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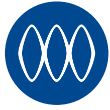

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How to finance your own terrorism risk: Captives and the Terrorism Risk Insurance Act

By Chris Kogut, FCAS, MAAA

Imagine you didn't have to buy a car insurance policy that reflects the average laxity of all the mediocre drivers out there; instead, you could set up your own fund that would cover only you. You would probably drive even more carefully than you already do. Now pretend that, if you did have an accident, the federal government would cover most of the loss. Your fund would not need to be nearly as large, nor would your premiums. Imagine further that these premiums could be tax deductible.

Combine all these imaginings and you have an idea of the sort of advantages afforded to businesses looking to use captive insurance companies to cover their terrorism risk. However, if federal protections expire at the end of the year, the situation could change.

Captives as Alternative Terrorism Insurance Vehicles

Captive insurance companies, or *captives*, provide a form of self-insurance, with a few key distinctions. Companies that choose to self-insure bear the risk of losses themselves, whereas investing in a captive allows a company to finance a portion of the risk that they bear. Captives are insurance companies established by a parent company, or group of companies, with the goal of financing the parent's risk (and occasionally bearing third-party risk).

Companies that cannot find the terrorism insurance coverage they want at desirable rates in the commercial market are, by default, self-insuring this risk; some may consider using a captive to finance this risk. Using a captive in this manner is particularly attractive to large property-owning companies, especially those that already have captives set up for other purposes and have a large exposure to terrorism risk.

A captive may also allow the parent to lower its insurance costs and access reinsurance opportunities. While there are start-up and overhead costs associated with setting up and capitalizing a captive, these costs can be lower than the price of private insurance.

The primary benefits of using captives for terrorism coverage are as follows:

1) Captives have access to reinsurance provisions in the federal Terrorism Risk Insurance Act (TRIA) that are not available to self-insurers.

2) Because it has TRIA available as a backstop and because the TRIA deductible for a captive would normally be substantially lower than the deductible for a commercial insurer, a captive may be able to charge a rate that is less than the market rate for terrorism insurance and receive a lower reinsurance rate (since the reinsurance coverage would be smaller).

TRIA Benefits

Passed in 2002 when terrorism coverage was highly sought and highly unavailable, TRIA requires all insurers to "make available" coverage for losses resulting from an act of terrorism. In return, the federal government acts as a reinsurer for coverage above certain deductibles, providing a backstop for insurance companies. This reinsurance can play a large role for captives.

TRIA protections would not be available to the parent company on its own, but a captive is a separate insurance company and therefore entitled to federal protections. If there is a certified

terrorist event, the federal government will reimburse the captive for up to 85% of the losses (down from 90% in 2006) above a deductible. The deductible is expressed as a percentage of an insurer's total direct earned premium for coverages subject to TRIA. The "earned premium" used in the deductible calculation is the immediately preceding calendar year earned premium. The deductible is 20% of the earned premium in 2007. The captive remains liable for only the remaining 15% of the losses (plus the deductible) from a certified terrorist act.

The example illustrated below in figure 1—of a $250 million certified terrorism loss that only affects a single insured—illustrates how TRIA helps make captives a realistic avenue for insuring against terrorism losses (not to mention an attractive alternative to self-insuring a $250 million loss).

As figure 1 illustrates, TRIA is responsible for most of the captive's loss. In addition, the captive could presumably be charged less for reinsurance coverage than the commercial insurer, since the reinsurer's exposure to loss is smaller. For a commercial insurance company, the sheer volume of its annual premium will mean that it has a much higher TRIA deductible, and therefore has to depend more on commercial reinsurance, for which it must pay a premium. For a captive, its relatively low premium volume means that it will have a lower TRIA deductible, more TRIA reimbursement, and will depend less on commercial reinsurance.

Drawbacks to Captives Relying Too Much on TRIA

Captives under TRIA are still not a flawless solution. A captive usually includes a bundle of insurance coverages, not just terrorism (although terrorism can be the largest component). Captive owners have to be careful in how they bundle these coverages; if at some point the owner wants to shut the captive down—if, for example, TRIA were to expire—certain portions of the captive could be removed in the short term, but other longer-tail coverages may require the captive to have a longer life span as the claims run off.

TRIA also contains a recoupment provision. If a terrorist attack occurs and the government reimburses companies under TRIA, it can recoup these payments from all insurers writing coverage subject to TRIA. The U.S. Department of Treasury has discretion as to the amount and timing of any assessments and may consider the impact of the assessment on the health of the industry. The assessment cannot be more than 3% of qualifying premiums in any one year, but could extend over many years. In other words, companies with coverages subject to TRIA in their captives that are not affected by a terrorist attack may end up paying a surcharge. The assessment can become quite expensive if a captive also writes direct insurance for coverages such as workers' compensation and general liability, which are included in "qualifying premium."

FIGURE 1

Sample Calculation (in millions)

	Commercial Insurer	Captive
(1) Certified terrorism loss	250.0	250.0
(2) TRIA reimbursement		
(a) DEP for coverages subject to TRIA	1000.0	20.0
(b) TRIA deductible percentage	20%	20%
(c) TRIA deductible = (a) x (b)	200.0	4.0
(d) TRIA reimbursement percentage	85%	85%
(e) TRIA reimbursement = [(1) - (2c)] x (2d)	42.5	209.1
(3) Commercial reinsurance reimbursement		
(a) Losses subject to reinsurance = (1) - (2e)	207.5	40.9
(b) Reinsurance attachment point	5.0	5.0
(c) Reinsurance reimbursement = (3a) - (3b)	202.5	35.9
(4) Retained loss = (1) - (2) - (3)	5.0	5.0

