therefore, under this surplus treaty is  $10 \times £5,000 = £50,000$  and this treaty would cover all risks up to £55,000, (the ceding company retention plus the reinsurance cover). All liabilities above that figure would have to be borne either by the ceding company or by further reinsurance protection. Various risks are summarised below.

Sum Insured	Retention	Reinsurance Cover	Sum over Treaty
£5,000	£5,000	Nil	Nil
£30,000	£5,000	£25,000	Nil
£65,000	£5,000	£50,000	£10,000

If flour mills are not considered a very good risk, the ceding company may keep less than the £5,000 and the amount to be reinsured will therefore increase. Let us assume that the company decides to keep only £4,000. Its reinsurance cover under the surplus treaty will therefore be  $10 \times £4,000 = £40,000$ . The above figures are summarised below with the new retention.

Sum Insured	Retention	Reinsurance Cover	Sum over Treaty
£5,000	£4,000	£1,000	Nil
£30,000	£4,000	£26,000	Nil
£65,000	£4,000	£40,000	£21,000

*EXAMPLE II* Let us now consider an example where the ceding company provides cover on a warehouse. It decides that its maximum retention is £5,000 and takes out a 10-line first surplus treaty, a 10-line second surplus treaty and a

10-line third surplus treaty. The distribution of various risks are shown below.

Sum Insured	Retention	First Surplus	Second Surplus	Third Surplus
£5,000	£5,000	Nil	Nil	Nil
£80,000	£5,000	£50,000	£25,000	Nil
£120,000	£5,000	£50,000	£50,000	£15,000

*EXAMPLE III* In the first example above we assumed that the whole of the first surplus treaty was covered by one reinsurer. In practice, the cover under most surplus treaties is shared by a number of reinsurers. Each reinsurer's participation will be expressed for example as:

- a 40 per cent not exceeding 4 lines part of 10 lines, or
- b 60 per cent not exceeding 6 lines part of 10 lines

Thus a 10-line treaty with two reinsurers may operate as follows for three different risks:

	Risk 1	Risk 2	Risk 3
Sum Insured	£10,000	£20,000	£55,000
Ceding Company's Retention	£5,000	£5,000	£5,000
Cession to treaty	£5,000	£15,000	£50,000
Reinsurer A			
40 per cent	£2,000	£6,000	£20,000
Reinsurer B			
60 per cent	£3,000	£9,000	£30,000

It will be seen from this example that even when the maximum capacity of the treaty is not used the reinsurers receive their proportion of each and every cession to the treaty.

### Quota Share Treaty

*EXAMPLE I* Let us consider a 90 per cent quota share treaty (that is 90 per cent of each risk is ceded to the reinsurer) subject to a maximum amount ceded of £90,000 on any one risk.

	Risk 1	Risk 2	Risk 3
Sum insured	£500	£10,000	£150,000
Ceding Company share	£50	£1,000	£10,000
Reinsurer's share	£450	£9,000	£90,000
Amount over treaty	Nil	Nil	£50,000

In the above example, an insurer would obtain further reinsurance either with a surplus treaty or on a facultative basis.

### Excess of Loss Treaty

*EXAMPLE* A treaty covers £95,000 in excess of £5,000 in respect of loss arising out of any one event. Examples of various claims under the treaty are given below:

Amount of Loss	Company	Reinsurer	Not Reinsured
£3,000	£3,000	Nil	Nil
£5,000	£5,000	Nil	Nil
£25,000	£5,000	£20,000	Nil
£106,000	£5,000	£95,000	£6,000

# International buying and selling

In chapter two the various components of the world reinsurance markets were covered. In this chapter we will look at the inter-relationship between the buyers and sellers of reinsurance on an international basis.

In most overseas countries, insurers cover risks only relating to or emanating from that

country or region. Much of their investment portfolio is tied up in assets within that country and, therefore, they would be in considerable financial difficulty if a catastrophe of some magnitude were to affect that country. It is essential, therefore, that the reinsurance covers they purchase should be with reinsurers with an



*"Just one more question – how stable is the socio-political situation hereabouts?"*

international portfolio, unless there are statutory requirements to the contrary. This is achieved by reinsurers or reinsurance brokers visiting those countries and, when mutually acceptable, arranging for reinsurance covers to be placed internationally. Thus a risk insured in one country could be reinsured in a number of different countries around the world. The role of the international reinsurance broker will be covered later in this chapter; in the following paragraphs the direct relationship between insurer and professional reinsurer will be explained.

Professional reinsurers can be divided into two groups. Firstly, there are those who transact business either solely or almost entirely through reinsurance brokers. They therefore rely on brokers bringing business to them for consideration. Secondly, there are large professional reinsurance companies, primarily in Western Europe, which have a sizeable team of travellers who go to various countries and have direct contact with the various insurance and reinsurance organisations which require reinsurance protection. The structure of such reinsurance organisations is normally divided into underwriting, marketing, finance, and administration. The underwriters determine the rates required for each different class of business, and the marketing team visits insurers and reinsurers at home and overseas to obtain new business or maintain existing links on the broad terms defined by the underwriters.

