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The P&C Reinsurance Landscape

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Reinsurance for property and casualty insurance follows the same general principles as life and annuity reinsurance. But all of the terminology and most of the details are totally different. I started to learn this 10 years ago, when I left the life insurance sector after over 30 years and joined a property and casualty reinsurance broker as an advisor on enterprise risk management. The following represents my very brief summary of the P&C reinsurance landscape that I have picked up by association over the past 10 years.

AUTOMATIC AND FACULTATIVE REINSURANCE

As with Life reinsurance, P&C reinsurance can be written on an automatic or facultative basis. Automatic reinsurance is also called Treaty reinsurance. Facultative reinsurance follows the same general choices for structure as Treaty reinsurance.

PROPORTIONAL TREATY REINSURANCE

Proportional reinsurance is called so because both premium and losses are shared between the cedant and the reinsurers based on the cession percentage. As example, if the cession percentage is 60 percent and premium is \$1,000 and losses are \$10,000, the reinsurer receives \$600 in reinsurance premium and pays \$6,000 in loss.

Property & Casualty insurers use two forms of proportional reinsurance: quota share (there is also a variant to this called variable quota share) and surplus share.

Quota Share: With quota share reinsurance, the cedant and reinsurer agree upon a fixed cession percentage for all risks, so that the reinsurer will receive a fixed percentage of premium and loss for all risks ceded to the quota share treaty. In its variant, the variable quota share and several fixed percentages can be set based on risk characteristics (which could include limit, geography or type of risk).

Surplus Share: Surplus share treaties are a form of proportional treaty that allows the cedant to vary the quota share percentage and determine the proportion ceded at the time of underwriting each and every risk. The cedant is allowed to cede the “surplus” amount of exposure over and above their

P&C INDUSTRY BACKGROUND

Most P&C policies are written with one-year durations. Policies are not binary and the amount of loss paid by the policy (if any) is uncertain, even after a loss becomes known. Pricing and reserve risk are therefore significant.

On the average, over the entire industry, P&C insurance runs at a modest underwriting profit to break-even over time. The industry’s genuine profits emerge from interest earned on assets backing reserves.

Reserves reflect amounts held for future claims payments on covered losses that were incurred during prior one-year coverage periods.

