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TERRORISM INSURANCE POLICY AND THE PUBLIC GOOD

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The September 11 attacks posed a policy challenge to the United States and its insurance industry. In some respects, the challenge was familiar. The technical difficulties involved with assessing and pricing terrorism risk are similar to those associated with assessing and pricing natural disaster risk. Yet, in other respects, terrorism risk is unique.

Terrorism is manmade. Unlike an earthquake fault line, the underlying risk of terrorism will shift in response to changes in public and private defenses. As a result, it may be hazardous to extend the policy logic used in natural disaster insurance markets to the case of the terrorism insurance market. In the following, we consider the terrorism insurance crisis in the context of previous insurance market crises and discuss some issues brought up by the federal policy response.

Like other catastrophe risks (such as those associated with natural disasters), terrorism risk is both difficult to price and difficult to diversify. In many lines of insurance, it is possible to use historical statistics to project future average costs with reasonable accuracy. This is much more difficult in catastrophe lines, where one must speculate about scenarios that have never happened.² What if a magnitude 8 earthquake³ hit modern-day

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² See James Flannigan, *Insurer's Gauge Risks of Terrorism*, L.A. TIMES, Aug. 3, 2003, at C1 (indicating that insurance companies can now gauge the potential damage of terrorist attacks in the same way they predict damage from hurricanes, tornadoes, and earthquakes).

San Francisco? What if a category 5 storm⁴ hit Miami? What if al Qaeda deployed a nuclear weapon? Moreover, even where the risk is assessable, it is still hard to diversify because of its "all or none" character. An insurer cannot expect stable average losses from year to year---any given year could bring a major event.

As a result, insurance companies that underwrite catastrophic risks face extremely high risk-management costs. These costs are evident in high prices for coverage. Risk management by insurers in catastrophe insurance markets also breeds event-driven cycles. It is not unusual to see spikes in price and restrictions in coverage after a major catastrophe---such as an earthquake, hurricane, or a major terrorist attack.⁵

Indeed, the insurance market turmoil wrought by the September 11 attacks fits well with a recurring pattern in the property-casualty insurance industry. Hurricane Andrew led to a crisis in the catastrophe reinsurance market of the early 1990's.⁶ Asbestos and malpractice litigation triggered a crisis in the liability insurance market in the 1980's.⁷ And the cycles were even more acute in the 19th century. For example, New York's fire of 1835 destroyed a large portion of lower Manhattan and drove twenty-three of the twenty-six companies serving the city into bankruptcy.⁸

³ See generally *The World; "Great" 8.0 Quake Hits Japanese Island; The Large Temblor Hurts 246 People, Forces a Mass Evacuation and Cuts Power to Many Homes*, L.A. TIMES, Sept. 26, 2003, at A7 (reporting that the USGS predicts an average of one magnitude-8 or "great" quake per year and equates the amount of energy released in a magnitude-8 earthquake equivalent to the energy contained in 1.01 billion tons of TNT).

⁴ See generally *Common Questions (and Answers) on Tropical Weather*, Yahoo! Geocities (contending that category 5 storms have only occurred twice in recorded history, have winds in excess of 155 mph for at least one sustained minute, and cause substantial destruction and devastation), at <http://www.geocities.com/deadlockdomain/commonq.html> (last visited Jan. 19, 2004).

⁵ See Martin F. Grace et al., *Overview of Catastrophe Insurance Markets in the U.S. 5* (Nov. 30, 1998) (prepared for The Wharton Catastrophe Risk Management Project), at [http://rmictr.gsu.edu/Paper s/Cat_ Overview_12-98.pdf](http://rmictr.gsu.edu/Paper%20s/Cat_Overview_12-98.pdf).

⁶ See Robert H. Jerry II, *Insurance, Terrorism, and 9/11: Reflections on Three Threshold Questions*, 9 CONN. INS. L.J. 95, 109 (2002) (measuring similarities between insurance markets after 9/11 and Hurricane Andrew).

⁷ See Jack K. Kilcullen, *Groping for the Reins: ERISA, HMO Malpractice, and Enterprise Liability*, 22 AM. J. L. & MED. 7, 48 (1996) (describing insurance market troubles in 1980's due to rises in malpractice insurance costs); Melissa Zelen, *Products Liability Issues in School Asbestos Litigation*, 10 AM. J. L. MED. 467, 486 (1985) (summarizing difficulty in quantifying insurance costs in asbestos cases).