There are many factors which an international reinsurer will look at when considering transacting business:

### **Territory**

First of all it is necessary to consider the general conditions which prevail in that country, for instance the political situation and the attitude of the ruling bodies towards international trade. The economic situation is also important, particularly

when considering such matters as the inflation rate prevailing in that country, the currency situation, and any exchange controls which may apply. It is also necessary to consider the sociological position, for instance whether it is generally stable or characterised by disturbances. Finally it is necessary to consider the legal requirements of that particular country.

A further factor to consider in any particular territory is the attitude towards insurance there. It is necessary to consider the local insurance practice with regard to controls and levels of awards, and the experience of settlements with or without statutory controls. Another important aspect is the local insurance market, the number of companies in it, the overall results of the market, and the total premium income per branch.

The third factor to consider is whether any insurance legislation exists regarding obligatory insurance or reinsurance. In some countries it is necessary to match the liabilities with assets in that country, or provide deposits as some form of security against any risks underwritten.

Finally, it is necessary to see if the country or region is prone to peculiar natural hazards such as earthquake, hurricanes and so on.

### **Companies**

After having considered all the factors outlined above with regard to a particular territory and decided to consider underwriting reinsurance there, it is necessary to look at each company with which a reinsurance arrangement may be sought. The sort of things to consider are: who are the owners? how good is the management of the company? who are the underwriters and what is their experience in underwriting the various classes of business? does the company specialise in any particular classes of business and, if so, what are its results in those classes? Finally, it is necessary to examine the reputation of the company locally and internationally, if at all

possible, including settlement of accounts.

The second main concern with regard to the company is the reinsurance programme needed and the terms on which it is prepared to reinsure the business.

After taking all these factors into consideration the marketing specialists have to negotiate with the company in order to obtain that part of the reinsurance programme which they require and on terms they are prepared to write. The major professional reinsurance companies therefore provide an extensive service to their ceding companies by advising them on the most suitable reinsurance programme to meet their needs, providing advice and assistance with management, underwriting and financial matters, and arranging for key staff to be trained.

## Brokers

Some specialist reinsurance companies and most other sellers of reinsurance do not travel to potential clients but rely upon business being shown to them by international reinsurance brokers. The role of the broker is to travel worldwide and provide a placement service for those insurers who wish to avail themselves of it. The broker will ascertain information similar to that detailed above for the territory and companies which he will service. After discussing the reinsurance programme with the client, it is the broker's role to place that business with the various sellers of reinsurance on terms and conditions acceptable to both the client and the reinsurers.

In addition to the placement service, the major reinsurance brokers provide or arrange advice and assistance similar to that given by the professional reinsurers. Within the United Kingdom most reinsurance business is transacted in the London market. On returning from visits to his clients, the broker will arrange for information to be displayed on a 'slip', which is a formalised document in a standard form setting

out the business on offer and the terms at which it is offered. It will include the name of the insurer seeking cover, the class of business to be covered, the type of reinsurance sought, the principal details of the terms proposed for the contract, the brokerage and, usually, the price at which the business is offered. With a new offer of business, certain terms may be left blank for the reinsurer to insert the price and conditions on which he will accept the risk. It is then up to the insurer to confirm to the broker that the terms suggested are acceptable.

Almost invariably an offer, whether by slip or otherwise, will include additional information about the proposed reinsurance. This is designed to help the reinsurer to form an accurate opinion of the risks involved and to arrive at the right price. Naturally, the insurer offering the business and the broker placing it will wish to present this information in the most favourable way. By the same token the reinsurer will know, and will request, the necessary information he needs to ensure that he has the full picture on which to base his judgement.

Different reinsurers have different specialities and the normal pressures of the market place ensure that different views of the price for any given insurance are to be found. It is an important part of the broker's skills to be able to identify the best reinsurers to approach in different circumstances to ensure that the insurer obtains the right cover at the right price with a respected leading reinsurer. The last aspect is particularly important because, as we have seen, it is relatively unusual for a single reinsurer to write or accept 100 per cent of a risk. Thus the insurer or broker must secure the agreement of a number of 'following' reinsurers if the risk is to be fully placed; this task is much easier if the leading reinsurer is respected in that class of business.

## Documentation

All forms of reinsurance which have been

mentioned have normal, fixed terms as well as those which vary from one offer to another. It is necessary to incorporate all these in a formal contract document to ensure that no dispute can arise at a future date regarding the terms of the reinsurance. This document, in all classes of reinsurance, is long and detailed.

For proportional reinsurance business the treaty document will cover: a description or list of the classes of business covered, the areas of the world to which the treaty applies, details relating to the limits of the treaty, the premiums and commissions payable, any risks which are excluded from the cover provided, how claims are to be paid and advised, the date of inception of the treaty, and any further information which the reinsurer feels is necessary.

The treaty documents for non-proportional

business will contain similar information to those under proportional treaties. In addition, further information will be given such as the company's retention, methods of calculating premiums for the treaty, any special clauses which will be applicable to the treaty, such as those dealing with the problems of inflation and currency fluctuation. The main clauses used are briefly mentioned in the next chapter.

## Services

Both the professional reinsurer, who has a considerable travelling team, and the international reinsurance brokers provide a full administrative back-up service to their clients. Long-standing relationships are therefore developed between insurers and reinsurance brokers and professional reinsurers.

