Pricing Extra-Contractual Obligations and Excess of Policy Limits Exposures in Clash Reinsurance Treaties

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Abstract: The authors examine the loss exposures due to extra-contractual obligations and excess of policy limit third party actions. They discuss how these components of clash cover reinsurance can be priced.

PRICING EXTRA-CONTRACTUAL OBLIGATIONS AND EXCESS OF POLICY LIMITS EXPOSURES IN CLASH REINSURANCE TREATIES

By Paul Braithwaite and Bryan Ware

"Bad Faith Award Shocks Insurer."[1] As headlines such as this become more common in the trade press, reinsurers need to pay more attention to the prices charged for Extra-Contractual Obligations (ECO) and Excess of Policy Limits (XPL) coverage provided in clash treaties.

Reinsurance casualty clash treaties provide coverage for exposures including multiple policy occurrences, multiple claimant workers' compensation (WC) occurrences, runaway allocated loss adjustment expenses (ALAE), ECO/XPL judgments, and a few other less visible exposures. In years past, multiclaimant WC losses and runaway ALAE have been the most frequent kinds of losses we have seen reported to clash covers. Multi-policy occurrences are more common in some lines of business, such as professional liability lines, or in treaties structured to cover on a per-coverage-part basis (for instance, an auto accident involving auto liability and workers' compensation). But ECO/XPL coverage is becoming much more important for reinsurers to consider due to fears of enormous jury awards, particularly punitive damages against corporate defendants.

Traditionally in clash pricing, a judgmental rate-on-line approach has been the norm. However, there is a significant amount of data available on which to base pricing models for some of the events mentioned. By using such an approach, it is possible, at first, to simply add

consistency to judgment. Over time, more data can be gathered, increasing the accuracy of the model projections.

The purpose of this paper is to take an in-depth look at the ECO/XPL component of clash reinsurance coverage, first at the definitions and some background of the coverages, then at the underwriting considerations which come into play, and finally at the framework of a pricing model which can be used to incorporate the specific characteristics of the cedant's book of business into a price for this component of the clash treaty.

DEFINITIONS and BACKGROUND

XPL

The Excess of Policy Limits (XPL) component covers judgments in excess of the original policy limits against the *insured* for claims brought by a third party. Consider an insured who buys a policy with limits of $1 million. The insured loses a lawsuit brought by a third party for a verdict of $10 million. The $9 million above the policy limit may be an XPL judgment. An XPL judgment normally involves alleged questionable claims handling or defense of a lawsuit by the insurer. This often takes the form of the cedant failing to settle a claim within the policy limits when the opportunity was presented. It is due to the handling of the claim that the insurer is considered liable for the excess verdict. The claim for which the damages were awarded must otherwise be covered by the primary policy.

An XPL judgment may include compensatory and punitive damages, but these are not always covered by the primary policy. Compensatory damages can include infliction of emotional distress or loss of business opportunity or business reputation. Punitive damages are usually

reserved for situations involving conduct that was exceptionally malicious, egregious, or outrageous.

One example of an XPL claim, affirmed on appeal, can be found in the case of *Fortman v. Hemco*, 211 Cal. App. 3d 241 (App. Div., California 1989). This case involves a three-year-old plaintiff who was injured in 1981 when she fell out of a jeep her mother was driving and was run over by a following vehicle. The plaintiff sued Hemco, who manufactured the mold used to form the fiberglass top and doors on the jeep. The doors on the jeep were designed to be rear-hinged and had exposed interior handles. The plaintiff hooked a sleeve on the door handle, opening the latch. The wind caught the door and threw it open, pulling the plaintiff out of the jeep.

Hemco's insurance company had the opportunity to settle the case for $1 million in 1984. They chose to go to court, primarily because Hemco neither designed the jeep top nor manufactured the actual top on the Fortman jeep. In 1986 a jury awarded Ms. Fortman $17.7 million in economic damages for the personal injury claim and $6 million for pain and suffering. The court concluded that Hemco provided expertise and could have corrected the design. Hemco's insurer was required to pay the entire loss, including the amounts in excess of the policy limit. Under the clash reinsurance program that the insurer purchases today, this would have been a sizeable reported loss to the clash layer.

