Assurances

Assurances

Changes in the Reinsurance Market

Keith Fillmore

Volume 62, numéro 2, 1994

URI : https://id.erudit.org/iderudit/1106059ar
DOI : https://doi.org/10.7202/1106059ar

Aller au sommaire du numéro

Éditeur(s)

HEC Montréal

ISSN

0004-6027 (imprimé)
2817-3465 (numérique)

Découvrir la revue

Résumé de l'article

L'auteur tente d'expliquer la nature et le pourquoi des changements survenus à l'intérieur des grands marchés de la réassurance. Il porte son attention sur les problèmes existant dans les marchés internationaux, puis sur les conditions qui prévalent actuellement sur les marchés canadiens, principalement dans le champ des risques proportionnels et les catastrophes affectant les dommages directs, et, enfin, sur les développements prévisibles des marchés.

Citer ce document

Fillmore, K. (1994). Changes in the Reinsurance Market. *Assurances*, *62*(2), 185–197. https://doi.org/10.7202/1106059ar

Changes in the Reinsurance Market*

by

Keith Fillmore**

L'auteur tente d'expliquer la nature et le pourquoi des changements survenus à l'intérieur des grands marchés de la réassurance. Il porte son attention sur les problèmes existant dans les marchés internationaux, puis sur les conditions qui prévalent actuellement sur les marchés canadiens, principalement dans le champ des risques proportionnels et les catastrophes affectant les dommages directs, et, enfin, sur les développements prévisibles des marchés.

~

I am pleased to have the opportunity to speak to you about the reinsurance market. I understand that many of you are not directly involved in reinsurance, but rather are primary underwriters who use the product known as reinsurance. So I will try to give you a practical sense of what has been happening in the reinsurance market and explains why the market has changed so dramatically. I will also try to give you some sense of how these changes will effect day to day underwriting.

We will look at three main topics. An overview of the recent experience and problems of the global reinsurance market. The current reinsurance terms and conditions in Canada especially in the area of property catastrophe and property pro rata. Finally I will risk severe embarrassment by trying to predict where the reinsurance market is headed.

---

* Speech made to the Mariners Club in Toronto.

** Mr. Fillmore is a Manager, Technical Services of B E P International inc., member of the Sodarcan Group.

Global Experience

To understand where the reinsurance market is today we have to look at the last few years. In the last 7 years the world has witnessed an increase in severity and frequency of large catastrophe losses. We have only considered losses that are among the twentieth largest losses of all time. In 1987 the J87 wind storm hit the UK and the Continent of Europe with a loss of just under US $2 billion. This loss was then described as the storm of the century. Before 1987 there had never been a billion dollar loss. In 1988 two large losses totaled $2.3 billion, 1989 saw three losses totaling $6.3 billion. In 1990 four European winter storms totaled $9.4 billion. In 1991 the total was just under $7 billion. Finally 1992 brought another record year with three losses totaling just under $18 billion. In 1993 the total was $2.3 billion. Nineteen ninety-four has begun with the Los Angeles earthquake that so far looks like an insured loss of at least U.S. $3 or $4 billion.

These losses are staggering in their size. Although many studies existed showing that loss potential of this magnitude was possible, the reinsurance and indeed the insurance communities were generally quite surprised at the enormity of these events.

These losses are not the worst case scenario. Experts estimate a repeat of an Andrew following a path 20 miles or so to the North would result in a $50 billion insured loss. The big one in Los Angeles or San Francisco is estimated at $50 to $70 billion dollars insured loss. A severe Tokyo earthquake has been estimated as high as $ US 500 billion economic loss.

To put some of these numbers in a slightly different context, the Hurricane Andrew loss equaled 551% of the direct earned premium in Florida in 1992 for homeowners and commercial multi peril policies. Hurricane Iniki represents 738% of the same premium base written in Hawaii. The most curious point from these losses may be that insurers in Florida who are being allowed by the insurance commissioner to reduce their portfolios are paying the first year premium of any policy holder they non renew. I always knew that the U.S. was the bastion of free enterprise.