# Costing Reinsurance

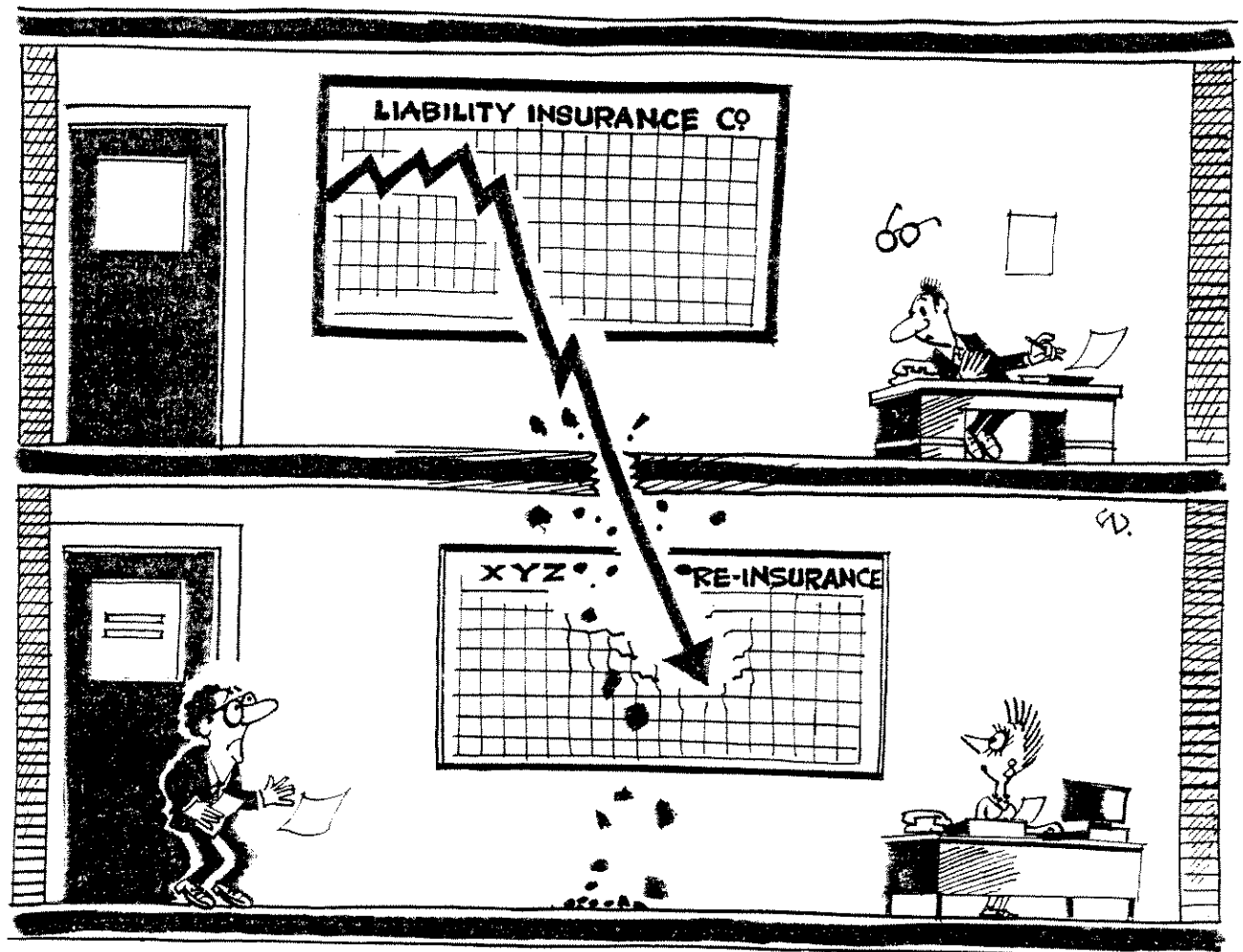
The calculation of premium rates to be charged under non-proportional business, the various commissions to be paid, and the settlement of claims is extremely complex. In this chapter we will examine briefly these various factors for both proportional and non-proportional business.

## Proportional Reinsurance

In proportional reinsurance the reinsurer agrees to pay a set proportion of all claims once the ratio between retention and cession has been established and it is, therefore, clearly equitable that the price should be based on receiving a similar proportion of the original premium

received by the insurer.

There are a number of factors which the insurer will have to consider when calculating his original premium rate. It is necessary for him to cover all the claims which will be made under the policies issued, his expenses in paying brokers and agents to bring the business to him, and all his administrative overheads. Obviously, he should also make a profit for his shareholders. On the other hand, the reinsurer providing proportional cover has fewer expenses than the insurer, particularly on a treaty account, although he will still have to settle a share of all the claims. It is general practice for the reinsurer



to allow the insurer a commission which is a portion, normally expressed as a percentage, of the original premiums in recognition of the insurer's costs in producing and administering the business which has become the subject of the reinsurance. This is called an overriding commission.

If the results under proportional treaty are profitable, the reinsurer may allow a further commission, called a profit commission. By this method a percentage of the profits is returned to the ceding company after providing for an allowance of the reinsurer's expenses.

A claim falling within the scope of the treaty will be shared between the ceding company and reinsurers in the same proportions as the original sum insured was reinsured. All reinsurers participating bear their share.