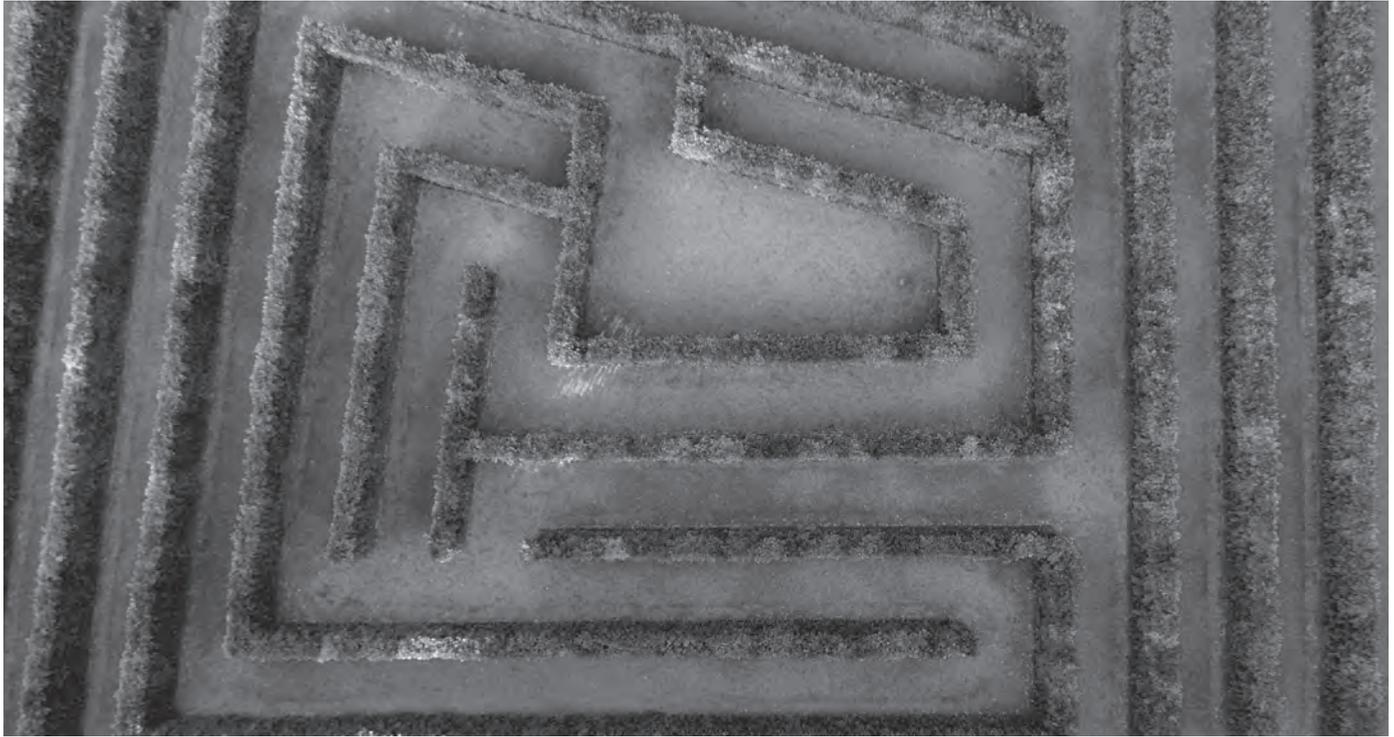
Claims from different P&C lines of business pay out over vastly different timeframes; property business over a shorter period and casualty business over a generally longer period.

For some lines, like personal auto and homeowners, almost all claims are settled within two or three years after the coverage period. Others, like workers’ compensation, take decades to settle.

For various historical reasons, P&C reserves are not generally discounted for interest, which is one major driver in the low or negative excesses of premiums over claims.

retained line subject to a maximum ceded percentage and limit. As an example, the surplus share treaty might allow the cedant to share between 50 percent and 80 percent of a risk subject to a maximum ceded line of \$10 million. In this example, the cedant could have a \$2M risk, retain \$1M and cede \$1M to reinsurers, a 50/50 sharing of risk. Another risk, could have a \$5M line and the cedant could decide to have the same 50/50 sharing of risk or could cede 80 percent of the risk, retaining \$1M and ceding \$4M. In each of these examples, the cedant and reinsurer share in the premium based upon the cession percentage determined by the cedant at the time the risk is underwritten. Due to the fact that this form of proportional reinsurance could theoretically involve adverse selection against the reinsurer, surplus share treaties are less common. Uncertainty surrounding loss development, exposures and timing of loss payments in casualty lines lead to surplus share being used less frequently for casualty business.

Pricing: Pricing for proportional reinsurance generally follows the original policy pricing. However, these treaties generally pay ceding commissions:



- A ceding commission should cover the expenses of the ceding company, but it can be reduced if the expected profitability of the business is questionable.
- In some cases, ceding commissions are on a sliding scale, trending downwards as claims are higher and higher as claims are reduced.
- A Loss Corridor can be introduced that will have the cedant retain 100 percent of losses above a given loss ratio and revert to the original quota share percentage after another higher loss ratio. This mechanism can allow for improved ceding commission terms and bridge a gap between the cedant's and reinsurers' loss expectations.

Proportional reinsurance is generally used to support a cedant's need to write larger risks than they are typically comfortable with; of the two, surplus share does this most effectively. As well, the ceding commissions and ceding of large amounts of unearned premium reserves provide some measure of expense and surplus relief. Depending on the percentage of business ceded to the proportional treaty and the exposure to event or catastrophic risk, proportional treaties can provide substantial catastrophe protection.

