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# Issues and Options for Government Intervention in the Market for Terrorism Insurance

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## Summary

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The threat of terrorism poses a challenge for the U.S. insurance system: How can the system best insure against potential losses and compensate victims of attacks? Following the 9/11 attacks, the federal government adopted the Terrorism Risk Insurance Act (TRIA), which requires insurers to make terrorism coverage available to commercial policyholders. In return, TRIA guarantees that the public (i.e., the government) will reimburse insurers for 90 percent of losses from terrorism above certain thresholds. TRIA was intended to bolster the insurance industry against catastrophic payouts while the industry developed strategies and mechanisms to cope with the threat of terrorism. TRIA expires on December 31, 2005, but insurance policies (which typically last one year) will soon begin to be written that will expire after TRIA does.

This paper has a dual purpose: to help frame the central issues that should be considered in the debate over whether to extend, modify, or end TRIA, and to explore the broader issue of the appropriate role of disaster insurance within a system for managing risks created by the possibility of terrorist attacks and compensating losses caused by terrorist attacks. The paper also discusses options that policymakers might consider in addressing these issues and goals against which various options can be evaluated.

Although this paper focuses on insurance, it is important to note that insurance is only one part of an overall system for managing risks created by the possibility of terrorist attacks and compensating losses caused by terrorist attacks. Direct government compensation, the tort system, and charities can also play a role in this system.

### **Key Issues in the Debate over the Terrorism Risk Insurance Act**

A review of the debate over TRIA and the role of insurance more generally points to five key issues that need to be considered in developing policies on insurance against losses from terrorist attacks: the capabilities of private insurance markets, the ability of individuals and firms to assess risk accurately, national security considerations, financing of payments to cover terrorism losses, and the desirability of tailoring federal policies to specific insurance market segments or types of terrorist attacks. Each of these topics is discussed in more detail in this section.

#### **The Capabilities of Private Insurance Markets**

To what extent are private insurance markets able to provide terrorism insurance at commercially viable rates? The threat of terrorism poses a number of challenges for insurers: It raises the specter of very large losses, and these losses may rarely happen, requiring financial re-

serves to be built up over time.<sup>1</sup> Pricing terrorism insurance products is also difficult for a variety of reasons, including the difficulty of predicting the type and frequency of future attacks. There are also likely to be barriers to controlling insurers' exposure to risk, because states frequently mandate what types of losses must be covered and what rates can be charged. Finally, it may be difficult to spread the risk of losses from terrorism over a sufficiently large base of buyers, which will make it more difficult for insurers to offer affordable products. Given these difficulties, it remains uncertain whether private insurers in the absence of TRIA could provide terrorism insurance at premiums that result in substantial take-up rates.<sup>2</sup>

### **Accuracy of Risk Assessment**

Even if insurers can provide the needed insurance at viable rates, it remains unclear whether businesses and individuals will buy it. Several barriers to a functioning market for terrorism insurance may arise that could keep demand below optimal levels. Potential buyers may misperceive the level of risk, lack good risk information, or focus myopically on the near term. They may also expect public compensation in the wake of attacks to make good their losses. The proportion of policyholders purchasing terrorism coverage has been moderate to low for many categories of firms under TRIA, but it is difficult to assess whether firms are systematically underestimating the risk of a terrorist attack.

### **National Security Considerations**

The insurance and compensation system has implications for national security because the system affects incentives for individuals and firms to invest in protective measures. It can also dampen the effect of terrorist attacks on economic activity, and may even potentially influence the future behavior of terrorists. For example, the perception of effective risk-protection measures and an efficient compensation system could reduce the appeal of terrorist attacks aimed at economic targets.

There are two views on creating appropriate incentives for firms to invest in measures to protect against losses from terrorist attacks. The first holds that private markets provide inadequate incentives for firms to invest in security, and so firms underprotect against terrorist attacks. The second holds that firms overprotect (e.g., through physical security measures) against terrorist attacks because they do not take into account that their security measures can shift risks to other targets. The challenge for policymakers is to distinguish between situations in which the incentives to take precautions are inadequate and those in which they are excessive.

### **Financing Payments to Cover Terrorism Losses**

How should payments to cover terrorism losses be financed? The following three questions are critical to determining how *insurance* payouts will be financed:

1. To what extent should risks be pooled?

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<sup>1</sup> For example, for auto insurance, the premiums that are collected in a given year finance the payouts in that year. For terrorism insurance, premiums may be collected for several years before an event occurs that triggers payouts.