Each reinsurer's liability is not limited to its share of the sum insured paid by the ceding company to the claimant. It is also liable for its share of claims' costs such as legal fees, assessor's fees etc., but it is not liable for a share of the office expenses of the ceding company. Any recoveries by the claimant must also be shared between the ceding company and reinsurer in the same proportion as the claim.

Quota share treaties are usually subject to higher rates of commission than certain surplus treaties because they offer no scope for selection of risks in the way that surplus treaties do and so, in general, offer a better spread of risks.

### **Non-Proportional Business**

The calculation of premium rates to be charged for non-proportional business is far more complex than those under proportional arrangements; the non-life underwriter has fewer statistics available to him than his life colleague from which to determine an adequate rate.

The premium for an excess of loss treaty is usually expressed as a percentage (the rate) of the net premium income written by the company for

the type of risk or class of business covered. Net premium income is usually considered as being all premiums written or accounted for by the company during the treaty period *less* premiums returned to original insureds due to cancellation of policies together with premiums paid to other reinsurers for protection which reduces the commitment of the reinsurer writing the excess of loss business.

The reinsurer's intention behind the calculation of a suitable rate is the same as rating for direct insurance, namely to cover:

- a The expected claims experience including an allowance for the problems of inflation and any IBNR (Incurred But Not Reported) claims.
- b The reinsurer's administrative expenses.
- c Brokerage.
- d An allowance for both a margin of profit and other contingencies

Several general factors affect the premium rate, the main ones being: the retention of the insurer, the liability of the reinsurer, the class of business covered by the treaty, any exclusions which are to apply under the treaty, the past experience of the treaty, and market conditions and experience for the class in question and the exposure to the treaty.

The reinsurer may quote a flat rate as a percentage which is applied to the net premium income of the company. On occasions, a flat premium of a certain sum of money may be quoted. In these days of worsening and, possibly erratic experience, a third method of rating is used referred to as the 'burning cost' basis. There are many variations on how the burning cost is calculated, but they all provide for the reinsurance premium to be allied directly to the claims occurring under the treaty. The actual burning cost is loaded and the resulting percentage is the premium rate for the period concerned. The loading is intended to provide the margin for worsening claims experience,

reinsurer's management expenses and profit. The reinsurance premium is subsequently adjusted, usually annually, until all claims occurring under the treaty are finally settled. This rating basis is subject to a minimum rate to safeguard the reinsurer and a maximum rate to safeguard the insurance company. An example of a burning cost calculation is given below.

Long-tail business is particularly difficult to rate due to the problems of inflation, currency fluctuation, and many of the claims only being advised some years after the date of occurrence (IBNR claims). This delayed reporting may be due to administrative problems of the company, for example late claims advices by agents, or it may be due to the normal delays in claims being made on the company by claimants due to writs and legal processes involving third parties.

**EXAMPLE I** Calculate the burning cost adjustment for the following treaty for the underwriting year ending 31st December:

$$\text{Loading factor} = \frac{100}{70}$$

Minimum rate 2.5 per cent, maximum 8 per cent.

Ceding company's premium income for the year = £2,000,000

Claims experience for the year:

Gross Claim	Retention	Treaty Claim	Outstanding or Paid
100,000	50,000	50,000	O/S
57,500	50,000	7,500	paid
74,000	50,000	24,000	O/S
82,750	50,000	32,750	paid
56,000	50,000	6,000	paid
69,750	50,000	19,750	O/S
<b>Totals 440,000</b>	<b>300,000</b>	<b>140,000</b>	<b>O/S and paid</b>

The total paid and outstanding losses to the treaty equals £140,000.

$$\text{Loaded burning cost} = \frac{140,000}{2,000,000} \times \frac{100}{70} \times \frac{100}{1} = 10\%$$

The maximum 8 per cent applies

$$\begin{aligned} \text{Premium payable} &= \text{gross premium income} \times \text{agreed maximum rate} \\ &= £2,000,000 \times 8 \text{ per cent} \\ &= £160,000. \end{aligned}$$

**EXAMPLE II** Perform the above calculation but assume that the burning cost rate is to be calculated on *paid claims only*.

Total paid losses to the treaty = £46,250

$$\text{Loaded burning cost} = \frac{46,250}{2,000,000} \times \frac{100}{70} \times \frac{100}{1} = 3.304\%$$

$$\begin{aligned} \text{Premium} &= 2,000,000 \times 3.304 \text{ per cent} \\ &= £66,080. \end{aligned}$$

When finally adjusted for all claims, Examples I and II would both be based on all claims paid under the treaty.

## Clauses

There are a number of clauses used in reinsurance to define what is covered by the treaty and what is excluded or to specify conditions relating to the treaty. These vary from class to class and are basically designed to clarify the scope of coverage so that disagreements, particularly after a loss, can be avoided. Two of the more important clauses dealing with currency and inflation are described below.

### Stability Clause (or Index Clause)

A stability clause is used normally in excess of loss long tail business only to ensure that the retention of the ceding company and, usually, the liability of the reinsurer retain the same relative monetary values which existed when the treaty commenced.

The clause is used to avoid placing the effect of inflation solely on the shoulders of the reinsurer. Instead, it is shared between the insurer and his reinsurers. The calculation is

carried out using an index for the territory concerned which reflects the rate of inflation in that territory.

