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Catastrophe Risk Management Options for the Smaller Insurance Company

By David Rains and James Eggert

Every life insurer is exposed to catastrophe risk. The largest carriers, of course, tend to have the capital on hand to absorb substantial losses and can rely on economies of scale to make reinsurance more affordable. Smaller life insurers, on the other hand, do not always have the same risk management tools available at a proportionate cost. Thus, they may feel forced to retain risks which, if realized, could imperil solvency. Fortunately, there are products on the market that make cover attainable for smaller life insurers.

Catastrophe risk poses a unique challenge for smaller life insurers. By virtue of a smaller portfolio of insureds, the probability of high losses from a given catastrophe is less than that for a larger carrier with broad market penetration. However, in specific markets or affinity groups, the relative probability of a catastrophic loss could be even greater for a small insurer that is very effective in that niche. Smaller average face amounts may create a smaller loss in absolute terms—though quite significant in relative terms, considered against a smaller balance sheet and available surplus. The threat is real.

Traditional reinsurance can be effective for mitigation, though in many cases, cedents see this as reinsuring too much profit and expense margin along with the risk. Yet, without coverage, one event could severely impair an insurer's balance sheet, so some protection is necessary. Smaller insurers have more options than they may realize. Several products are at their disposal, which can help them protect their capital without impairing profitability unnecessarily.

Variations on basic life catastrophe cover—which involve a minimum of three lives in a single event—do exist for smaller carriers. The coverage pays if losses exceed a particular attachment point, and recovery is governed by a specified limit and Maximum Any One Life (MAOL) amount, as well as a limited timeframe within which the losses occur (i.e., "hours clauses"). Pricing is generally quoted as a "rate on line" (ROL) and is a percentage of the specified limit. A "3 million XS 1 million" treaty, for example, attaches at a catastrophe loss of USD1 million and has a limit of USD3 million. At an ROL of 3 percent, it would cost USD90,000 (i.e., 0.03 X USD3 million).

Life catastrophe cover is available from markets in Bermuda and London and can provide coverage for deaths from natural disasters, accidents and terrorism. Terrorism may include nuclear, biologi-

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Chairperson's Corner

Sanity in an Insane World

By Christopher H. Hause

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Risk.

Leverage.

Vertical Integration.

Sophisticated Financial Arrangements.

Do you remember when these were not dirty words? It was not that long ago. But just like anything that is good, excess can be devastating. You may have heard a while back about a woman who died of drinking too much water, which is the essence of life.

Our financial system has failed. I do not mean to say that it is bankrupt, but it has strayed from its mission, and in doing so has betrayed the public trust and lost credibility.

One of the reasons for the existence of a financial system is to help provide financial security to our clients and the public in general. In our zeal to compete with the high-risk, HIGH REWARD sectors of the financial industry, we appear to have indiscriminately shifted risk to our policyholders and clients.

I remember learning as a young actuarial student the concept that insurance is "reverse gambling." That is to say, insuring is not gambling, but failing to insure against loss is gambling. Protecting against the loss by paying a small premium and shifting (or pooling) the risk is generally the safe and prudent course of action.

The insurance industry has always been correct to emphasize its unique guarantees. But, what of the situation where an important element of the risk (premium adequacy vis-à-vis an adequate investment return) is shifted to the policy owner? Does the client really understand the effect on policy values of changes in account performance?

Every time we ask employees to allocate their 401(k) among available funds, we are asking them to be their own investment advisors. And, the same thing is true when we ask policyholders to allocate (or rebalance) their subaccounts, or ask them to choose between fixed and variable products.

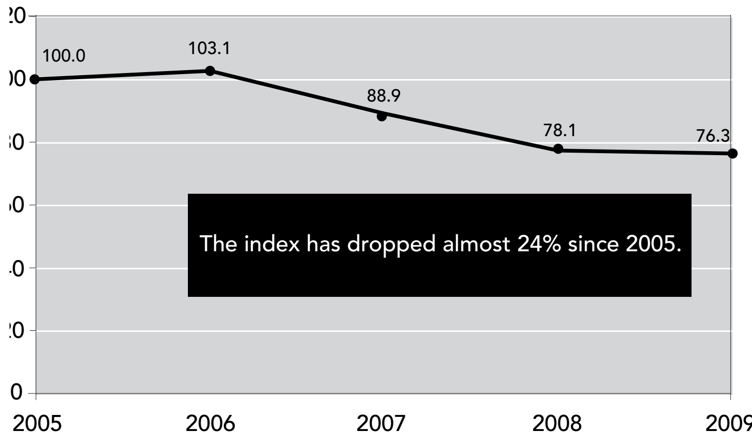
On the other hand, small companies by their nature and by necessity are simple and focused. Generally speaking, they have a limited market that is served by appropriate products (even tailor-made ones) that maximize the security part of financial security.

