

The Debate Over Federal Insurance Against Terrorism



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In the wake of the attacks of September 11, commercial insurance is drying up for protection against acts of terror. This is happening because the reinsurance companies (insurance “wholesalers”) are turning down policies from primary insurers (“retailers”) that cover acts of terrorism. A product that the private market has been delivering for many years is being withdrawn from the marketplace.

The withdrawal of insurance has not ended economic activity. But neither should we be sanguine. There are some high-profile examples of real estate deals undermined by lack of terrorism insurance, but many deals have been consummated in spite of the absence of terrorism coverage. By mid-February 2002, large deals were signed for uninsured properties in midtown Manhattan at interest rates only 0.15 percentage points above the rates for fully insured properties.¹

The danger now is not that the economy will grind to a halt tomorrow without insurance against terrorism but that, quietly, risks are being shifted onto property owners, risks that had been divided and spread quite literally all over the globe. This is potentially a very unstable situation. Another terror attack might or might not result in massive disaster relief for those affected by these concentrated losses, but even with such relief, heavy costs would be distributed arbitrarily among citizens, and relief, too, probably would be unfairly spread among victims. We may not learn how valuable insurance is until we need it again, perhaps years from now, but it would be a great mistake to wait until another catastrophe strikes.

How should government react? The following brief will explore the insurance industry, the reasons for the collapse of the market for terrorism coverage, and the public policy challenges this presents.

SEPTEMBER 11 LOSSES IN HISTORICAL PERSPECTIVE

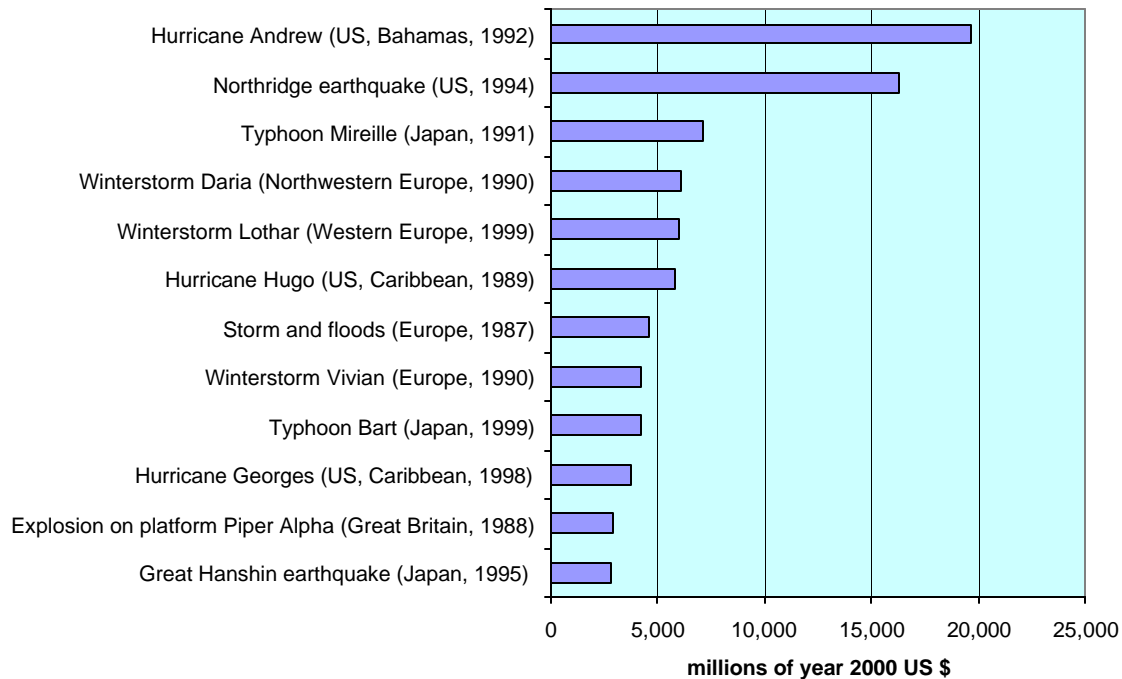
The terror attacks of September 11 caused the largest insurance losses ever recorded. The Reinsurance Association of America puts the range of insured losses at \$35-\$75 billion, far greater than the previous largest worldwide loss, \$20 billion from Hurricane Andrew in 1992, to say nothing of the other great insurance catastrophes of the past three decades (See Figure 1).² The full costs of the terror attacks will not be known for decades, as secondary effects--such as illness to bystanders caused by air pollution--work themselves out. These costs are out of the ballpark compared to previous losses from man-made catastrophes. Of the forty greatest insurance losses of the 1970-2000

¹ John B. Levy, “Mortgage Buyers Take Lack of Insurance in Stride,” *Real Estate Journal*, reprinted from *Barron’s*, February 13, 2002.