ECO

The Extra-Contractual Obligations (ECO) component of a casualty clash reinsurance treaty covers judgments against the *reinsured* which are "extra" or outside the policy. The plaintiff in the lawsuit is normally the original insured. The major cost in the judgment is

often punitive damages. By nature, these are liabilities not covered under any provision of the policy. ECO claims normally involve wrongful or negligent claims handling by the reinsured. If, in addition, it is found that the cedant dealt with the claim in "bad faith," punitive damages may be awarded. These clauses first began to appear in reinsurance treaties in the late 1970s; XPL clauses have been around since the 1960s.

A fairly recent example of an ECO loss is the case of *Hedrick v. Sentry Insurance Co.*, 96-128100-90 (Dist. Ct., Tarrant Co., Texas). This case began with an auto accident on an interstate in May 1986. A truck rear-ended a northbound car and knocked it and a second car over the median into the southbound lanes. One of the cars struck head-on another vehicle containing Virgie Poston and her two adult daughters. All three were killed.

Ms. Poston's grandchildren filed suit against the drivers of both cars and the truck for damages in the deaths of their mothers and grandmother. The insurance companies for the three drivers settled, and the money was split among the grandchildren, the husband of one of the daughters, the driver of the car that struck Ms. Poston's, and Ms. Poston's husband.

Mr. Poston felt that he had been inadequately compensated for the death of his wife. In 1989, he filed suit against his own insurer, State Farm. According to Mr. Poston's attorney, the insurer failed to investigate, lost the claim file, and denied the $20,000 settlement Mr. Poston sought.

Mr. Poston and his son sued State Farm for bad faith arising out of their handling of the claim. On December 10, 1993 the jury awarded them $2.17 million in compensatory damages and

$100 million in punitive damages. In March of 1994 while the appeal was pending, this case was settled out of court for an undisclosed amount.

There are a few items of note in this example. The first is the obvious one. It would have been easy for the insurer to settle the claim for a small amount of money early on in the case, and thereby avoid the shock verdict. The settled amount was probably substantially less than the verdict. On the other hand, with the negotiating leverage provided by the shock verdict, the settlement was probably very large. From the reinsurer's perspective, this claim is also likely to have been a substantial loss for any clash reinsurance program the insurer chose to purchase.

The second point is the elapsed time involved here. The accident was in May 1986 and the jury award was late 1993. It is entirely possible that a clash reinsurer would see no reported losses to the layer from a claim such as this for seven years. If appealed, the final value of the claim may not be known for several years after that. This can be a fairly long-tailed coverage.

UNDERWRITING CONSIDERATIONS

We have identified five general areas of underwriting considerations which we take into account when determining an expected loss for the ECO/XPL component of a clash program: 1) the states in which the reinsured writes business, 2) other reinsurance coverages the company purchases, 3) the size of the ceding company, 4) the quality of and approach to claims management by the reinsured, and 5) the policy limits which the reinsured sells. We will look at each of these in more detail.

Before we dive into these considerations it is worthwhile to briefly discuss our goal in this exercise. The steps we will go through in any clash pricing exercise are to first determine what

types of events (ECO/XPL, WC multiclaimant, etc.) represent significant exposure to loss, then to determine an expected severity and frequency of loss for each type of event. This may take the form of, for example, an expectation of a $5 million loss every 25 years. Thus our task is separated into determining both what size of loss is reasonable to expect in the layer (the severity) and how often we expect to incur that loss (the frequency).

States

The states in which the company writes business can be particularly important for several reasons. Different states have different rules about how to handle damages. For instance, in Texas punitive damages are limited to four times the actual damages, except in cases of gross negligence or malice, in which case this limit does not apply. However, in a few other states, punitive damages cannot be covered by insurance at all. The states in which a cedant writes can have an effect on both the frequency and the severity of losses.