PER RISK EXCESS TREATY REINSURANCE

Losses in the property and casualty world are generally not binary and usually fall short of the full policy limit. If there is a fire in a 100-story office tower, the loss is generally contained

to one or a handful of floors, not the entire building. As a result, reinsurers are willing to consider reinsurance structures that will allow the cedant to retain the first portion of loss as a retention and, above the retention reinsurers, would pay losses. This is per risk excess reinsurance, sometimes referred to as excess of loss or XOL reinsurance.

Because the cedant is retaining the first dollars of loss, there is also a disproportionate sharing of premium. As an illustration, an XOL treaty may provide protection for \$5 million per risk, per loss excess of \$5 million per risk, per loss. In this example, reinsurers would receive less than 50 percent of the premium due to the fact that more losses are expected to fall within the first \$5 million of loss than in the second. As the retention relative to overall exposure increases, per risk excess pricing reduces.

Per risk excess reinsurance is utilized to protect both property and casualty exposures.

WHAT IS CASUALTY INSURANCE?

Casualty coverages include all forms of liability coverages, from individual liabilities resulting from auto accidents, to corporate liability and professional liability of lawyers, doctors, and directors and officers. Workers' compensation insurance is also considered to be a casualty coverage.



As with quota share, per risk excess reinsurance enables cedants to write larger risks. And the structure allows a cedant to cap-off peak risks within her or his portfolio. These treaties sometimes have ceding commissions, but, since the premium volumes are generally lesser than proportional reinsurance, the expense and surplus relief are lesser too. Due to the first loss retention of per risk excess treaties, they generally provide lesser protection against catastrophic risk than do proportional reinsurance treaties.

PER OCCURRENCE EXCESS TREATIES

Per occurrence excess treaties protect cedants against an accumulation of risk to a single occurrence or event. Insurance regulators and rating agencies are particularly concerned with a property and casualty company's ability to withstand

exposure to natural catastrophes; and, increasingly, they are concerned with possible exposure to systemic casualty risk.

Per occurrence excess treaties are similar to per risk excess treaties in that the cedant retains the first portion of loss and reinsurers respond excess of that retention.

Property occurrence excess treaties are often referred to as "Cat" treaties because most of the protection afforded is against natural perils like earthquakes, hurricanes and floods; these treaties still provide protection against man-made disasters like 9-11 or the Phillips Petroleum disaster (1989 for \$1.4 billion).

Casualty excess occurrence treaties are often referred to as "clash" treaties since the treaties respond to a clash of losses from either or both multiple policies for the same insured (think Enron) or multiple insureds involved in the same event (the MGM Grand Fire as example, where the building owners, architects, construction companies, local government and others were defendants). The definition of "occurrence" or "event" has always been one of the major hurdles in negotiating a casualty occurrence excess treaty.

WHAT IS A CASUALTY EVENT?

In casualty insurance, an occurrence is an event that results in one or more claims. In most casualty per occurrence excess treaties, an event requires multiple claims against multiple policies.

As is the case with per risk excess treaties, pricing for per occurrence excess treaties reduces as the retention increases. For property Cat treaties, reinsurers utilize catastrophe models to develop expected annual aggregate losses exposing the treaty and price accordingly. For casualty clash treaties, there are no industry-standard models for pricing and pricing generally follows benchmarks relative to other similar treaties, attachment relative to the maximum per risk exposure or to industry concentrations.

INSURANCE-LINKED SECURITIES

Since the early 1990s, the capital markets have played an increasing role in supplying capacity for catastrophic risk. As investments, they are popular with pension plans and other investment funds that are looking for extra returns from uncorrelated investments.

