

REINSURANCE: WHAT, WHY AND HOW?

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Reinsurance has been defined in many ways. A textbook definition of reinsurance is "the transfer of a part of the insurance risk to another insurer." Someone outside the industry might think of reinsurance as "insurance for insurance companies." One of our colleagues likens the concept of reinsurance to "selling ice cubes to Eskimos."

In fact, reinsurance is all those things — and much more. Reinsurance has become an extremely complex business because the needs of direct writing companies are diverse and complicated.

Reinsurance: What is it?

In its simplest form, life reinsurance is a risk transfer that allows an insurance company to write larger life insurance policies than it could otherwise — without jeopardizing the company's financial soundness. Since the company can pass on, or reinsure, part of a \$2 million policy, it does not require the same assets and surplus needed to support a \$2 million claim.

If the company's reinsurance agreement or treaty with its reinsurer calls for the direct writing company to cede any excess amount over the first \$100,000 to this reinsurer, the first \$100,000 is called the scheduled retention. If the treaty further specifies that the amount ceded is subject to a maximum of four times the amount retained, \$400,000 (or four times \$100,000) is the automatic binding limit. Thus the direct writing company may issue a policy up to \$500,000 (\$100,000 retained, \$400,000 ceded to the reinsurer) on an automatic basis, that is, without further consent of the reinsurer.

In the \$2 million policy example, the direct writing company only wished to retain \$100,000 of the risk, so it asked the reinsurer if it would assume the remaining \$1,900,000. Since the reinsurer had the option of accepting or declining the risk based on its own underwriting evaluation, the reinsurance in this case would be *facultative reinsurance*.

As a practical matter, some reinsurers will accept a large risk and then retrocede some portion of that risk to another reinsurer. The same surplus concerns that direct writing companies have are an issue for reinsurers, too. The individual insured will usually not be aware of reinsurance or retrocession agreements since all correspondence and premiums are sent to the direct writing company.

The retention is the amount of the risk that is retained by the direct writer or ceding company. The scheduled retention is the maximum amount a direct writer has determined it wants to retain on a particular class of risk. The desired retention is the amount of risk that the direct writer's underwriters wish to retain on a particular life. The desired retention may be less than or equal to the scheduled retention. Scheduled retention

may vary by age and risk classification, and the table listing these amounts is known as the retention schedule.

Many different methods are used to determine the appropriate retention schedule. In all cases, it makes sense to establish a minimum cession amount in order to avoid purchasing reinsurance in small amounts. It would be inefficient to incur reinsurance administrative expenses unless a significant risk transfer is involved.

A company's actuaries, accountants and industry analysts all can play a role in determining the firm's retention schedule.

The first actuarial consideration is to set a retention limit that would produce a confidence level high enough to ensure that claims in a given year would not exceed predetermined guidelines. The actuarial formula for establishing a retention schedule includes categorizing all policies by age, amount and type.

From an accounting perspective, it is important to calculate the cost of reinsurance at different retention levels. One maxim is to retain the largest amount possible without jeopardizing the company's financial security. Accordingly, large companies that have significant assets, surplus, capital and insureds can retain larger amounts without adversely affecting their safety.

Another consideration is what retention limits have been established by other companies in the marketplace whose assets, surplus, capital and insureds are in the same ballpark. Deviating too much in either direction from industry norms could signal a problem or send the wrong message to outside audiences.

Just as there are several ways to calculate retention schedules, reinsurance can be paid for in a variety of ways. The most common methods of premium payment for shared risks are yearly renewable term (YRT) reinsurance, coinsurance and modified coinsurance. Under the YRT method, a company purchases reinsurance equal to the net amount at risk of that portion of a policy being reinsured. The mortality risk is transferred to the reinsurer on a net amount at risk basis (or an approximation thereof).

Some rates will include provisions for refunds if the actual experience is more favorable than planned. Correspondingly, all or part of the loss related to unfavorable mortality may be deducted from a future year's profits if called for in the reinsurance agreement.

Under the coinsurance method, the reinsurer shares in the premiums paid to the direct writer. It also shares proportionately in the commissions, expenses and reserve liability related to the policy.

