

AMICE/ICMIF Reinsurance Training for Non-Reinsurers

18 - 20 September 2013

Outcome

Thirteen participants from several member organisations of ICMIF and AMICE came together for a three day reinsurance training, designed for people who are new to a reinsurance department or have a role that demands at least a working knowledge of how reinsurance operates. It offered valuable insights into the basics of reinsurance by combining presentations from seasoned professionals with a powerful simulation tool that enabled the participants to immediately apply what they have learned in a realistic, dynamic environment. The emphasis placed on learning by doing enabled participants to immerse themselves in the reinsurance process and gain a much deeper understanding of the topic.

Simulation | ReAction business game

The state of adversity consisted of three medium sized insurers competing domestically and three global AA-rated reinsurers on four lines of business property, theft, marine and auto. The participants decided on team roles, chose their business strategy, presented their strategy in plenary and designed the programme with the lead insurer.

The insurer's role is to decide the strategy and risk appetite of your company. The participants design their reinsurance programme. The business objectives are market share, profitability, solvency and customer service. The strategic options of insurers include customer service, niche market, low cost, market share and market follower and attitude to underwriting risk.

The reinsurers provide reinsurance advice service to one insurer, they negotiate the terms as lead underwriter and underwrite new reinsurance business in the market. The reinsurers' business objectives consist of new business development, market share growth, profitability and bespoke client service.

Why do we need reinsurance

Michel Hermand from P&V Group offers an overview of whether and why we need reinsurance. He explains that reinsurance can be considered a sacrifice of parts of the expected profit in exchange for partial risk transfer, mainly originating from large or extreme events. It serves to stabilize the technical result, giving preference to a financially secure mid- and long-term perspective over maximizing short-term profits.

Michel refers to the example of non-life insurance activity with MTPL, GTPL, MD, Property, WC and LOB's:

- Gross premium income = 495e6 EUR
- Commissions and expenses = 169e6 EUR (34%)
- Expected aggregate loss = 301e6 EUR (61%)
- Expected technical result = 25e6 EUR (5%)

The expected aggregate loss can be split into five claims categories: attritional (<0,5e6: 230e6), medium (0,5e6-4e6: 35e6), big and man-made cat (>4e6: 20e6), attritional natural hazards (<=8e6: 5e6) and large natural hazards (11e6).

The full risk profile of the company consists of gross, net, VaR and TVaR. Solvency II has chosen the VaR of 99,5% on the European market, while Switzerland has set it based on TVaR at 99 %.

The primary insurers have regulatory requirements and relatively high risks due to which it is crucial to mitigate these through buying reinsurance. The costs of reinsurance do not consist of the reinsurance premium only. It is important to subtract the expected recoveries from the reinsurance premium as well.

Types of reinsurance

Nadja Riedwyl from Swiss Re outlines different ways of how risks can be transferred from a customer to a primary insurer and from a primary insurer to a reinsurance company. The specific risks may range from the areas of motor, home, life, health, business and natural catastrophes. The primary insurer usually passes on portfolios of either similar risks or large single risks with the aim of reducing the volatility and severity of claims. The reinsurer diversifies the risk portfolio by geography and type of risk.

She differentiates facultative versus obligatory/ treaty reinsurance. Facultative reinsurance refers to reinsurance of single risks (e.g. civic infrastructure, buildings). Obligatory reinsurance or treaty reinsurance, on the other hand, consists of an agreement on a number of risks, building an entire portfolio or segment. Both facultative and treaty reinsurance can be agreed as proportional and non-proportional reinsurance. With non-proportional reinsurance, both parties agree on a certain deductible, thus the primary insurer bears all losses up to a certain amount. In proportional reinsurance, instead, the primary insurer and the reinsurer divide premiums and losses among themselves at a contractually defined ratio, with the reinsurer's share of the premiums being directly proportional to its obligation to pay any losses. The simplest form of proportional reinsurance is quota share (QS): the primary insurer retains a fixed percentage of each policy's premiums and cedes the remainder. Losses are apportioned at the same ratio. For the QS the ratio is fixed, which is not necessarily the case for other proportional contracts. QS treaties are in particular suitable for young, fast-growing insurers (start up's) or established companies which are new to a certain class of business. They also make sense for those who are seeking capital relief in light of solvency considerations or protection against random fluctuations across the entire portfolio. Disadvantages of QS treaties relate to the crude notion of the proportional sharing of premiums and losses, thus, the QS does not effectively protect the insurer against extreme loss scenarios. Imbalances in a primary insurer's portfolio also remain unaddressed. A primary insurer might also ceding too much, retaining too little at the expense of profitability. A popular other proportional reinsurance solution to the drawbacks of a QS is a surplus reinsurance agreement.