² “The Reinsurance Market: The Impact of the September 11th Terrorism Catastrophe,” December 7, 2001, available at http://www.reinsurance.org/policyupdate/terrorism/terrorism_reinsurance.html. These estimated losses are likely to be exaggerations. For example, this Reinsurance Association of America report places insured losses from the 1994 Northridge earthquake at \$16 billion, while the auditor of the California Earthquake Authority places total Northridge losses at \$12.5 billion (a difference probably attributable to inflation) but insured losses at only \$5.5 billion.

period, thirty-three were weather-related, three were earthquakes, two were large-scale fires that started in the countryside, and two were petrochemical industry accidents. Before September 11, terrorism was little more than a footnote in insurance accounts. It is the collapse of this earlier order, with the prospect of massive and uncertain losses now readily conceivable, that has led to the crisis in terrorism coverage.

Figure 1: Greatest Catastrophic Insurance Losses, 1970-2000



Source:

Sigma, Swiss Re, February 2001, available at <http://www.swissre.com>.

Britain faced a similar crisis in reinsurance following a series of bombings in the early 1990s. The most serious of these resulted in one death and about £1 billion in property losses. So the reluctance of insurers to continue covering terrorism losses after September 11 should not come as a surprise. (The British policy response is reviewed below.)

THE FUNCTION OF INSURANCE

Insurance pools, and thereby reduces, risk. By purchasing insurance, becoming one of a large number of insured parties, an individual benefits from the law of large numbers, which says that uncertainty declines as the number of cases increases. The insured pays the statistical expected loss plus a fee for the insurance service.

The calculation of expected loss, at the heart of insurance underwriting, also serves broader economic functions. By setting a price on various risks, insurance companies inform clients about what they are up against. For example, discounts on life insurance for nonsmokers inform clients of the cost of smoking in longevity terms and may help people decide to become nonsmokers. Similarly, rate variation in property insurance reflects differences in risk of loss. Many insurers also intervene more aggressively to help clients learn about options to reduce the risk of loss—for example, by informing property owners about security and fire-control options.

INSURABLE RISKS

The profitability of the insurance industry depends on several features of normal life:

- Many risks are predictable for groups, if not for individuals. Nobody can predict whether a person with certain characteristics (health history, gender, age, race, income, family status, and so forth) will die in a given year, but one can answer with a high degree of accuracy for a group of 10,000 with similar characteristics.
- Losses--such as deaths, fires, or transportation accidents--are largely independent of one another. While an epidemic, a weather event, or a large fire can produce many losses close together, these still are relatively isolated on a global scale.
- Even when losses come in groups, the clustering of such events may have a predictable pattern. For example, the historical record shows that hurricanes create clusters of losses in a fairly predictable way across time and space.
- Insurance against many losses does not substantially alter the likelihood of such losses. Life insurance does not increase the likelihood of death, nor does fire insurance lead to many new losses from fire (although arson and other fraud is common enough to make insurance claim investigation an important activity).

If any of these conditions fails to hold, commercial insurance is unlikely to be profitable and therefore unlikely to be offered in the marketplace. When risks are unpredictable, nobody knows how to price a policy. Nobody knows what the chances are that a terrorist attack could result in losses of \$100 billion. Unlike catastrophes such as earthquakes and hurricanes, there is no history of experience with massive terrorism losses.

When risks are not independent of one another (as in wartime destruction), it may be impossible to diversify them adequately. If a nuclear device were detonated in a city or a biochemical weapon claimed hundreds of thousands of victims, the losses could rival those in a war. Not even the combined capital of the global insurance industry is prepared for losses of that magnitude.