The level of litigation in the states is of utmost importance when determining an expected frequency of claims. Research has shown that California and Texas tend to have the highest incidence of punitive damage claims.[2,3] New York, Florida, and Illinois are also higher than the norm.

This raises some interesting coverage issues. First, are punitive damages insurable? Punitive damages can be assessed either directly or vicariously against the insured. An example of a case where punitive damages might be assessed directly is a case where a doctor inadvertently leaves an instrument inside a patient after surgery. The damages are assessed against the doctor. However, punitive damages assessed against the hospital in the same case are vicarious.

Currently, 46 states allow recovery, at least in part, of punitive damages, depending on whether the damages are vicarious or direct. Michigan, New Hampshire, Nebraska, and Washington do not permit recovery of punitive damages. However, even these states allow recovery of non-economic damages (usually pain and suffering). Coverage of vicariously assessed punitive damages is more common than of directly assessed damages.

The next coverage issue is whether the punitive damages are recoverable under reinsurance in the states in question. In the case of punitives assessed against the insured (XPL), the indemnity payment is made by the reinsurer on a contractual basis where the original policy sold by the insurer provided coverage for punitive damages. This assumes that the original damages were insurable to begin with.

On the other hand, some insurance departments view ECO coverage of punitive damages similarly to direct errors & omissions insurance. This may then revert to the state laws on insurability; however, the situation is unclear. Even if state laws mandate that punitive damages are uninsurable (and thus not reinsurable in this sense), a court may rule that in a given situation it is in the public's best interest to require a reinsurer to cover the punitive damages. For example, New York and California (among other states) prohibit insurance coverage of directly assessed punitive damages (vicariously assessed punitives are insurable). Regulators in these two states have voiced concerns with respect to reinsurance recoverables for these uninsurable damages, due to public policy concerns. However, this has not been thoroughly tested in the courts.

Other Coverage

The main question to answer here is whether the cedant purchases any insurance or reinsurance which inures to the benefit of the clash program, specifically errors & omissions coverage. An E&O policy may cover alleged faulty claims handling, but not always. If the company's reinsurance program is structured such that this is inuring coverage, then the clash reinsurer is further removed from loss. An E&O policy may provide some protection against ECO claims, but will probably be of little value on XPL claims. If the answers to these questions are not contained in the pricing submission material, it is worth asking.

For instance, say a company buys clash protection for a layer of $15 million excess $10 million, and sells only policy limits of $5 million. A judgment of $20 million, including $15 million ECO, will be a $10 million loss to the clash layer. However, if the reinsured buys an E&O policy with limits of $10 million that inures to the clash protection, then there is no loss to the clash layer ($5 million inside the policy limit, $10 million to the E&O, and $5 million company retention).

The second coverage point to note is the coinsurance percentages allowed. The current standard is 90%/90%, meaning the company retains a 10% coinsurance share of each ECO and XPL judgment. The most common variations on these shares are 80%/80%, 80%/100%, and 100%/100%. (It often simplifies matters to have the ceding company retain an equal percentage for ECO and XPL. This usually circumvents having to differentiate between the two, which is sometimes difficult.) Another variation is that the indemnity loss may be required to attach the layer before ECO or XPL will be covered. From a reinsurer's standpoint, it is wise to have the cedant retaining a non-zero percentage. Since the cedant's actions normally determine the

incidence of ECO claims and usually of XPL claims, they should have a direct stake in the outcome.

In applying coinsurance, the cedant's share is typically subtracted from the ground-up loss. For instance, use the same $15 million xs $10 million clash layer mentioned above and assume a $12 million ground-up ECO loss with a 90% reinsurance coverage share. (For simplicity, we are assuming that the entire loss is ECO. Normally a portion will be a covered loss within the policy, and thus not subject to the coinsurance percentage.) Using this application, the coinsurance share is 10% of $12 million, or $1.2 million. The remaining loss is $10.8 million, resulting in an $800,000 loss to the clash layer.