The Surplus Treaty is more commonly used than the quota share, as it allows the primary insurer to keep the retention up to a specific amount. Surplus reinsurance implies negotiation on the facultative reinsurance or additional retention, the point of cession to reinsurer and the retained portfolio.

Non-proportional reinsurance means reinsurance where there is no fixed or pre-determined split of premium and losses. – mainly dealt with in non-life. All losses up to a certain amount are borne by the primary insurer, the amount is known as deductible. This type emerged as an alternative and complement to traditional and proportional reinsurance in the 1970s. Insurance companies are enabled to retain the more frequent small risks for their own account. Reinsurance solutions were sought that would provide protection against the biggest and accumulated losses, those which could jeopardize the primary insurer's solvency. The non-proportional treaty types presented are excess of loss per risk XL/R, excess of loss per event XL/E or Cat XL and stop loss.

More detailed information is provided in Swiss Re's Essential guide to reinsurance ([updated version](#)¹ 2013).

Designing your reinsurance programme

Andreas Gadmer from Signal Iduna explains how to design a reinsurance programme. The key achievements of entering into a reinsurance contract lay in the protection of solvency, namely to protect against large single losses, accumulation of losses. Reinsurance also serves to reduce volatility in claims payments and in financial results. It also provides capacity for large sums insured or for starting new lines of business.

There are several options for reinsurance contracts (treaty vs. facultative contracts; proportional vs. non-proportional contracts). On the proportional side, there are the types of quota share (QS) and surplus (Spl). On the non proportional end, there are loss (XL) and stop loss (SL). It is common to combine different programmes.

According to Standard & Poors, risk management and risk strategy must be embedded in a risk culture, nurtured by an assessment of the company's risk appetite (risk vs. reward). A desired risk profile should be developed in which the risk tolerance should be agreed, risk limits and control mechanism should be defined, quantification and aggregation must be assessed.

- Risk appetite provides the framework for decisions on risk taking? It sets principles and guidelines on how to measure risk. It defines how selection, avoidance and transfer of risk is done.
- Risk tolerance is based on the risk appetite; it defines quantities such as risk limits and risk bearing ability.
- Risk strategy describes the handling of all relevant risks in a company It comprehends risk appetite, risk tolerance and a risk management system.

Signal Iduna's reinsurance risk control framework comprehends (I) risk communication (with the supervisor on a yearly basis and internal risk report every six months); (II) performance management (scorecard for value creation and business profitability, capital allocation and measurement of diversification, underwriting performance expected and benchmarked RoRAC; (III) business strategy (defining the risk appetite based on guidelines and pricing, analyzing new strategic fields including investment decision based on market risk and credit risk assessment, diversification of impact of large contracts).

¹ http://media.swissre.com/documents/The_essential_guide_to_reinsurance_updated_2013.pdf

Andreas presents several examples of how to identify suitable structures depending on the case-to-case requirements. More detailed information on these can be found in his presentation.

The costs of reinsurance and today's market

Piet Haers from QBE Re (Europe) Secura Branch outlines how reinsurance pricing works. He differentiates among the technical price and the commercial price. Recalling the differentiation between proportional (no price in the strict sense of the word, but commission which is paid to the reinsurer) and non-proportional (a real price).