Looking at these losses and potential losses one can see why catastrophe rates have increased on a worldwide basis in the last several years. Until these events the majority of reinsurers used recent loss history to help them to set rates. This was not the only factor they used, but certainly it was part of the equation. The existing rating certainly proved to be inadequate. On the other hand a competitive market probably would not have permitted reinsurers to charge more.

The price increases were also very much driven by the demise of the London Market Excess or LMX Retrocession market. LMX was essentially a reinsurance market for reinsurers (or retrocession market as they call it). Although there is still a small retrocession market left, the costs are expensive. Therefore most reinsurers do not buy much retrocession capacity. So they are writing net lines for the most part.

I will not bore you with a long analysis of the LMX market. In a simplistic view the LMX market was similar to each of us reinsuring each other. Eventually if a large catastrophe loss occurred we would all have to pay most of our own loss because we never really transferred risk. We simply traded each others risk amongst ourselves.

Although Canada has not suffered directly from these losses, it requires substantial reinsurance capacity all of which essentially is foreign owned. The local market can provide $40 to $50 million of catastrophe capacity. Most larger companies require much more than that. Therefore the poor global loss experience has produced significant price increases for Canadian catastrophe reinsurance in the last several years. Most Canadian reinsurers however will tell you that until recently the catastrophe premiums they received were eroded by small losses, so they had been unable to build adequate reserves for the big one. After the 1991 Calgary loss and three subsequent renewal seasons, prices and retentions have probably increased to levels where reserves can be built. It will however take many years to build such reserves.

Many companies are now paying two or three times what they paid in 1990 for their catastrophe protections. In 1994 the average cost is often 3 to 6 % of GNEPI depending on the level of protections purchased. Top layers were available in 1990 for as little as .6% of the limit or rate on line as we like to call it. Today this is at least 2.0% and likely 2.25% or 2.5% or in a few cases even higher. The additional cost of catastrophe reinsurance is even more critical for smaller insurers as they unlike larger companies lack the ability to carry large retentions.

Rate increases for 1994 were less dramatic due to the increase in catastrophe capacity available in the market, the majority coming from new operations in Bermuda that brought 4 billion U.S. dollars of capital and surplus to the market.

This has added about $140 million U.S. of catastrophe capacity to the market. As reinsurers rarely use their maximum capacity the actual capacity available is usually $40 or $50 million. In addition the Bermuda market is structured to write business above a certain size market loss. In the U.S., this is $4 billion, for Canada this is likely about $400 million, which would be excess of the 1991 Calgary loss. This means the Bermuda market rarely writes below $20 million on a program and often they will only write layers that are exposed only to earthquake losses.

For 1993 it was difficult to place programs of $150 million. These programs are now easily placed, although costs have not dropped. It is now possible to place limits of $250 million or even $300 million for a Canadian program. However most cedents would probably find it more cost effective to reduce exposures rather than purchase that much catastrophe reinsurance.

Whilst these rates seem high, top layers for U.S. regional carriers average 8% to 10% of limit and many regional carriers pay rates of over 10% of subject premium income for their catastrophe protections. Most other areas of the world pay rates significantly higher that those in Canada.

What does this all mean for primary underwriters. First you now are required to make sure all the values in earthquake zones are recorded accurately. Virtually all ceding companies in Canada now have complete accumulation control systems.

You probably now have been given maximum limits that you can write in Earthquake zones. This is especially true if you are writing national accounts or are working in a Special Risks operation.

If in the past you were allowed to Fire PML underwrite in earthquake zones, today your underwriting guidelines most likely do not permit this. Many of your colleagues in Vancouver and Montreal may now be using expert systems to help them underwrite risks in earthquake zones. Some of you also are probably starting to do this. In the future many more of you will be using these systems. These systems allow insurers to control and assess exposures in these areas.

You are also likely receiving more memos from head office on the need to charge a rate for any natural perils, especially earthquake. It will take several if not many years for primary insurers to obtain the proper technical rate for these exposures. For example the proper technical earthquake rate for commercial property risks in the Richmond Delta area is probably between .15 and .30¢ per hundred. In the remainder of the B.C. earthquake area it is between .5 and .15 ¢ per hundred.