There are numerous statistical bulletins issued by various organisations and it is essential that the bulletin and table to be used are specified in the treaty document. The table selected would normally be based on government-produced figures for the territory of the claim and would measure consumer prices or wages.

#### Currency Fluctuation Clause

A currency fluctuation clause is also used only in excess of loss business to ensure that, for claims sustained in currencies other than the one in which the treaty is expressed, the retention and reinsurer's liability are determined on the basis of

the values as they exist at commencement of the treaty. This preserves the value of both retention and cover provided.

The clause is used to eliminate the constant fluctuation in exchange rates which would otherwise distort values of retention and cover and create uncertainty for both parties. It is important to note that this clause applies only to determining the level of retention and reinsurer's liability in the currency concerned, the conversion of that amount to provide actual settlement will be at prevailing rates of exchange. To this extent, fluctuations in exchange rates can substantially affect the values of both premiums and claims when they are exchanged into the reinsurer's domestic currency from overseas currencies.

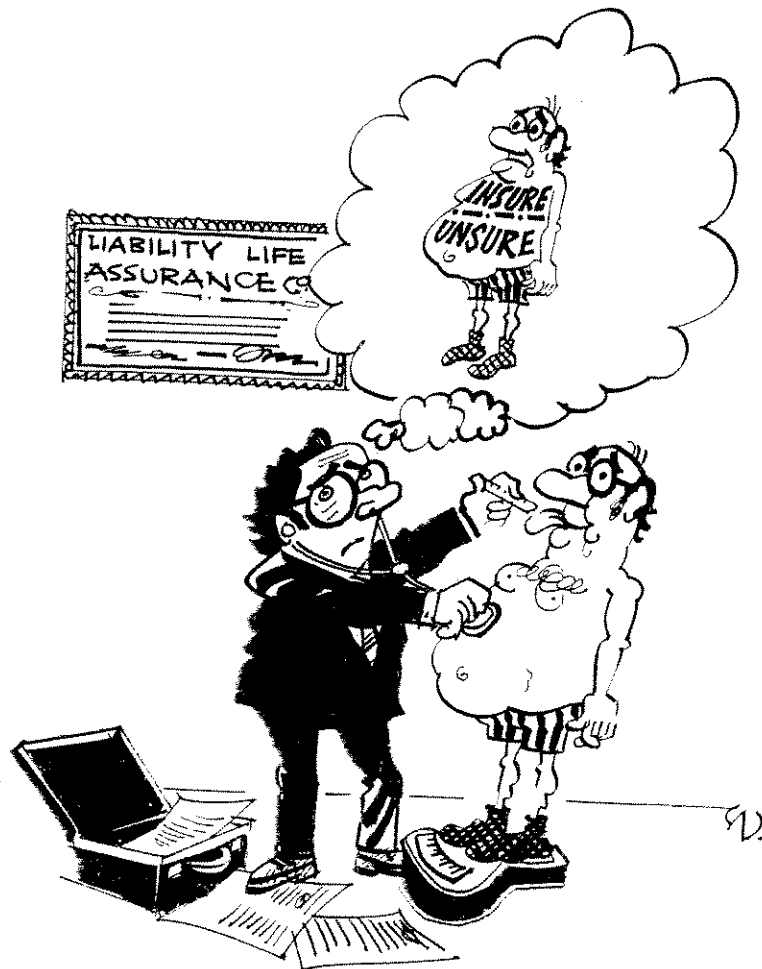
# Life Reinsurance

## Reassurance of Long-term Business

Long-term insurance business falls into two main categories, namely life assurance and permanent health insurance. Until recently, claims experience on life assurance business has been relatively predictable. The actuary has been able to use mortality tables to predict, fairly accurately, the future claims on in-force business. The situation has now altered with the arrival of the AIDS virus where, although there are many predictions as to its likely effect, the future course of the virus and its impact on mortality cannot be accurately assessed. Nonetheless, the needs for reassurance are somewhat different from these for non-life reinsurance.

## Size of Sum Assured

Although it is possible to predict, with some accuracy, the number of deaths likely to occur during a certain period, it is clearly not possible to predict which lives will expire during that time. A claim arising on a policy with a very large sum assured will have a major effect on the company's results and this is where reassurance comes in. The company decides the maximum it can afford to pay out in the event of a life assured dying, this figure is known as its retention, and reassures the excess of this amount, either by an automatic reinsurance treaty or by offering the excess to a reinsurer on a facultative basis.



## Permanent Health Insurance

The foregoing comments have concentrated on life reinsurance. A rapidly growing area is the market for permanent health insurance. With these contracts an income is paid to the policyholder when he is unable to work. Normally, there is a period before benefit is payable – usually this is three or six months, since many policyholders will be in receipt of income for this period. As with life assurance, a company will determine its retention and reinsurance any amounts over this figure.

## Other Services

Life reinsurers play an active role in assisting their clients to develop new policies. They are well placed to do this in view of their wide range of contacts throughout the market. In return for this assistance, the company will pass any reinsurance on these policies to the reinsurer.

For many years life reinsurers have specialised in offering terms to companies on

proposals on medically sub-standard lives. They have been able to develop great expertise in this area and nowadays there are very few proposals where terms cannot be offered.