We are not too big to fail. We do not double down on our success by vertical integration. We do not take immeasurably disastrous risks, but we stay focused on our clients and their needs. We manage our risks, and we stick to what we are good at.

That is our role and that is how we bring sanity to an insane world. ●

cal, and chemical (NBC) protection for a surcharge. Pricing for life catastrophe reinsurance spiked following the terror attacks of Sept. 11, 2001.

Though prices have come down considerably, the cost is not likely to return to prior levels.



Depending on the key risks identified, limited catastrophe products may be more affordable options. A common example would be coverage for catastrophes affecting specific buildings—useful if your primary catastrophe exposure is highly concentrated in the home office, a key agency or a large client. Another would be common carrier coverage, preferred where benefits may be multiples of base coverage and the key risks are multiple deaths from airplane accidents.

Accidental death carve-out (ADCO) reinsurance manages exposure to all accidental death volatility. The coverage is, essentially, a fixed-for-floating mortality swap: the cedent pays the expected accidental death claims plus a risk margin to the reinsurer and the reinsurer reimburses the cedent for actual accidental death claims—including death claims due to accident for any type of underlying policy. By definition, this form of cover includes catastrophe losses for all causes (including NBC terror), and unlimited recovery treaties are widely available (though some reinsurers will impose limits). This approach, which is offered for single- and multi-year periods, can make catastrophe cover more valuable by smoothing accidental death claim volatility by including recoveries in high loss, non-catastrophe years.

Given that cost is among the principal concerns of smaller life carriers in regards to managing the risk of a remote event (that they have likely never experienced), a certain degree of coverage flexibility is necessary. With ADCO, cedents can include deductibles of up to 100 percent of expected claims. In conjunction with the possibility of multi-year cover and the fact that claims may not be capped, smaller life insurers have the ability to structure their protection in a way that balances cost, the need for catastrophe cover, and the added benefit of reducing volatility.

In addition to indemnity contracts with reinsurers, smaller life cedents can also join risk-sharing pools. Special Pooled Risk Administrators (SPRA), managed by Swiss Re, operates risk pools for both individual and group life policies. Though complex formulas define deductibles and shares, the operation of the pool is relatively straightforward. After deductibles, claims are shared in proportion with each company's participation percentage. If a company's proportion of the loss is greater than their participation percentage, they receive benefits.

For ordinary life, SPRA includes 15 participants representing 30 companies, but this is shrinking. Ten years ago, it had 100 participants, and five years ago, it dropped to 50. Despite the low cost up front, lack of annual limit on claims, and full terrorism cover (including NBC), the total cost to the cedent can include assessments (and, just as there is no limit on the annual number of claims, there is no limit on the annual number of assessments). Thus, every member is a potential payer or reinsurer, as well as a beneficiary or cedent, depending on its share of a loss relative to other members of the SPRA pool.

The Shared Adverse Fluctuation Experience (SAFE) pool is another pooled risk resource for life insurers. Similar to SPRA, it provides a low-cost, low-risk alternative to reinsurance, but focused on companies that do not have large insurance concentrations in major metropolitan areas. The deductible applied is the lesser of three times a carrier's retention or 12 times its average policy size. The pool is small, with 13 life insurance companies (seven corporate groups) and approximately USD89 billion of net retained life risk. Limits are approxi-

"In addition to indemnity contracts with reinsurers, smaller life cedents can also join risk-sharing pools."

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mately USD18 million, and four deaths are required to qualify an event as a catastrophe, as opposed to the usual threshold of three.

The decision to secure life catastrophe coverage should be driven by exposure and risk management strategy—reflecting cost as an important consideration but not the sole driver.

A smaller life insurer has an obligation, just as larger firms do, to first understand its exposure and then make any risk transfer decisions based on risk tolerance thresholds and financial objectives. Retaining risks outside of defined tolerance thresholds is no longer the only option. The products exist to facilitate informed, cost-effective risk and capital management decision-making that is aligned with the intricacies of a portfolio's specific risks, no matter the size.

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Comparison Matrix

	Catastrophe Cover	ADCO	Risk Pools
Cost Structure	ROL – a percentage of the maximum benefit amount	Expected losses under the contract plus a margin	• Entry and annual service fees • Loss assessments
Includes NBC	Optional	Yes	Yes
Options	• Single site cover • Common carrier	• Deductible • Contract term	None
Advantages	• Rates have improved dramatically • Costs are fixed	• Responds to high annual claims even without a specific event	• Very low entry costs
Disadvantages	• Reinstatement premium post loss	• Higher cost than catastrophe cover	• Total cost unknown until event happens • May have assessment without a catastrophe loss

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