Another way to look at the cost of writing business in these areas is to look at the cost of reinsurance at the individual risk level. Let us take the example of a company who buys just enough catastrophe cover. They write a risk of $1 million at a 20 cent rate per hundred for all perils which produces a premium of $2,000. The risk is on poor subsoil so the earthquake PML is 25%, so the company adds $250,000 to its overall Earthquake PML. They then go out and buy more cover. A minimum rate for a top layer is at least 2% rate on line or $20,000 per million. So in this case the additional cost of catastrophe reinsurance is $5,000. You are $3,000 in the red and you have not paid any commission or losses. If the PML is only 5% the cost is still $1,000. So 50% of the premium would be required for the catastrophe reinsurance.

I think we can all see why this has become such an important issue for insurers in Canada. This is why many companies have increased the deductible for earthquake from 2% to 5% or in some cases even higher. This has a significant impact on reducing a company's earthquake PML.

Other Problems

Now we will look at some other problems that have emerged in recent years for reinsurers. Along with the spate of catastrophes the reinsurance market continues to exist in the shadow of the Evil twins of U.S. asbestosis and pollution losses from the 1950's and 1960's. These problems and others more specific to individual companies have led to recent exits from the market of such long time players as NW Re, Netherlands Re, NRG Victory, Royal Re, Skandia and National Re to name but a few. Many other reinsurers have been put on the market but few have found buyers willing to pay the asking price. It has also become virtually impossible to sell an existing reinsurance operation without a financial guarantee of the adequacy of loss reserves.

In Canada in 1988 there were 57 licensed reinsurers writing business, today there are 41, a drop of 16 or 28%. A large majority of these exiting reinsurers did not just leave Canada, they retired from reinsurance period.

Although this flight from the market reduced capacity and increased price, it drove out mostly smaller capitalized reinsurers. The remaining reinsurers are generally better capitalized and increasingly more technical in their approach to the business. In the long term this should help stabilize the reinsurance market. One other conclusion I think we can draw from the recent rationalization in the reinsurance market is that reinsurance is now a game for the big guys. Unless a company has some serious cash, reinsurance may not the business to be in.

Property Pro Rata

Next we will look at the pro rata or proportional property market. In the last few years many reinsurers on a world wide basis have struggled with a prolonged down turn on their pro rata property portfolios.

This has been true of Canada. In the last several years, the property loss ratios of reinsurers have been about 10% worse than commercial property loss ratio of the primary market. It is therefore not surprising that reinsurers have imposed rather stiff terms on pro rata property treaties in an effort to turn their own results around.

One reason for the deterioration in treaty results is that property rates have fallen in the last few years although recently this has stabilized. Rate reductions usually lead to increases in loss ratios. This trend reduced ceded premiums to many pro rata treaties. Reinsurers for the most part did not reduce the capacity of these treaties. As a consequence the treaty results became more volatile. Many treaties lacked the premium to absorb even moderate losses above the expected loss ratios. This ignores the recent down turn in the economy, which no doubt has also negatively effected property loss ratios.

The reason that reinsurers did not reduce the treaty capacity may be that they did not wish to reduce their volume. Property income accounted for almost 54% of reinsurers total premium income in 1992. This total includes facultative and excess of loss premiums, so pro rata property probably makes up about 40% of the average reinsurer's portfolio in Canada. This is like the joke about banks which goes if you owe the bank $100,000 and cannot pay you have a problem. If you owe $100 million and cannot pay the bank has the problem. In a sense reinsurers have a bigger stake in this segment of the market than the primary insurers they reinsure.

Reinsurers like primary insurers share the same concern about producing a high or at least an acceptable return on equity. If premium volume reduces without a significant improvement in loss ratio and or expenses, return on equity will drop. Most boards of directors and shareholders frown upon a low return on equity.