Reinsurers also help with the provision of other services. A particular specialist area is in claims control where reinsurers have provided detailed advice both on systems and the assessment of individual claims.

## Financing

There can be a considerable financial strain on companies who are expanding rapidly in terms of new business written, mainly because of the high initial commission payable on life business. Reinsurers are often able to help in providing finance for this purpose.

Life reinsurance is a very specialised field, and the contents of this chapter simply outline how reinsurance arises, how it is dealt with and how it compares with general business.

## Differences between Life Reinsurance and General Reinsurance

### LIFE

#### *Long term*

As a life assurance contract may pay the sum assured on the death of a policyholder, cover needs to be given for an unknown length of time which could be as long as 60 years.

#### *Few policies compared with the total population*

Life insurance is bought by a small proportion of the working population, particularly in some overseas countries.

#### *Individual records*

Life policies are of varying durations and, therefore, a record must be kept of the value of each one.

It is becoming more common for detailed records to be kept by one company (the original assurance company or the first reinsurer) and subsequent reinsurers to get summaries only.

### GENERAL

#### *Short term*

Most general insurance contracts are on a yearly basis which, whilst covering events in one year, do tend to produce claims for several years after.

#### *Large number of policies*

Most families have at least one policy associated with their property, its contents, or their form of transport. Every commercial and industrial concern requires a variety of policies to cover its various insurance requirements.

#### *Few individual records*

Reinsurers rarely keep detailed records of all individual risks covered, apart from those of sizeable value or where an accumulation of values is likely to occur, as detailed bordereaux are rarely provided now for treaty business.

*100 per cent treaties*

Because of the small number of policies requiring reinsurance and the individual record keeping, treaties are usually placed 100 per cent with one reinsurer. Some large assurance companies do not place all their treaty business with one reinsurer, in particular different types of policy classes may be reassured with different organisations.

*Participating reinsurers*

Due to the large sums insured for certain risks or the possible risk of accumulations for smaller risks, it is usual to reinsure only a small percentage of the cover with one particular reinsurer.

*No cancellation date for treaty*

As life policies run for unknown periods and treaties have to provide cover, normally there is no automatic cancellation date.

*Treaties reviewed annually*

Terms and conditions under most treaties are reviewed annually.

*Treaties mainly on a surplus basis*

Most life treaties are on a surplus basis although there are occasions when quota share is used.

*Both proportional and non-proportional treaties*

Both types of treaty are widely used.

*Catastrophe treaties rare*

A catastrophe that would affect a life company is rare. The most likely event would be a plane crash, a train crash or a factory explosion.

*Catastrophe treaties*

Catastrophe protection is widely used either to cover against natural perils such as earthquakes or windstorms, or to buy protection from an accumulation of risks in a certain class.

*Close relationship with clients*

As previously explained, most reinsurance for small or developing offices is on a 100 per cent basis, therefore reinsurers work closely with their clients at all levels and are extremely interested in their development.

*Intermediaries widely used*

Many reinsurers obtain all or part of their business through reinsurance brokers. When the business is obtained direct, the contacts between the insurer and reinsurer are normally limited to a few people.

*Competitors are other professional reinsurers*

There is a small number of companies writing life reinsurance throughout the world and, as treaties are usually on a 100 per cent basis, competition for reinsurance is normally restricted to a small number of professional reinsurers.

*Wide competition*

In Chapter Two the many sellers of reinsurance were explained. It is not unusual for many organisations in the reinsurance market to be used in order to provide the capacity that is required to place the large risks. There is therefore a considerable amount of competition between the various members.

*Total loss*

Under most life assurance contracts a claim is normally paid when a person dies. There are exceptions, particularly with regard to Permanent Health Insurance.

*Partial loss normally*

It is rare to have a total loss as invariably something can be salvaged, saved or rebuilt.

*Rates cannot be revised for existing businesses*

The premiums for an assurance policy are determined when the policy is taken out. Similarly, rates cannot be changed under a corresponding reinsurance contract. New rates can be introduced for new cases.

*Rates reviewed annually*

Premium rates are usually agreed for one year only. The rates required to renew the business are reviewed annually and depend on results achieved under its treaty.

*Statistics and rates*

Mortality statistics are very reliable and therefore the base for premium calculation is correspondingly so. However, as Life business is long term, rates of interest and expenses are very difficult to predict.

*Uneven claims experience*

There is no well-defined pattern of claims and, therefore, rating is difficult. However, as rates are reviewed annually the impact of inflation and currency fluctuation can more easily be taken into consideration.

# Glossary of terms

There are many reinsurance terms used in this guide and elsewhere with which you may be unfamiliar. You will find definitions of some of them below.

**Accumulation** *a* The aggregate of liabilities for a single risk created by cover being provided under a number of different reinsurance contracts.

*b* Concentration of risks that could result in many losses occurring during one event. (For example, an insurer or reinsurer may find that he has a number of policies on properties in one particular street or area). See 'Catastrophe cover'.

**Aggregate Excess of Loss** Form of excess of loss reinsurance which indemnifies the ceding company against the amount by which the ceding company's losses incurred during a specified period (usually twelve months) exceeds either the predetermined sum or a percentage of the company's premium income for the class of business concerned (loss ratio) for the specified period. This is also known as 'Stop Loss' or 'Excess of Loss Ratio' reinsurance.