We note the Treasury has taken the position that forming a captive for stand-alone, single-risk terrorism insurance should be cautioned against if there is evidence of an intent to avoid the deductible or recoupment requirements.[1]

There are other costs to consider with captives. These include management, actuarial, legal, audit, board meetings, and other overhead—not to mention premium tax and cost of capital. All told, these expenses, or "frictional costs," may account for between $75,000 and $100,000 per year. For companies that do not already have a captive, there are also start-up costs to consider. If a terrorist event does occur, it must be "certified" as a terrorist attack by the federal government in order for insurance companies to be entitled to reimbursement; a destructive event not certified as terrorism will not have the federal reinsurance as a backstop. In order to be certified, the event must be perpetrated by foreign-born terrorists (so the Oklahoma City bombing would not have been a certified event). Also, the annual aggregate loss must exceed $100 million (in 2007) to trigger TRIA protections. For example, a "small, local" event that just affected a few companies might constitute a large loss for those companies, but might not pierce the industry threshold.

Even if the losses are covered under TRIA, the timing of the reimbursement may not be immediate. Under Treasury regulations, a captive may file a claim for reimbursement after it has paid its aggregate losses—which means the captive may need to borrow funds to cover the difference between its capital and its losses while waiting on their federal reinsurance check. Under more recent regulations, however, procedures have been established to obtain advance reimbursement payments, which lower the chances that a captive may have to take out a short-term loan in the event of a loss.

The Future of TRIA

TRIA has already been extended once, and is set to expire on Dec. 31, 2007. But Sen. Christopher Dodd, D-Conn., the new chairman of the Senate Banking, Housing, and Urban Affairs Committee, stated at a media briefing in December that he wants to make the protections in TRIA permanent. Early in 2007, the committee will consider whether to extend the law (and if so, in what form). Extension may not be a priority for the rest of Congress and may face opposition from the White House, which views federal protection as a hindrance to the mature development of private solutions for terrorism insurance.[2]

If TRIA expires, a big portion of the risks and burdens in covering terrorist acts will be dropped back into the laps of commercial insurers. Companies could buy coverage in the commercial market, but doing so may become more difficult. The capital requirements for terrorism coverage will increase,

Actuaries and Captives

Setting up and maintaining a captive can be a complicated process, with or without terrorism coverage. Although companies must make insurance decisions based on their own unique risk profile, if they decide on self-insurance, actuaries can help determine whether captives are the best option. The following is a list of ways actuaries can add value to captive programs:

Cost/benefit analysis and potential tax benefits. As a first assessment, it would be appropriate to conduct a cost/benefit analysis of maintaining and operating a captive (versus other self-insurance options) and determine the best timing structure for paying premiums. One of the benefits of captives in general is that companies may be able to realize tax deductions when they pay the premiums rather than when (and if) they suffer losses.

Annual actuarial analysis and statement of actuarial opinion. Actuaries can provide captives with periodic evaluations that some regulators might require. These can include an annual loss and loss adjustment expense reserve analysis, and a statement of actuarial opinion. Some companies prefer to monitor their reserves at quarterly intervals throughout the year, rather than at the single year-end reserve review.

Analyses of prospective funding requirements. Actuaries can estimate insured losses for future periods, providing results on a nominal and a discounted basis. The discounted values would reflect expected payout patterns and investment returns on the captive's assets. Actuaries can also estimate future losses at the captive's retained limits, as well as estimate retained and ceded losses at other layers.

Strategic financial planning (including financial modeling and forecasting). Once the captive is up and running, actuaries can construct a financial model and test the captive's performance under various scenarios. This can provide additional insight into capital and surplus needs, expected accumulations of earnings within the captive, etc.

Variability of aggregate losses. Actuaries can estimate the probability that losses will exceed various levels, by modeling the variability of total expected losses or reserves. This can be useful on its own or as part of a financial planning or capital and surplus needs analysis.

and insurers may have to move capital from other lines of coverage, raise premiums, reduce offerings, or even exit certain markets. The advantages to using captives for terrorism will be reduced without TRIA's backing, and many companies may end up self-insuring terrorism risk, without captive financing.

On the other hand, if TRIA is renewed and resembles its current form, the opportunity to use captives will continue. Even with the current uncertainty about the future of TRIA, companies that already have captives set up for other types of insurance may find it beneficial to expand their captive's scope to include terrorism.

Setting Up a Captive

Companies can examine their individual risk profile and decide whether market coverage or self-insurance is a better fit. If they decide on self-insurance, actuaries can assist companies in determining whether a captive is an appropriate option, and, if so, help coordinate with insurance regulators to meet licensing requirements.

Insurance regulators typically view captives as standalone insurance companies that must be self-sustaining and must meet the same standards as their commercial market counterparts. In general, potential captives must submit a feasibility study to the regulator, including pro forma financial projections, in order to get an insurance license. Actuaries can assist in this process, as well as help prepare and submit the ongoing reserve opinions required by regulators; just as in commercial insurance markets, captives must justify that they can cover their potential liabilities.

Conclusion

For this year at least, with TRIA in place as a federal reinsurance backstop, captives make a great deal of sense for insuring terrorism risk, especially for organizations that already have a captive and have chosen to self-insure their terrorism exposure. Time will tell whether the federal provisions will be allowed to sunset or whether some other mechanism will emerge in their place. It seems likely that, one way or another, captives will continue to play a role for companies that choose to finance their own risks.

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[1] *102(6)(C) of the Act; response letter from Jeffrey Bragg dated 9/24/2004.*

[2] *Knight, R. & Kirchgaessner, S, "Insurers fear 'creeping complacency' will scupper terrorism risks bill in Congress,"* Financial Times, *December 19, 2006.*

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