The most common form for these instruments is a bond that is purchased by the investor; the bond pays a regular coupon and at maturity repays the principal, unless there is a pre-specified catastrophic event. This bond is held by a special purpose vehicle (SPV) reinsurer which enters into a reinsurance agreement with

the insurer; if there is a catastrophe, the principle is not repaid and coupon payments cease. Initially, the definition of a triggering catastrophe was based upon industry-wide losses from a single event. As the market gained experience with this form of catastrophe protection, the definition has shifted to more company-specific definitions of catastrophes. ILS, unlike traditional reinsurance treaties, will often run for multiple years, offering insurers stability of both capacity and of pricing. With the large storms in 2017, several existing ILS were called upon to pay insurers.

Other forms of ILS included industry loss warranties which are parametric derivative contracts that pay their full amount to the extent that the industry loss (as determined by some recognized supplier of such information) exceeds a specified dollar amount.

ILS vehicles have been commonly used to protect against exposure to natural catastrophes. More rarely, they have been used to provide casualty catastrophe protection; fewer than a handful of casualty ILS structures have been placed to date; this is due to the lack of any standards for measuring and modeling casualty catastrophe risk.

AGGREGATE STOP LOSS

This form of reinsurance provides insurers with a comprehensive guarantee that their claims will not exceed a predetermined level, specified as either a percent of the premium base or a fixed dollar amount after satisfaction of a deductible (or retention). In many cases, this is the form of reinsurance that most closely aligns with what the insurer wants in terms of claims variability management. However, aggregate stop-loss is not always available; and, when it is available, it may be priced at a level that makes it less attractive compared to a bundle of other reinsurance treaties that provide piecemeal coverage that can add up to something very close to the protection afforded under an aggregate stop-loss.

LOSS PORTFOLIO TRANSFERS

Even though most P&C insurance is written via one-year contracts, claims may pay out over multiple years. An insurer may end up with a large amount of loss reserves that are held to pay future claims on previous business. In some cases, insurers want to be relieved of the uncertainty of the actual amount of claims that will be paid as well as the capital that must be held to provide for that uncertainty. A loss portfolio transfer (LPT) is a form of reinsurance that transfers all or a portion of the liability for future claims payments to the reinsurer. Depending upon the type of business, the amount of claims already paid and a host of other factors, the amount transferred to the reinsurer may be the reserves held, something less or in some cases, a larger amount. The reinsurer may also take over management of the claims so that they can seek to achieve the best possible result.

ADVERSE DEVELOPMENT COVER

An alternative to the LPT is an adverse development cover (ADC) under which an insurer gets reimbursement from the reinsurer for claims from any claims in excess of a pre-agreed retention level. Usually this level will be either at the level of the reserves held or at some level higher than the reserves.

MULTIPLE EXCESS LAYER AND REINSTATEMENTS

Because most losses are partial, cedants can reduce rates depending on the retention of any given excess cover. In order to appeal to varying risk assumption appetites of reinsurers and to appeal to their own risk retention appetite, cedants will often structure their per risk, per occurrence, and adverse development covers in layers in order to appeal to these fluctuating appetites.

Excess reinsurance treaties often have limitations on the number of times they will respond for the duration of the contract. Each time the contract pays an additional limit, is considered a reinstatement of the original limit. Per risk excess reinsurance contracts that have a high premium volume and predictable results (sometimes called “working” reinsurance layers) are generally provided with unlimited reinstatements. Whereas, those with limited premium volumes and substantial volatility are given only limited reinstatements; sometimes these reinstatements come with an additional premium referred to as a paid reinstatement. Cat and Clash reinsurance contracts generally have limited and paid reinstatement features.

COMBINATIONS OF TREATIES

For P&C insurers, it is quite common to purchase a variety of reinsurance covers for different “layers” of their exposure in order to address different needs: capacity, financing, stabilization and catastrophe protection. Each of the forms of reinsurance fulfill, to some extent one or all of these functions.

CONCLUSION

In writing this brief tour of P&C reinsurance, I realize that I have learned quite a bit about what was once a totally foreign land. But in gaining that familiarity, I realize that I may have lost some of my Life Insurance perspective. I hope that I retained enough to make this a helpful starting point for anyone who wants to learn about this fascinating sector. ■



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