Other variations of this calculation are used in other reinsurance covers. For instance, in quota share reinsurance, the ECO or XPL loss may be subject to an additional limit or recovered pro rata in addition to the limit of the contract. Although these methods of calculation are not meaningful in the clash context, they are mentioned as another source of inuring protection. It is also worthwhile to find out if the cedant's excess of loss reinsurance (if any) provides additional coverage for ECO/XPL.

Size of the Ceding Companies

All else equal, a larger insurer will have a higher ECO judgment from a given incident than a smaller company. One reason for this is the actions of juries and judges in determining damages. Punitive damages are by definition intended to be painful. Consider two companies, one with $10 million in premium, the other with $1 billion. A $1 million verdict against the first company will likely have a definite effect on the way they do business. They will feel the loss,

whereas the second company would not. Proportionally, it would take a verdict of $100 million against the larger company to have the same effect. This sometimes has the effect of making larger companies targets of these lawsuits.

This relationship is not as clear for XPL, where the verdict is officially against the insured. A proportionately larger punitive damage award is probably more likely against a large insured than a small insured, regardless of the size of the insurer. However, since the claims handling of the insurer is also responsible for the judgment, its size may become a factor as well.

The deep-pocket effect also comes into play. People are more likely to sue a larger company because there is a potential for much bigger rewards. Thus, the frequency of losses will also be higher.

Overall, one would expect less total loss on ECO/XPL covers on 100 insurance companies of $50 million each in premium than on one company of $5 billion.

Claims Management Practices

Probably the single most important piece of qualitative information we seek when determining a price for the ECO/XPL portion of a clash cover is an honest, unbiased evaluation of the quality of the cedant's claims management practices. There are several topics which are important for us to cover when evaluating the cedant's claims staff.

What is the average workload and experience level of the staff? The lower the workload, in general, the less likely a claim is to fall through the cracks.

What are the cedant's views on settling claims? An early settlement in the *Hedrick v. Sentry* case mentioned above could have saved potentially $100 million. A company which chooses to settle potential ECO/XPL claims early on may develop a frequency problem on their own books, but this probably won't translate into a problem for high clash layers since the severity is kept low.

Some companies will choose to go to court on a declaratory judgment action instead of outright refusing coverage and taking the chance of suffering an ECO/XPL loss. In a DJ case, the facts of the case are not disputed by either side. They choose to go to court for a ruling only on the applicable laws or coverage issues. This approach may avoid the danger of a large punitive damage award for disputing coverage or failing to provide a defense.

How stable is the claims staff? Do they have trouble hiring and keeping good people? A stable claims staff tends to better manage its claims inventory.

Another important indicator of at least the company's past claims practices is the level of reported ECO/XPL claims over the past ten to twenty years. Large claims will normally be included in a pricing submission, although they may not be identified as ECO/XPL. Claims descriptions will often identify them.

Policy Limits

The policy limits sold by the cedant are also important. It is important to look at the size of the policies as well as the relationship between the policy limits and the attachment point of the clash layer. Limits profiles are normally available from the cedant. Clearly, the lower the policy

limit, the more likely a judgment is to be in excess of the limit. An insured buying too little coverage can be a problem. On the other hand, it is desirable to have a buffer zone between the most frequent policy limits sold and the attachment of the clash layer.

A PRICING MODEL

The pricing model described in detail below is an exposure rating model. It is based on the characteristics of the specific cedant being priced. It does not, however, depend on the actual loss history of the cedant. Before using the model, one should examine the historic ECO/XPL losses of the cedant. Ideally, there will be none of any consequence. A lack of historic ECO/XPL claims can be significant, depending on the expected number of losses and the number of years of data available. In practice, there often are one or more. If there are, a quick experience rating is normally done. A look at the experience can at least serve as a reasonability test of the exposure rate.