⁸ See Cynthia Crossen, *New York, New York: From 12/17 to 9/11, America's Biggest City Proves it Can Rise Above Disaster*, WALL ST. J. CLASSROOM ED. (stating that great fire in 1835 destroyed 700 buildings in flowering business district and caused twenty-

We have seen insurance market crises before, and they are often accompanied by calls for federal intervention. However, the enactment of the Terrorism Risk Insurance Act of 2002 (TRIA)⁹ marked a departure from existing federal catastrophe insurance market policy in several respects. Before TRIA, federal disaster assistance through the Federal Emergency Management Agency (FEMA) rather than ex ante intervention in the insurance market.¹⁰ Even after including state commitments to disaster insurance markets (specifically, the California Earthquake Authority and Florida's Citizens Property Insurance Corporation), the aggregate stated government backing of catastrophe insurance markets was relatively minor before TRIA. TRIA, on the other hand, involved a commitment of over \$250 billion over three years to back the terrorism insurance market and completely dwarfed the aggregate of federal and state commitments to other natural disaster markets.¹¹

This aggressive intervention is not unique to the United States. The September 11 attacks spawned terrorism insurance legislation in Australia, France and Germany, to name a few.¹² Government-sponsored programs are also present in countries that have had ongoing problems with terrorism, such as Israel and the United Kingdom.¹³ Israel's program is especially

three of twenty-six insurance companies to declare bankruptcy), at <http://www.wsjclassroomedition.com/archive/02nov/ESSY.htm> (last visited Jan. 19, 2002).

⁹ See Terrorism Risk Insurance Act of 2002, Pub. L. No. 107-297, § 101(a)(6), 116 Stat. 2323 (2002) (suggesting that the US Government should provide financial assistance to insured parties).

¹⁰ See generally Margo D. Beller, *Draft Disaster Bill Falls Short of Insurers' Hopes*, J. OF COM., May 22, 1996, at 8A (commenting that federal government refuses to the reinsurance cushion insurers were seeking).

¹¹ See Darius Lakdawalla and George Zanjani, *Insurance, Self Protection, and the Economics of Terrorism*, NBER Working Paper #9215 (comparing the government commitments to various catastrophe insurance markets).

¹² See generally Tina Perinotto, *Financiers Await Decision On Terror Cover*, AUSTRALIAN FIN. REV., Mar. 7, 2002 at 51 (noting Australia, as well as France and Germany, favors insurance schemes which rely on pooled reinsurance).

¹³ See Lucien J. Dhooze, *The Terrorism Insurance Market After September 11: The Case for Limited Federal Intervention*, 34 MCGEORGE L. REV. 27, 54-55 (2002) (describing Israel's Property Tax and Compensation Fund which funds claims for damage caused by terrorist activity); William B. Bice, Comment, *British Government Reinsurance and Acts of Terrorism: The Problems of Pool Re*, 15 U. PA. J. INT'L BUS. L. 441 (1994) (describing England's Pool Re program).

generous in that the government essentially acts as an insurer.¹⁴ Israel pays for all property damage and pays scheduled benefits to victims who are injured or to families of victims who have died in terrorist attacks.¹⁵

However, experts disagree on the economic case for government involvement in the terrorism insurance market.¹⁶ The primary concern is the potential for distortion in individual self-protective behavior, also known as moral hazard.¹⁷ If people have access to subsidized insurance, will they still take proper care in protecting themselves? Will they make adequate provisions for security? Will developers choose locations with due regard for terrorism risk if they are insured by the government for terrorism losses?

These concerns are familiar ones and often arise when contemplating government involvement in an insurance market. For example, federal provision of flood insurance might encourage people to build on flood plains. Of course, building on a flood plain is not *necessarily* a bad idea---there could be good reasons for locating a project in a high-risk area. Ideally, however, we would like the builders to consider the full social consequences of their actions. And if taxpayers are paying for damages whenever a flood hits, the builders may not be considering the full costs associated with flood risk and thus may not be choosing socially optimal locations. The behavioral distortion may also be manifest in other dimensions. For example, on the eve of the flood, the homeowner on a flood plain may make less of an effort to protect her home if she is insured than if she is not insured. These ideas can be extended to the case of terrorism, so it is not surprising that the self-protection issue surfaced during the debate on federal terrorism insurance.

¹⁴ See generally Ann LoLordo, *Caught in the Cross-Fire; Israeli Bill Would Limit Compensation Claims*, BALT. SUN, Aug. 11, 1997, at 1A (reporting a man received cash compensation from the Israeli government after being wounded in a Palestinian uprising).

¹⁵ See generally *id.* (stating that the Israeli Government had paid over \$17 million to more than 600 claimants since intifada).

¹⁶ See Anne Gron & Alan O. Sykes, *Terrorism and Insurance Markets: A Role for the Government as Insurer?*, 36 IND. L. REV. 447, 448-50 (2003) (for a case against federal involvement in terrorism insurance); Jeff R. Brown et al., *Federal Terrorism Risk Insurance*, 55 NAT'L TAX J. 647-57.

¹⁷ See Margaret Howard, *Shifting Risk and Fixing Blame: The Vexing Problem of Credit Card Obligations in Bankruptcy*, 75 AM. BANKR. L.J. 63, 84 (2001) (describing how individuals will "relax" behavior due to the applicability of insurance).