Modified coinsurance differs from coinsurance in that the ceding company holds all the reserves. On an annual basis,

the reinsurer pays the ceding company an amount equal to the increase in the reserve for the portion that was reinsured. The reinsurer will deduct from that amount a sum representing the interest earned by the direct writer on the reinsured reserve fund.

Each of these plans requires calculating the amount at risk. For a policy that is not reinsured, the amount at risk is the death benefit less the reserve. Once a policy is reinsured, that definition changes.

Under a typical YRT reinsurance agreement, the reinsured amount equals the portion of the face amount that is reinsured minus the mean reserve on that portion of the policy. As an example, let's say the face amount of the policy is \$200,000 and the ceding company's retention is \$100,000. If the reserve on the policy is \$20,000, the reinsured amount at risk would be \$100,000 less the \$10,000 reserve on the reinsured portion, or \$90,000. The methods used to calculate the amount at risk can be complex, but they are also precise and cost-efficient.

While the primary focus of this article is life reinsurance, the reinsurance mechanism is also commonly used to transfer other risks such as health insurance, disability income insurance, property-casualty insurance and annuities.

Reinsurance: Why is it needed?

Historically, reinsurance became popular because it allowed companies to write larger policies than they could otherwise issue safely. Agents did not want to lose a large sale because the face amount was greater than their company's assets and surplus could support, so reinsurance provided an effective way to retain agents and increase sales.

Only a handful of the largest North American insurance companies have the assets and surplus to support the sale of multi-million dollar policies. That's why the market for life reinsurance consists of virtually every company in the marketplace. Even companies that do not actively market large face value policies occasionally find themselves in a situation where agents or proposed insureds require such a product.

Although the demand side of the U.S. reinsurance marketplace includes approximately 1,000 insurance companies, the supply side of the marketplace includes only about 20 professional reinsurers. Of those, about five represent the lion's share of the market.

Increased risk capacity is not the only reason that insurance companies make the decision to reinsure a case or a block of business, though. There are dozens of reasons that direct writers develop a relationship with one or more professional reinsurers. Here are some of the most common:

By transferring risks through reinsurance, direct writing companies can increase or decrease their profits in a given year. Since many policies deplete the company's surplus during the first several policy years, the transfer of risk through reinsurance (especially coinsurance) also transfers the corresponding drain on surplus. Periodically, many companies find it beneficial to utilize reinsurance this way for tax planning, surplus management and regulatory purposes.

When entering a new market or introducing a new product

for competitive reasons, companies often use reinsurance to minimize these new or unknown risks.

Apart from the risk sharing that takes place, a professional reinsurer can share its underwriting, medical, actuarial, marketing, public affairs, information systems and investment expertise with its client companies. Some large, established reinsurers now offer a few services on a fee basis while most services are included as a side benefit of the reinsurance relationship.

Life and health underwriting manuals are examples of the kinds of services available through some professional reinsurers. Substandard underwriting is a professional reinsurance specialty. Because large reinsurers receive more exposure to rare or unusual impairments than a smaller direct writer would, their underwriters and medical directors are more likely to identify related symptoms when they appear in the underwriting papers. Some of the earliest accurate information about AIDS, for instance, was distributed throughout the industry by reinsurance company medical directors.

Reinsurers also maintain vast data banks in order to review mortality and develop studies of past experience and projections of future experience. Because information is part of the reinsurer's stock-in-trade, the accumulated data and expertise is often used to train medical directors, underwriters, actuaries and other professionals from companies that do business with the reinsurer. Both parties benefit from such training. The direct company benefits from the gained expertise; the reinsurer benefits from improved experience on business in which it shares the risk.

Unlike the reinsurance marketplace of the early 1980s, today's reinsurance agreements generally are not won or lost strictly because of price. While the cost of reinsurance continues to be a factor, the intense price competition of the '80s forced some companies out of the business and caused others to re-think their position. Those that survived recognized that reinsurers need to earn a fair return for the services they provide.

Today, buyer and seller come together in this marketplace for two principal reasons:

1. To transfer mortality and morbidity risk, and
2. To share other services.

Mortality is extremely important to the life reinsurer since 80 percent or more of the life reinsurance dollar typically is spent on the mortality risk. The direct writer, on the other hand, may require only 40-50 percent of the premium for mortality risk, with the remainder used for expenses (including commissions) and any investment element inherent in the policy. Thus, mortality fluctuations have a greater impact on the reinsurer than on the direct company.