As regards the proportional reinsurance contracts, the price equals the commission plus the special clauses (profit commission etc.). A rating process takes place consisting of an analysis of recurrent LR (excluding large claims), calculation of LR large losses and LR CAT. The non-proportional requires to calculate the technical reinsurance price, the reinsurer will estimate the total claims amount in the layer in the year to come. You can use the past experience to estimate the future price. As reinsurer, you will need to ask to the primary insurer to receive the necessary data (past claims and premiums) in order to calculate the observed burning costs (total claims minus total premiums on a yearly basis). In the revalorization and selection of data requires a claims index, taking into account the inflation of large claims and the premium index, taking into account tariff evolutions. Loss indexation and extrapolation are important in this process. The total of indexed and extrapolated claims should be divided by the total of indexed and premiums. To predict the future evolution you accumulate the data from the past in order to predict the future (chain ladder).

Formerly, most reinsurers calculated for each primary insurer/ client a separate dataset and propose a rate based on that. This allows pricing of higher layers and allows the calculation of special clauses. Nowadays, the data is being aggregated from several primary insurers in order to develop a market model (e.g. MTPL). This makes the model much more stable, taking into account the frequency of the claims on a larger dataset. It still allows to use client data to calibrate the market model. This avoids a lack of sufficient data and makes the choice of the model easier. Another way is to use exposure rating (e.g. in property) where a rate is calculated only taking into account the composition of the portfolio. Drawback is the use of stand exposure curves. A way to remediate is to calibrate the exposure rating with the same factor as the difference of the exposure rate and the experience rate on a reference layer with enough data.

The role of the reinsurance broker

Robin Swindell from Willis Re offers valuable insights into the role of the reinsurance broker. Brokers are agents and are therefore subject to the general law of agency. In the case of reinsurance, brokers are agents of insurance companies; in the case of retrocession, brokers are agents of reinsurance companies. Brokers normally have Terms of Business Agreements (TOBAs) setting out the details of their relationships with their client and markets. Agents have some key responsibilities towards their principals (obedience, due care/good faith).

Transactional reinsurance consists of pre-placement, placement and post-placement. As regards the pre-placement, brokers seek to manage the market (e.g. maintaining regular contact with all key reinsurers; actively seeking and assessing new or emerging reinsurers and report on the opportunities that they present; up-to-date information to clients on all new developments and related implications. Brokers prepare the submission (e.g. hold pre-renewal meetings on information requirements) and the contract documents (e.g. drafting contract wordings, seeking the best available coverage and technology, advising on what is

currently available in the market, obtaining agreement of leading reinsurers, administer distribution to all reinsurer and return of signed documents. Brokers plan the renewal (e.g. collaborating on an accurate timeline for the renewal process, develop a clear strategy, objectives, targets for price and coverage).

As regards the placement, brokers seek to getting across the client's message, ensuring price discovery (e.g. negotiating terms, investigating alternatives, obtaining quotes promptly and clearly) and capacity (e.g. identifying all potential supporting reinsurers in advance and obtain their support as necessary in order to ensure completion at the terms quoted; offering programme to world-wide markets, negotiating on the client's behalf by following up full submissions, monitor progress of placement and advising clients). The appropriate allocation of reinsurance capacity over a programme is crucial (e.g. using experience, best judgement and large and reliable data; upon completion determine each reinsurer's precise signed share in conjunction with the client, promptly advise all reinsurers of their signed shares).

As regards the post-placement, brokers produce documentation immediately following completion of placement, ensuring smooth handling of premiums and treaty accounts. They provide advice on process claims to all reinsurers; actively administer, co-ordinate and press for swift collection of claims and transition of funds; offer independent advice on complex claims, including both defence and reserving issues. The post-renewal debrief should give a detailed debrief of the renewal (successes² and failures³), include feedback from reinsurers and peer group comparisons. Establish a joint plan to address common objectives for the forthcoming year.

What typically happens after a loss? Slow claims collections, increased price/ reduced commission, more restrictive terms. What can be done to minimise this? Plan, communicate, monitor and plan again. When establishing a clear and inclusive plan of action, Robin recommends to involve a broad range of colleagues (e.g. reinsurance, claims, finance, public relations, senior management), to seek support and experienced-based advice from your broker and not just your account team but senior claims figures.

² Did some risk types perform better than expected? Have your rebuilding costs been lower than expected? Have you been able to settle claims more quickly than anticipated?

³ Be straight-forward about the problems... but don't publically beat yourself up! Giving reinsurers "A chance to earn your money back" is not a great reason to renew after a loss"