Many would question what influence the reinsurers can exert on the primary market. The reinsurers share of the Property & Casualty market dropped from 6.01% in 1988 to 4.86% in 1992. So whatever ability the reinsurers do have to influence the primary market, that power has fallen in the last several years.

This market environment has lead to a number of changes in reinsurance terms and conditions for the property pro rata treaties.

Reinsurers introduced Loss Participation Clauses for 1993 into many property pro rata treaties and for 1994 they introduced Occurrence Limits.

Loss Participation Clauses were introduced in an effort to improve the property results of reinsurers. They only come into play if the loss ratio exceeds a predetermined level, for example 70% and they are capped at the top end, for example 90%. The ceding company assumes a participation of these losses, most commonly around 50%. Although this is actually a reduction in paid losses, the effect is the same as a reduction in commission. In the case of our example the impact is the same as a 10% reduction in commission. This clause would usually be used with a minimum commission, most commonly in the range of 20 to 30%.

Unlike most sliding scale commissions any deficit is not brought forward so you pay for a really bad year once. If the top limit is exceeded any deficit is not brought forward. In our example if a minimum commission of 20% applied the effective rate of commission on this treaty with a loss ratio of 90% is 10%. The cedent is not even covering its original acquisition costs, to say little of the internal operating expenses. This type of results will not be in the cedents interest for very long. The reinsurers combined ratio on the treaty is 100% which is 10% lower than it would have been without the clause.

If such results continue the reinsurer will probably try to widen the range or increase the participation of the clause. Unless treaty results improve dramatically one would expect loss participation clauses to be a feature of pro rata property terms and conditions in Canada for the foreseeable future.

What does this mean for front-line underwriters who actually use the treaties? The most likely impact is that you will be given new instructions or reminded of existing guidelines on the use of these treaties. In addition you will be again reminded to try for rate increases. But you will probably hear this even if you do not have a surplus treaty. Your Underwriting Line guides may be rewritten or at least adjusted. You may have had the capacity of your treaties reduced last year or for 1994. Some companies may even encourage the increased use of the pro rata treaties and reduced use of facultative reinsurance to increase the premium ceded. This can give a treaty the ability to absorb unexpected losses. Increased premium can allow a ceding company to maintain an underwriting capacity that might otherwise drop as volume drops. For example a ceding company that cedes $5 million premium would find it more difficult to maintain $20 million reinsurance treaty capacity versus another who cedes $15 or 20 million.

In dire circumstances a company's property proportional program may become unrenewable and the ceding company may be forced to change the pro rata property reinsurance program to a per risk basis.

This will at least require some rethinking of underwriting practice as the insurers reinsurance recoveries switch to an excess of loss basis. If a cedent wrote a $5 million dollar risk with a $1 million retention they would keep 20% net and cede 80% to the pro rata treaties. All losses will be split on the same basis. Under a per risk program with the same $1 million retention only losses on this risk excess of $ 1 million will be recovered.

The appropriateness of either type of program depends on the protected portfolio and the ceding company. The important point here is that switching from one to the other in most cases will require some adjustment in primary underwriting practice.

Occurrence Limits

We will now look at Occurrence Limits. Although the natural perils loss history in Canada by global standards is small, the Canadian insurance industry is vulnerable to exposure from very large catastrophe losses. The Munich Re completed a study on the Economic impact of a Vancouver earthquake and they concluded the expected insured loss from a 6.5 Richter earthquake was $6.7 to $12.7 billion dollars. The Surplus of the Canadian Property Casualty industry in 1992 was $10.9 billion. This loss estimate represents 61% to 116 % of the Surplus of the Canadian industry. By way of comparison the American industry has $178 Billion of Surplus. As noted previously the worse case catastrophe loss estimates in the U.S. are between $50 to 70 billion. This represents 28 to 39% of surplus. One can see the Canadian industry as a whole needs catastrophe reinsurance capacity. A pro rata treaty with an occurrence limit still provides catastrophe capacity.