Terrorism, however, is a complicated problem and involves a number of political and economic considerations absent in the case of natural disaster risk. Indeed, a key difference between terrorism and natural disaster risk is that terrorism is manmade. The ground will shake and the wind will blow regardless of the choices we make, but terrorists will presumably adjust their plans in response to our choices. Terrorist capabilities and target selection cannot be viewed independently of the self-protection decisions made by potential targets: Self-protection decisions made by individuals, businesses, and the government will have important consequences for the distribution of terrorist attacks. This is not typical of self-protection against natural risks. For example, one man's decision to locate on a fault line will have little impact on his neighbors' financial exposure to earthquake. Thus, on closer inspection, the "self-protection issue" is much more complicated in the case of terrorism than it is in the case of natural disasters.

Self-protection against terrorism involves a variety of investments and behaviors. It includes security investments such as fences, guards, guns, and background checks. It also includes more subtle behavioral changes such as making decisions about where to live, where to locate an office-building project, or where to go for entertainment on a Saturday night.

The key question is how an individual's self-protection against terrorism affects others. In some cases, individual self-protection can be expected to *reduce* the risks faced by others. For example, additional security at a nuclear plant reduces the likelihood of radiological material from that plant being used as a weapon against other targets. In other cases, however, it may *increase* the risks faced by others. For example, a security guard posted outside a restaurant may reduce the risk faced by the restaurant, but some of the risk may simply have been displaced onto neighboring businesses.

Similar analysis can be applied to self-protection through avoidance. For example, a decision to abandon a "trophy" office building project has both negative and positive implications for others' exposures to terrorism risk. Neighboring small businesses may enjoy a decrease in terrorism risk, since they are no longer exposed to damage resulting from an attack on the trophy building. But trophy complexes in other parts of the city

or country may experience an effective increase in terrorism risk, as terrorist resources will no longer be diverted toward the new trophy building.

Self-protection choices may also affect society more broadly through public goods. These are harder to characterize but include things like national pride, patriotism, or prestige. They may be easiest to illustrate through examples. First, consider racial profiling. Suppose a business uses racial profiling as a tool in its security program. This could conceivably reduce exposure to terrorism losses, but many would argue that the practice is bad for society.¹⁸ It may tear at the social fabric by alienating groups targeted by racial profiling. Second, consider reconstruction at the World Trade Center site. A skyscraper in Manhattan may well be a desirable target for terrorists. Nonetheless, many view rebuilding the site as an essential expression of national resolve.¹⁹ If a developer were to decline the project because of the terrorism risk, is this prudent self-protection or a blow to the national psyche?

The point here is that the private sector response to terrorism must be considered on a variety of levels. With natural disasters, a central concern with both ex post disaster assistance and ex ante insurance market subsidies is the potential encouragement of risk-taking behavior that is excessive from a social standpoint. Similar concerns may be present with federal assistance in the case of terrorism risk, but there is also the problem of terrorism causing excessive *risk-avoiding* behavior. Thus, in the case of terrorism, self-protective behavior (and any policy effect on that behavior) must be evaluated in the context of the war on terrorism and with much broader social goals in mind. Indeed, it has been argued that the TRIA's potential encouragement of risk-taking behavior was in fact a key underlying motivation, rather than a worrisome side effect.²⁰

¹⁸ See generally Tomoeh Murakami, *ACLU Panel on Racial Profiling Worries about Arab Americans*, PLAIN DEALER, Oct. 5, 2001, at A6 (positing that while in certain instances racial profiling may be understandable, such activities are not acceptable in modern society).

¹⁹ See Deborah C. Roth, Note, *Wish You Were Here: A Cross-Cultural Analysis of Architectural Preservation, Reconstruction, and the Contemporary Built Environment*, 30 SYRACUSE J. INT'L L. & COM. 395, 416 (2003) (stating, "reconstruction may be paramount in helping the world recover from the senselessness of terrorism").

²⁰ See Lakdawalla & Zanjani, *supra* note 11.

Going beyond TRIA, the responses of terrorists have implications more generally for how society shares terrorism risk. Liability for acts of terrorism often falls to the targets of terrorism, who are sued for failing to take adequate precautions. This assignment of liability may have important consequences for behavior. Faced with potentially enormous liability bills, developers may choose not to build major downtown buildings, while building managers may be cautious in securing their existing properties. Holding targets fully liable for collateral damages will thus encourage businesses to think more broadly about the consequences of an attack on their premises, but it also may exacerbate the problems of excessive self-protection and inadequate risk-taking.

In general, the economic evaluation of TRIA is a challenging enterprise. While the comparison of terrorism risk with natural disaster risk is suitable as a starting point, it is clear that there are unique issues associated with terrorism and, in particular, an economically complex interaction between public policy and private behavior. How do we strike the right balance between encouraging people to take socially beneficial risks and discouraging people from being careless? What are symbolic properties in New York City or Washington, D.C. or other urban locations worth? Should we encourage or discourage their construction when terrorists are at large? These are tough questions and are ones that must be wrestled with going forward.