Reinsurance: How is it put together?

While annuity coinsurance and other investment-related products are beginning to receive attention in the reinsurance field, the basic reinsurance transaction still involves a mortality or morbidity risk transfer.

The agreement is put together by a team that includes the sales,

underwriting, pricing, administration and legal functions. Often, one or more members of this team will spend months (or years) learning about the ceding company's products, distribution channels and reinsurance needs. Based on all these factors, the team will develop a strategy for meeting the reinsurance needs of that company.

There are several agreement provisions that are common elements from one treaty to another:

1. **Good faith.** Treaties are more than contracts; they are interpreted as "gentlemen's agreements" that involve mutual trust and complete good faith.
2. **Underwriting standards.** Because the ceding company's underwriting can affect the reinsurer's mortality experience, certain underwriting limits and standards are established.
3. **Errors and omissions.** Like other contracts, the typical treaty will seek to protect the position of both companies through the insertion of an errors and omissions clause. Its effect is to restore both parties to the position they would be in if no error or omission had taken place.
4. **Claims.** If a reinsurer carries the majority of the risk on a case, it will be adversely affected if the ceding company's claims procedures are more liberal than the reinsurer's. Accordingly, the ceding company may be required to get prior approval from the reinsurer in such cases.

There are many other clauses and provisions that appear routinely in reinsurance treaties. In lieu of a lengthy list, they can be categorized as clauses dealing with premiums, reductions and terminations, recapture and multiple-reinsurer situations.

While the treaties have many common elements, they are clearly not all alike. The type of coverage recommended might be traditional YRT reinsurance or it might be a special type such as catastrophe reinsurance or stop-loss reinsurance. Catastrophe coverage (also known as catco) protects a ceding company from a serious financial loss if a single accident or disaster claims the lives of several insureds. Stop-loss reinsurance offers protection for a collection of risks.

The risk can be transferred in any one of three ways: through automatic, facultative or facultative-obligatory reinsurance.

In an automatic reinsurance treaty, the ceding company determines the policy rating and binds the reinsurer for amounts up to the automatic binding limit. Since the reinsurer may not decline a policy that falls within the ceding company's auto-

matic limits and meets its scheduled retention, the reinsurer may require something in exchange. A common condition for automatic reinsurance is that the ceding company follow certain accepted underwriting standards.

As mentioned before, facultative reinsurance differs from automatic reinsurance in that the reinsurer is not required to accept the case in question. A reinsurer may decline or rate any case it chooses. Ceding companies will sometimes submit a case to several reinsurers — commonly called "shopping" — if the case has been declined or rated.

Facultative-obligatory reinsurance is similar to automatic reinsurance. The main difference is that a reinsurer may decline a facultative-obligatory case if it has already reached its scheduled retention on that life. If it were an automatic treaty instead, the reinsurer would not even be consulted before the policy was ceded.

Although reinsurance is an information-driven industry, there is still a great deal of "art" alongside the "science" of reinsurance. No amount of data can totally eliminate the judgment calls that are involved in such decisions as retention limits, reinsurance methods and choice of reinsurer.

Reinsurance: How is it changing?

To some extent, reinsurers will be forced to respond to the trend toward investment products on the direct side. Reinsurers that are currently experts in underwriting, pricing and systems will have to add investment heavyweights to their staffs. This trend will be reflected in new products such as annuity coinsurance, as well as the offering of fee-for-service investment seminars that advise client companies how they can better support their universal life or annuity business.

Staff in other special disciplines needed by direct writing companies will be nurtured and developed by reinsurers to meet anticipated market needs. These specialized fields might include genetics, international marketing and governmental affairs.

Expert systems and other sophisticated technology will make reinsurance underwriting even better and faster in the coming years. These systems will also make it easier for reinsurers to adjust coverages on a more frequent basis and to tailor reinsurance products for specific client needs.

As Eli Grossman said ten years ago in his landmark text on life reinsurance, ". . . As long as people are mortal, there will be insurance, and as long as there is insurance, there will be reinsurance."