Experience Rating

To perform an experience rating, any historic ECO/XPL losses are trended to the average accident date of the clash treaty being priced. They are also developed to ultimate. The development is an unusually tricky process, due to the nature of the claims. Closed claims are not usually liable to change. Open claims often change, but the amount of change depends on the status of the lawsuit. If a claim has received a jury-awarded shock verdict and appeals are pending, then the value may very well be expected to drop after appeal. On the other hand, if the suit has not gone to trial at all, it may not even be reported in the submission material and may skyrocket upon verdict. A provision is also included for unreported claims which will arise out of

the historic exposures. Our approach when evaluating a cedant who has historic ECO/XPL claims is to estimate the future reportings (IBNR) for open and unreported claims. If the cedant has experienced rapid growth or other changes in the relative level of exposure, an adjustment is made to reflect this, as well.

After trending and developing, these claims are slotted into the layer (adjusting for coinsurance) and are used to determine an expected frequency of claims and average severity. These results are compared to the exposure rate, determined below. If a cedant has a high historic frequency of ECO/XPL losses in the layer, the reinsurer should, of course, re-evaluate whether this risk is acceptable before continuing.

Exposure Rating Model

The exposure rating model described here is essentially a market share approach. The main input is the premium of the company being rated. Several other factors modify the results of the main calculation. The basic formula is:

$$E[L] = \text{Premium} * \text{Constant} * \int_{\text{Attachment}}^{\text{Limit}} f(x)dx.$$

The result of the equation, E[L], is the expected losses for the ECO/XPL portion of the clash cover. Each of the three components of this formula, which are multiplied together to get this result, can be split into frequency and severity components. This allows E[L] to be stated as a layer severity and a return period. For example, say the formula shows E[L] to be $100,000. Splitting the formula into component pieces may show that this corresponds to a $1 million loss every 10 years (or a $10 million loss every 100 years).

Premium

The first portion of the formula is the Premium. To be specific, this is the premium which gives rise to ECO/XPL exposure. A few aspects must be considered.

1) The first is what *lines of business* are exposed. Most clash covers are limited to casualty business and don't include property in the subject premium base. Property business does not tend to have XPL claims, and ECO claims arising from property are extremely rare. Any ECO claim resulting entirely from the handling of a property loss is likely to be of little consequence.

2) *Workers' Compensation* business presents a lower hazard from ECO/XPL than other casualty lines. Because of the nature of WC business, it just doesn't give rise to anywhere near the number of losses as general liability and auto. However, there is a risk. ECO losses from compensation claims do happen and should not be ignored. Our solution is to include a small portion of the WC premium.

3) The final aspect of the premium component is in the *attachment points* that the company writes. Clearly a company which writes $50 million of GL and AL business excess of an average SIR of $500,000 presents a very different risk than one that writes $50 million in ground-up GL and AL policies. Increasing the premium for the former company can capture some of this added risk.

Constant

The second component of the formula is the Constant. Originally, the base constant is set such that the formula produces the desired frequency of losses for the market. Once calibrated, this constant is modified multiplicatively on a case-by-case basis in order to model the frequency of losses for the individual company being examined. We have identified four separate factors for which the constant may be adjusted.

1) The frequency is adjusted based on the *states* in which the company writes business. For example, we have identified California and to a lesser extent Texas as having a particularly high frequency of ECO/XPL claims. Several other states have also been singled out as deserving an increase in the frequency constant.

2) The relative *hazard level* of the cedant's book can also affect the frequency. A hazard adjustment should consider the line of business mix as well as the types of risks insured. A more hazardous book is inherently more likely to produce injuries which could result in ECO/XPL claims.

3) The cedant's *claims management* practices and philosophies are important determinants of the expected frequency of losses. Subjective opinions such as "better than average" or"terrible" must be quantified. For instance, an "average" company gets a claims handling multiplier of 1; an "above average" company may get .75; a "below average" company may get 1.5.