<sup>2</sup> *Take-up rate* refers to the percentage of insurance policyholders that purchase coverage for terrorism losses.

2. To what extent should losses be pre-funded or post-funded?<sup>3</sup>
3. Should purchasing terrorism insurance be mandatory or voluntary?

The body of this paper explores the advantages and disadvantages of the various answers to the above questions and also considers more generally the pros and cons of having insurance play a lead role in a risk-management and compensation system for losses from terrorism. The way in which the above questions are answered will affect how the resulting system looks. For instance, an insurance system in which risks are not pooled, losses are post-funded, and coverage is mandatory would more closely resemble a direct government compensation program than a traditional insurance system. Regularly occurring attacks of limited scope, for example, may well be handled by a traditional insurance-based system, whereas very large but rarely occurring attacks may suggest that a post-funded, direct public compensation system is desirable. More work is needed to explore how the likelihood and severity of terrorist attacks, and the type of losses that result (death and personal injury versus property and financial damage), affect the attractiveness of various approaches.

### **To What Extent Should Government Policies Be Tailored to Different Insurance Market Segments or Types of Attack?**

Workers' compensation, commercial property and casualty, life and health, and personal lines of insurance are all affected differently by the threat of terrorism. A tailored-policy approach—such as a TRIA-type approach for some types of losses and direct government compensation for others—might make sense. Similarly, it may be reasonable to vary government policy by type of attack. Currently, TRIA applies to what is defined as foreign terrorism, and it excludes domestic terrorism. It may also be worth considering whether to develop special policies for chemical, biological, radiological, and nuclear (CBRN) attacks. Further work is needed to better understand whether the four different types of CBRN attacks should be lumped together or treated separately.

## **Options**

The federal government can take three fundamentally different approaches to dealing with terrorism insurance. These approaches vary according to the degree of public (i.e., government) involvement.

**The government can rely on private insurance markets.** This approach entails the least amount of government involvement. TRIA would be allowed to “sunset,” and the government would focus on removing barriers that hinder insurance markets. The following examples of this approach are examined in the body of this paper:

- Catastrophe bonds
- Pre-funded, tax-free catastrophe reserves
- A voluntary pool for workers' compensation.

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<sup>3</sup> Losses are pre-funded if insurance premiums are collected or resources are set aside to pay for losses before an attack. See the discussion under “To What Extent Should Losses Be Pre-Funded or Post-Funded?” in Part 3 of this paper for a definition of pre- and post-funded losses.

Even though this approach attempts to assign the bulk of the risk to private markets, it could have the opposite effect if the purchase of insurance is not widespread prior to a major terrorist attack. This approach could be the most reasonable one if policymakers believe that terrorist attacks in the United States are likely to be rare or that it is extremely unlikely that losses will occur again on the order of the 9/11 losses.

**The government can share the insurance risk with the private sector.** Under this approach, the government would share some of the risk with private insurers. This approach could involve a variety of stances toward TRIA, including extending it, modifying it, or gradually replacing it with a private-insurance pool. In the extreme, the government could provide mandatory terrorism insurance. All of the options under this approach address the difficulty that insurers have providing coverage for very large losses at premiums that result in substantial take-up rates. This approach may make the most sense if terrorist attacks are seen as less-than-rare events and catastrophic losses are more than a remote possibility. In the absence of a substantial terrorist threat, this approach may also be reasonable while perceptions of terrorist risk are diminishing, and it may be reasonable if the insurance industry does not make much progress in the very difficult job of predicting the frequency of attacks.

**The government can provide compensation directly.** Under this approach, government compensation would replace insurance as the main compensation mechanism. Individuals and firms would be compensated for losses regardless of whether they bought insurance, although they could still buy insurance to augment government compensation. This approach could be the most reasonable one if terrorist attacks become chronic and more than minor in scale. Similar programs—those that are public funded with minimal private-sector involvement—exist in countries that have experienced frequent terrorist attacks, such as Northern Ireland and Israel. Arguments for this approach would be less convincing if attacks become frequent but are small in scale, in which case private insurance may be able to deal with those attacks in much the same way that it deals with crimes or accidents.

## Conclusions

Strategies for managing the risk of catastrophic losses from terrorist attacks remain only partially explored. Because the stakes are high, the choice of strategies should be grounded in a clear understanding of how they measure up against system goals. Further research can help not only in this decisionmaking process, it can also help to improve models of the frequency of attacks, to clarify the role terrorism insurance plays in national security, and to examine the role of other forms of compensation, including tort liability. We plan to examine these and other related issues in subsequent studies.