**Acquisition Cost** The reinsurer's acquisition cost is normally the commission paid to the ceding company as an offset against the commission paid to agents or brokers and their other costs of writing the business. The acquisition cost will also include the commission paid to a broker by the reinsurer where applicable.

**Bordereaux** Information submitted by the ceding company to the reinsurer giving details of individual risks ceded to the specific treaty.

Bordereaux may be submitted for either premiums or claims or for both under the treaty.

**Broker** An independent intermediary who, in reinsurance, is employed by the ceding company to place reinsurance on its behalf and to collect claims but is paid a commission, or 'brokerage', by the reinsurer and not the insurer.

**Burning Cost** The ratio of the reinsurance losses incurred (either paid or payable) to the ceding company's premium for the business covered by an 'excess of loss' treaty.

**Capacity** The largest amount of insurance or reinsurance available from a particular insurance or reinsurance agreement, company or the market.

**Catastrophe Cover** A form of excess of loss reinsurance which, in excess of a specified retention and up to a specified limit, indemnifies the ceding company against an accumulation of losses arising from one catastrophic event (for example, earthquake or hurricane).

**Cede** When a company transfers part of its liability to a reinsurer under a proportional reinsurance agreement, it is said to 'cede' that business.

**Ceding Company** The insurance company that transfers part of its risk to a reinsurer under a proportional reinsurance agreement.

**Cession Business** received by reinsurers from ceding companies under a proportional reinsurance agreement.

**Co-Insurers** Two or more insurers jointly covering the same risk.

**Co-Reinsurers** Two or more reinsurers jointly covering the same risk or part of it.

**Commission** An allowance made by the reinsurer for part or all of a ceding company's acquisition and other costs. It may also include a profit factor.

**Contingent Commission (or Profit Commission)**  
*a* An allowance payable to the ceding company in addition to the normal commission allowance. It is a pre-determined percentage of the reinsurer's net profits after a charge for the reinsurer's overheads.

*b* Alternatively, 'Commission' (see above) may be on a sliding scale which combines both the elements of a basic commission and a profit commission.

**Deductibles (see Excess, Retention)** An amount which the insured is prepared to, or has to, bear on any one claim. When the deductible is exceeded, only the amount in excess of the

deductible is recoverable under the insurance policy.

**Earned Premium** That part of the reinsurance premium attributable to the expired portion of the policies reinsured.

**Escalation Provision** for automatic increases on some defined basis in premiums and sums insured.

**Estimated Maximum Loss (EML)** An expression used in fire, explosion and material damage policies only. An estimate of the monetary loss which could be sustained by insurers on a single risk as a result of a single fire or explosion considered by the underwriter to be within the realms of possibility.

**Excess (See Deductible)** The first part of the cost of a claim which the insured or reinsured has to bear in accordance with the terms of the insurance or reinsurance policy.

**Excess of Loss** A non-proportional form of reinsurance which, subject to a specified limit, indemnifies the ceding company for that part of a loss which exceeds a specified amount (retention), for example £90,000 excess of £30,000.

**Facultative** The reinsurance of risks on an individual basis where the original insurer has no obligation to cede a risk. The reinsurer has the option of accepting or declining each offer.

**Facultative Obligatory Treaty (Usually abbreviated to FAC/OBLIG)** Contract of reinsurance whereby the ceding company *may* cede risks of any agreed class which the reinsurer *must* accept if ceded.

**Following the Fortunes** A clause which stipulates that once a risk has been ceded by the insurer, the reinsurer is bound by the same fate as experienced by the ceding company.

**Fronting** An arrangement whereby one company agrees to accept business on behalf of others,

usually in markets where the accepting company is well established and will find it easier to obtain business than would the companies for which it has agreed to 'front'.

**Gross Retention** The total limit of liability accepted by an insurer together with Quota-Share reinsurers on an individual risk. Also known as 'gross line'.

**IBNR (Incurred but not Reported)** A notional figure to allow for losses which may have occurred, but have not yet been reported to the ceding company or reinsurer.

**Incurred Losses** The aggregate of losses attributable to a specified period of insurance, either the underwriting year or treaty year, both paid and the reserves for claims notified but not yet paid.

**Incurred Loss Ratio** The percentage of losses incurred to premiums earned.

**Indemnify** To put the insured closely as possible in the same position after the loss as he was before it occurred.

**Intermediary** An agent or broker through whom a contract is arranged.

**Issued and Renewed** A term used in accounting under excess of loss treaties whereby all claims under policies issued or renewed in the treaty year are covered, no matter in what year they may occur. The reinsurer is at risk until all policies covered by the treaty for that year have expired and all losses have been settled. (See Losses Occurring).

**Layer Term** used to denote a stratum of cover, for example for claims between £10,000 and £50,000. This may be expressed as £40,000 excess of £10,000. Covers are often arranged in a number of successive layers.

**Line** One line is equal to the ceding company's retention. A proportional treaty may have a total

capacity expressed as x lines and a reinsurer's share may be y lines.

**Losses Occurring** An expression used to signify that losses which occur within the period of an excess of loss treaty are covered, no matter when the original policy was issued. (See 'Issued and Renewed').

