Assessing the Effectiveness of the Terrorism Risk Insurance Act

Aft er the 9/11 attacks and the substantial losses incurred, insurers questioned their ability to pay claims in future attacks and began to exclude terrorism coverage from commercial insurance policies. The fear that a lack of coverage would threaten economic stability and growth, urban development, and jobs led the federal government to adopt the Terrorism Risk Insurance Act (TRIA) of 2002, requiring insurers to make terrorism coverage available to commercial policyholders.

Because TRIA sunsets at the end of 2005, policymakers need to assess how effective TRIA is in responding to the losses from different modes and magnitudes of terrorist attacks. But because no large terrorist attacks have occurred since 9/11, no empirical data on which to base such an assessment exist.

In this study, RAND Corporation researchers respond to that need by simulating the expected losses for three different modes of terrorist attack scenarios—crashing a hijacked aircraft into a major building, releasing anthrax within a major building, and releasing anthrax outdoors in a major urban area—and then assessing the effects of the insurance system and TRIA on how those losses are ultimately distributed.

Estimating Losses from a Large Terrorist Attack

Working with the three scenarios, researchers simulated losses from each mode of terrorist attacks. Losses for the outdoor anthrax scenario dwarf those of the other two scenarios: $172 billion versus $6.7 and $7.9 billion for the aircraft impact and indoor anthrax scenarios, respectively. The distribution of those losses varies substantially. Property losses account for 13, 58, and 67 percent of the total loss in the indoor anthrax, outdoor anthrax, and aircraft impact scenarios, respectively. Workers’ compensation shows a complementary variation, accounting for 77, 25, and 23 percent of the losses in the indoor anthrax, outdoor anthrax, and aircraft impact scenarios, respectively. Life and health insurance lines make up 10 percent in the indoor anthrax and aircraft impact scenarios and 16 percent in the outdoor anthrax scenario.

How TRIA Distributes Losses

TRIA applies only to commercial policies—not to life and health lines or personal lines (such as homeowners’ insurance)—and covers cumulative attacks over a year. TRIA allows insurers to exclude property losses from chemical, biological, radiological, and nuclear (CBRN) attacks, but insured losses from a CBRN attack are eligible. Finally, workers’ compensation losses cannot be excluded.

Some losses following a terrorist attack are “uninsured” because people and businesses do not have terrorism coverage; and some losses, as noted above, are not eligible for TRIA. TRIA distributes eligible losses according to a formula. “Target insurers” who have paid claims on policies that include terrorism coverage and are in eligible lines are...
How TRIA Distributes Losses from the Attacks

The figure shows how TRIA distributes losses in the three scenarios. As shown in the black segments, a large fraction of the loss is uninsured: 30 percent, 14 percent, and 57 percent for aircraft impact, indoor anthrax, and outdoor anthrax, respectively.

As the figure also shows, taxpayers do not pay any of the losses from a single attack in any of the scenarios. Assuming current terrorism insurance take-up rates, target insurers alone pay in the aircraft impact and indoor anthrax scenarios until TRIA-covered losses reach $5 million, which occurs at $8.5 million for the aircraft impact and $6.5 million for the indoor anthrax scenario.

Conclusions and Implications

Based on our analysis, the role of taxpayers is expected to be minimal unless there are several large-scale attacks in a single year, which means that TRIA is not primarily a taxpayer bailout of the insurance industry. Thus, modifications or alternatives to TRIA need not focus on protecting taxpayers.

Still, TRIA does influence the terrorism insurance market. Target insurers get substantial subsidies from the surcharge on commercial insurance policyholders, and TRIA makes property insurance for conventional terrorism available to policyholders, thus making terrorism insurance more available and affordable.

Also, even with TRIA, a high fraction of losses would go uninsured under the scenarios analyzed. Given this, reducing uninsured losses should be considered in modifying TRIA or in alternatives to it.
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