In the past it has been common on the international reinsurance market for pro rata treaties to have occurrence limits. In Canada this has historically not been the case. To give you an example of what a catastrophe loss can do to a pro rata treaty we only need to look at an example from Hurricane Andrew. One company suffered a loss 80 times their entire property premium in Florida, they had a quota share treaty. Florida represented about 20% of the ceded premium. If this treaty produced a combine ratio of 90% it would take 112 years to repay the Andrew loss. It is unlikely that such a treaty could produce that kind of results for 112 years. Even more unlikely is that 112 years would pass without another catastrophe loss. To the best of my knowledge this treaty no longer exists. If it was renewed one can be certain it had an Occurrence Limit. The odds of it being renewed without one were probably worse than those of me playing for the new NBA franchise in Toronto. I need not say more.

Fortunately for Canadian ceding companies, reinsurers did not try to introduce occurrence limits for 1993, but rather gave companies some time to come to grips with their catastrophe exposures.

Only a few ceding companies renewed their treaties for 1994 without an occurrence limit. Generally these were set at 2 to 3 times the ceded premium. In the event of a loss the treaty will only pay the amount of the occurrence limit and any overflow will fall back to net account of the ceding company.

In cases where the insurer had additional exposures above the occurrence limit many have chosen to either increase their catastrophe reinsurance limits or they have undertaken measures to reduce their exposures. In some cases both apply. In most if not all cases the reductions would be targeted in the earthquake areas of Vancouver and Montreal as these areas usually determine the upper limit required for catastrophe protections. Therefore many primary underwriters will probably have been given instructions to reduce business in the two earthquake zones to reduce the Probable Maximum Loss to within the reinsurance catastrophe limits.

The comments I made earlier about earthquake rates and deductibles certainly also apply for business being ceded to pro rata treaties. In fact they may be even more important in as much as reinsurers follow primary pricing on pro rata treaties, whereas for catastrophe covers the reinsurer sets the price independent of the primary rates.

Lloyd's

I have not talked about Lloyd's, and any discussion of reinsurance must at least mention Lloyd's. As much has been written all that needs to be said is that the problems of this market are a reflection of many of the problems reinsurers have been facing in the last several years. Suffice it to say these problems have had a significant impact on the hardening of the reinsurance market in the last several years.

I do not want to leave you with an impression that reinsurers have been innocent victims of a difficult market. They have often made underwriting decisions that were against their better judgment justified by a competitive market. Unfortunately to a certain extent the recent changes in the market came because things had deteriorated to the point where changes could not be avoided any longer.

Casualty

We will briefly look at the Casualty treaty market. The main concern for reinsurers for the last several years has been overwhelmingly on the property side. The introduction of the Ontario Motorist Protection Plan changed this. Before this automobile excess reinsurance protections were primarily clash covers. Reinsurers initially struggled with the pricing of OMPP excess covers. In the end reinsurance rates did not increase significantly until late 1992 for 1993 renewals as the first threshold claims came through the system.

Bill 164 has complicated matters even more as cedents and reinsurers alike try their crystal balls on what the price of automobile excess covers should be. In the absence of historical data on losses, which does not really exist because the product has been altered so significantly, rating becomes little more than an educated guess. I'm sure we will all watch developments in this area with great interest

At the same time some reinsurers and certainly some insurers are concerned that in all the excitement about property and automobile, the rates for primary CGL exposures have fallen too far. This may well warrant some attention for the 1995 renewal season.

The Future

In my opening statement I promised to risk embarrassment by trying to predict what lies ahead in the reinsurance market. Catastrophe rates have probably peaked and should remain stable for 1995. Pro rata property terms are such that the reinsurers may finally obtain what they consider acceptable results. If this does not happen treaties that continue to perform poorly may become unrenewable.

The exits from the market of reinsurers that were common place in the last few years will not stop, but they should be just a trickle in comparison to prior years. The rush of new capacity, especially to Bermuda or anywhere else for that matter, will not be seen in 1994. Overall there should be more stability in the reinsurance market than we have seen for several years.

Finally my last fearless prediction, one that is a certainty, is that I will not leave the reinsurance world to play professional basketball.