



# AMERICAN ACADEMY of ACTUARIES

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August 2, 2005

The Honorable Richard Baker  
Chairman, Subcommittee on Capital Markets,  
Insurance and Government Sponsored Enterprises  
Committee on Financial Services  
U.S. House of Representatives  
Washington, D.C. 20515

Dear Chairman Baker,

The Extreme Events Committee<sup>1</sup> of the American Academy of Actuaries offers the following comments addressing the need for a federal backstop to reinsure P/C insurers in the aftermath of a catastrophic terrorism loss. Our comments focus on some characteristics of terrorism insurance then on aspects of the recently released Department of the Treasury report, *Assessment: The Terrorism Risk Insurance Act of 2002*.

Though there has been some development of terrorism models since the September 11, 2001 attacks, quantification of consumer and insurer terrorism exposure is still extremely difficult. Unlike models used to assess natural catastrophe risk, terrorism models cannot rely on past statistical records and the application of meteorological or geological science. Instead, they must rely on the intellectual capital of experts who have studied terrorist groups to develop frequency and severity assumptions. Even though engineering sciences have built a large body of data relating to building damage and peril intensity, the probabilities associated with the occurrence of a terrorist attack remain somewhat judgmental and a key source of uncertainty. For example, in evaluating tornado risk, we have an historical database consisting of thousands of observations of tornados, and we have a similar database with hundreds of hurricane observations. However, for catastrophic insured multi-billion terrorism losses in the U.S. (the magnitude and type of losses the Terrorism Risk Insurance Act or, TRIA, was designed to address), we have only one event.

Potential terrorism events are not only difficult to model but can be extremely large in terms of insured losses, which the September 11, 2001 attacks demonstrated. The combination of a potentially large insured-loss terrorism event with uncertainties in modeling potential events gives insurers pause. The bottom line is that it is difficult to assess how often a terrorist attack will occur and how much damage will be inflicted (possibly very much), and therefore insurance pricing is problematic.

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<sup>1</sup> The American Academy of Actuaries is the public policy organization for actuaries of all specialties within the United States. The Academy is nonpartisan and assists the public policy process through the presentation of clear, objective analysis, and serves as the public information organization for the profession. The Academy regularly prepares testimony for Congress, provides information to federal officials and congressional staff, comments on proposed federal regulations, and works closely with state officials on issues related to insurance. The Academy also supports the development and enforcement of actuarial standards of conduct, qualification and practice and the Code of Professional Conduct for all actuaries practicing in the United States.

Excerpts from the Treasury report are in italics below. Our comments follow.

*Industry surplus, a major source of insurer capacity, has returned to pre-September 11th levels. Insurers are financially stronger and more able to bear unexpected losses than they were prior to enactment of the TRIA.*

- Not all of the U.S. P/C insurance industry surplus can be used to cover terrorism insurance losses, and little of this surplus was generated from terrorism premiums. Much of the insurer surplus is needed to cover other types of risks, including natural catastrophes. As the 2004 four-storm hurricane season showed, surplus needs to be available to pay for natural catastrophes in the U.S. as well. A good portion of the scientific community today believes that meteorological science anticipates an increase in the number of major hurricanes and a corresponding increase in dollars of claims associated with those hurricanes.
- Insurers and reinsurers are not very willing to expose their capital or surplus to a largely unknowable terrorism risk. The mere fact that the surplus and capital exist does not mean that insurers are willing to risk potentially huge losses in an uncertain environment. Limited reinsurance coverage exists to help spread the risk, and there are no alternative means (such as the capital markets) to transfer this risk.
- Large commercial P/C insurers are the ones that typically assume terrorism risk, and they make up only less than half of the industry-wide surplus.

*It is reasonable to expect that the removal of the subsidy will result in a short-lived adjustment in coverage and pricing.*

- Insurers may seek to exclude terrorism risk in the absence of a federal backstop. However, it is not possible to exclude terrorism from certain policies, such as workers' compensation or fire-following-coverage in many states. In those instances, insurers may simply avoid the market or they may raise premiums high enough to drive policyholders away and effectively remove that risk from their companies' books.
- Because the risk of terrorism is so difficult to predict, it is also very difficult to price adequately. The issues of adequate pricing and adverse selection will be paramount in making terrorism insurance an insurable risk without an adequate federal backstop.
- Competition that currently exists for higher-risk insurance contracts could significantly diminish.

*Take-up of terrorism risk insurance continued to increase while the ratio of policies written by insurers including terrorism coverage has been flat to rising, even as the TRIA deductible rose over time.*

- The take-up rate has varied significantly by region. According to a recent industry report, 53 percent of firms in the northeast purchased coverage; in the western states, where there is a lower perceived threat of terrorism, only 34 percent purchased it. Take-up rates are also high in cities such as Washington (60 percent) and Chicago (58 percent).
- If terrorism insurance evolves into a product that is purchased exclusively by a few owners of high-value, high-profile buildings in major cities it will make it additionally difficult for insurers to provide coverage in an environment without an adequate federal backstop, due to the inability to spread exposure over a large number of risks.
- It is likely that pricing and underwriting adjustments would be necessary for insurers to manage and re-evaluate their terrorism exposure since adequate pricing will be so difficult and adverse selection will cause difficulties.
- There are no well-vetted means of determining terrorism exposure, and many building owners do not expect to be targeted by terrorists. Many structures remain vulnerable against terrorism risk because of the difficulties in determining who is vulnerable.

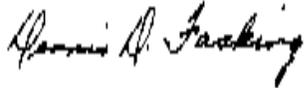
*Overall, our assessment is that the immediate effect of the removal of the TRIA subsidy is likely to be less terrorism insurance written by insurers, higher prices, and lower take-up rates. Over time, we expect that the private market will develop additional terrorism reinsurance capacity. We anticipate that the initial response of premiums in the market will spur buildup of surplus as insurers tap into capital markets and the development of additional private reinsurance and other risk-shifting mechanisms.*

- We believe without a federal backstop there will be a long-term, rather than just an immediate, negative effect where there will be higher prices, decreased availability, and lower take-up rates.
- It is much more difficult to mitigate terrorism risk than natural catastrophe risk. Mitigation efforts such as improved building codes, structural components that better resist wind loads, and prudent land use planning have been shown to significantly reduce natural catastrophe property insurance losses. Terrorists can adapt to mitigation efforts and try and work around them, blunting their effect.
- In the absence of an adequate federal backstop, there could be significant disruptions to the insurance market capacity and solvency should there be large terrorism insured losses. A significant disruption in the terrorism insurance market would make it difficult for policyholders to renew their policies and to acquire new policies, especially in areas that are perceived to be high-risk, and this could have negative economic effects.

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The American Academy of Actuaries stands ready to assist Congress in assessing or developing alternatives to the private terrorism insurance market.

Sincerely,

A handwritten signature in black ink, appearing to read "Dennis Fasking". The signature is written in a cursive style with a prominent initial "D".

Dennis Fasking, FCAS, MAAA  
Chairperson, Extreme Events Committee  
American Academy of Actuaries

CC: Honorable Paul Kanjorski, Ranking Member