4) The final adjustment to the frequency is to increase the frequency constant for *"target" insurance companies*. The larger the company, the more likely they are to be the recipient of

lawsuits. This effect is more than simply proportional. The constant needs to be increased to compensate for the deep-pocket effect. One way to measure this is by the overall premium size of the company. The premium component mentioned earlier is for exposed lines only.

It can also be argued that this target company effect will apply to larger underlying insureds, as well. If larger insureds are more likely to be sued for larger amounts, this can be factored in here.

Expected Average Severity

The final component of the formula is the severity. Similarly to the frequency component, we start with a basic severity curve, then modify it to reflect the specific characteristics of the cedant. We will examine the basic curve and the three categories of modifiers we have identified.

The data we started with was a collection of punitive damage claims. These were gathered primarily from two sources. The first is underwriting submissions. Any identified ECO/XPL claims are pulled and collected into a single source. The second group consists of published studies of large verdicts and settlements, such as are contained in *The National Law Journal*.

To this data, we fit a Pareto curve. This is one of several standard curves used in actuarial work to represent severity distributions. An algebraic formula can then be used to calculate the expected severity given any attachment and limit combination. We have selected the two parameter Pareto curve. The first is a shape parameter, which is entirely determined by the fit to

the data. The second is the scale parameter, which can be adjusted to reflect differing characteristics of the cedant.

1) The first severity modifier is for the *states* in which the company writes. Care must be taken to ensure that this modifier does not overlap with the frequency adjustment for the states. The adjustment discussed before was done to reflect solely the relative number of lawsuits filed. This severity adjustment is intended to capture state differences in the amount of the judgments, given that the suit is filed. Clearly, there is a cause-and-effect relationship here. The larger the verdicts in a state, the more people are going to decide to file suit. At the same time, once a precedent is set for large judgments in a state, future large jury awards are more likely. (This effect is somewhat similar to the lottery. More people buy tickets when the jackpot gets high, even though no single person has any greater chance of winning. The increased sales cause the jackpot to go even higher.) This modifier can be applied as an adjustment to the scale parameter.

2) The second severity modifier is for the *coinsurance* factor, discussed above. This can be accomplished by modifying the scale parameter or by adjusting the limit and attachment upwards (i.e., with a 90% coinsurance factor, it takes a loss greater than $10 million to attach a layer excess of $9 million). If the latter method is used, the layer severity must be adjusted, as well.

3) The third severity modifier is for *inuring protection*, such as Errors & Omissions coverage purchased by the cedant. This does not change the number of suits filed against the company, but does lower the chance of penetration of the reinsurance layer. The reinsurer is covering a higher layer for the cases where inuring protection has an effect.

Clearly, the second and third severity modifiers also have an effect on the frequency of claims in the excess layer being priced. They do not, however, have any effect on the pure number of cases being pursued. The frequency component is intended to capture only the number of cases. The severity component then adjusts for the likelihood of the loss reaching the clash layer.

SUMMARY

As clash reinsurance becomes a larger portion of many reinsurers' books of business, it is important to have logical methods of evaluating the associated exposures. The pricing of this business has typically been done using judgmental methods. The underwriting considerations shown above detail what we have identified as the most significant characteristics affecting the ECO/XPL portion of these exposures. The exposure rating model described presents a method of translating this information into expected losses for the clash treaty. By using a model such as this, the reinsurer can add logic and consistency to the pricing approach as well as compare clash programs.

[1] Joanne Wojcik, "Bad Faith Award Shocks Insurers," *Business Insurance,* December 13, 1993.

[2] Margaret Cronin Fisk, "The Year's Largest Verdicts," *The National Law Journal,* January 17, 1994.

[3] Margaret Cronin Fisk, "Verdicts. The Big Numbers of 1994," *The National Law Journal,* February 6, 1995.

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