**Loss Event** The total losses to the ceding company or to the reinsurer resulting from a single cause such as a windstorm, flood or fire, subject to any time limitations imposed by the reinsurer (for example 24 or 48 hours).

**Loss Ratio** The proportion of claims paid or payable to the premiums earned or written.

**Loss Reserve** Amount withheld by the ceding company to guarantee the reinsurer(s) meeting claims which have been notified but not settled.

**MPL (Maximum Probable Loss)** The largest loss thought probable under a given insurance policy. Normally applied to material damage risks where the total sum insured is not considered to be at risk from one loss event (for example fire).

**Operative Clause** Defines the class and nature of business covered by a specific reinsurance treaty.

**Original Terms** Reinsurance granted on the same conditions and the same rate of premium as the original insurance.

**Outstanding Losses** Losses which have occurred but are unsettled at the time of the accounts being prepared.

**Overriding Commission** An allowance paid to the ceding company over and above the acquisition cost to allow for additional expenses.

**Proportional Reinsurance (Participating or pro-rata)** All sharing forms of reinsurance whereby the reinsurer participates proportionately in all losses and in all premiums.

**Pool** An organisation of insurers or reinsurers through which particular risks are written.

Premiums, losses and expenses are shared in agreed proportions.

**Portfolio** A block of business.

**Profit Commission (or Contingent Commission)** An additional commission based on the results under a treaty. See 'Contingent Commission'.

**Quota Share** A form of proportional reinsurance indemnifying the ceding company against a fixed percentage on each risk, for example a ceding company may agree to retain 30 per cent on every risk and cede the remaining 70 per cent to its quota share reinsurers.

**Reciprocity** The practice of requiring incoming reinsurance business in exchange for reinsurance ceded. Thus, a ceding company will offer only a share of its reinsurances to a reinsurer who is able to offer suitable reinsurance business in return.

**Reinstatement** Re-establishes the sum insured to its original figure after it has been reduced by the amount of a loss payment. It normally requires payment of an additional premium, as defined in the agreement.

**Reinsurance Brokerage** A deduction made from the reinsurer's premium by a reinsurance broker as commission for business placed with the reinsurer.

**Retention** The proportion of risk retained by the ceding insurance company.

**Retrocede** When a reinsurer transfers part of its liability to another seller of reinsurance, it is said to 'retrocede' that business.

**Retrocession** The reinsurance of reinsurance. The reinsurance of business over and above that which a reinsurance company wishes or can afford to retain for its own account.

**Risk Excess** A working excess of loss cover usually restricted to cover risks written on a direct or facultative basis.

**Run-Off Term** applicable where the reinsurance contract has been terminated but a liability remains in respect of cessions or risks accepted during the period of the agreement.

**Sliding Scale Commission** A commission adjusted under a formula whereby the actual commission varies inversely with the loss ratio, subject to a specified maximum and minimum.

**Slip** A piece of paper, carrying the details of a risk, presented by the broker to the underwriter on which the underwriter signifies the extent of his intended participation in the risk and the terms on which he is prepared so to do.

**Stability Clause (or Index Clause)** The clause applied to excess of loss treaties (usually casualty) to index-link the limits so that the impact of inflation on claims settlements, which may not be finalised until many years after the loss occurs, is fairly shared between the ceding company and the reinsurer.

**Stop Loss** A form of reinsurance under which the reinsurer reimburses the ceding company's losses in any year to the extent by which they exceed a specified loss ratio or amount, subject to some specified limit. (See also 'Aggregate Excess of Loss Cover').

**Sum Insured** The sum expressed in a policy as the amount payable on the occurrence of the event insured against in the case of a benefit policy or as the maximum of the insurer's liability under a contract of indemnity.

**Surplus** The amount by which the gross sum insured accepted by a ceding company exceeds the ceding company's own retention.

**Surplus Reinsurance** Under this form of treaty, the ceding company decides the limit of liability which it wishes to retain on any risk or class of risk. This will be its maximum retention, but it

may retain a lesser amount if it wishes. The surplus above the retention will be allotted to reinsurers. The limit of the liability which may be ceded to the reinsurance treaty is normally expressed in terms of lines (that is multiples of the ceding company's retention).

**Treaty** The traditional term for a reinsurance agreement under which the reinsurer accepts a certain liability on all risks or losses as specified on the agreement. The treaty also specifies the terms and conditions under which such business is reinsured.

**Ultimate Net Loss** The total loss suffered by the insurer for his net account after all recoveries have been made.

**Underwriter** An individual who determines the acceptability of an insurance or reinsurance risk and specifies terms for it.

**Underwriting Year** A reinsurance contract can be in force until the natural expiry of all policies issued by the ceding company during a specified year covered by the contract. The year which is covered by such reinsurance arrangements is usually referred to as the 'underwriting year'.

**Working Cover** An excess of loss reinsurance in which loss frequency is anticipated because such a treaty's limits fall well within the insurer's underwriting limit for any one risk or loss occurrence.

**Written Line** The maximum amount of reinsurance that a reinsurer has agreed to accept when writing a slip. It may be more than the amount actually reinsured by an individual reinsurer if the reinsurance broker obtains more than 100 per cent cover on the risk, in which case each reinsurer's liability will be reduced proportionately to a 'closed line' or 'signed line'.