Finally, when the presence of insurance changes behavior enough to increase risk substantially, insurance is unprofitable. That is why there is no private insurance against joblessness--the likelihood is too high that a well-insured person would fail to hold a job. This also helps to explain why private insurers will not offer flood insurance--the availability of insurance leads to excessive risk taking. The increase in risk taking stemming from the availability of insurance is called "moral hazard."

INSURANCE MARKETS

Primary insurers deal with businesses and households. Their essential activities are risk assessment, estimation of expected losses (underwriting), claims settlement, financial management of reserves against expected future losses, and management of insured risks. Both risk management and financial management involve the creation of a diversified portfolio of assets, liabilities, and expected liabilities that produces good returns at low risk for the insurance companies.

Reinsurance companies, which trade in risks with primary insurers, are vitally important to the task of risk management. A primary insurer might "lay off" on a reinsurer risks that are too concentrated geographically to be independent of one another and might acquire from the reinsurer risk located elsewhere. Or the primary insurer might pay the reinsurer to assume the risk of rare and very large losses ("stop-loss" insurance). Reinsurance firms are the wholesalers in risk, dealing only with other insurance companies. As a result, they are not very visible, but they are vital to the industry, since without them primary insurers would not be able to diversify their risks properly.

Like other insurers, reinsurers set rates on the basis of historical experience. From September 11, they learned that history is a poor guide to the risk of terrorism, and they responded by refusing to accept

such risks. The losses of the 1990s--which included the 1993 attack on the World Trade Center, the destruction of the Alfred J. Murrah Federal Building in Oklahoma City, and a number of airplane losses, each with attendant loss of life--provided little basis to predict the likelihood of future terrorist attacks or their destructiveness.

A FEDERAL ROLE?

Many participants in insurance markets would like to see the federal government offer reinsurance that guarantees coverage against terrorism. This probably would take the form of stop-loss coverage, with commercial insurance and reinsurance firms absorbing losses up to a ceiling, at which point the government would cover any additional claims. This idea has obvious merit as well as some potential problems.

Arguments Pro and Con

Pro:

- This would not be the first time that government would move in, providing insurance where private firms have proved unwilling. In the United States, there are and have been a number of government insurance programs. (See Cases 1-3 below.)
- Without insurance, property owners themselves bear all the risk of terrorism losses. Insurance divides risk, and the cost of losses among very large groups, in a way that is much more fair and orderly than any alternative. Our cities themselves are at risk if terrorism is uninsurable.
- We cannot let the terrorists win.

Con:

- As a result of other government insurance programs, dangerous areas unsuitable for habitation--on floodplains and earthquake faults--have been overbuilt. Government insurance programs may encourage costly and unnecessary risk taking.
- Potential losses are staggering, and these are likely to be inflated if the federal government (read: taxpayer) picks up the tab. As the destruction of the World Trade Center illustrates, there is no telling what the eventual costs might be. A federal guarantee puts a deep pocket into the litigation process.
- We should not subsidize urban density. Communication technology is making cities obsolete. We should not use tax dollars to prop up high-density cities as we have propped up agriculture, fighting the flow of history.

Advocates of a federal role respond that the principal reason that the market for terrorism reinsurance is drying up is not moral hazard, nor unwillingness of the insured to pay more for insurance. Rather, it is the unwillingness of reinsurance firms to offer coverage. Insurance is based on predictable losses, and insurance companies, like the rest of us, simply do not know what to expect. Great uncertainty surrounding very large losses is not the sort of risk that attracts commercial insurers. In fact, moral hazard does not seem a serious problem. It is unlikely that tenants would want to occupy spaces that might be thought of as "terror magnets," so there are plenty of market forces discouraging undue risk taking. It is the fact that the risks appear unmeasurable that has undermined the market for terror insurance. The challenge for the federal government is to step in where markets have failed. If we want to ensure for the long run that people have the opportunity to live and work in places with higher terrorism risk, like our great cities, we need to offer terrorism insurance.

HOW TO STRUCTURE A FEDERAL ROLE

A number of suggestions for government involvement are based on the British experience. The British Pool Reinsurance Co. was established in 1993 in response to the withdrawal of commercial reinsurance from London following IRA terrorist attacks. "Pool Re" is a mutual company that brings together a large number of participating private insurers (nearly two hundred, at last count) offering greater coverage against terrorism than the standard property policy. Insurers that are members of Pool Re charge additional premiums, which they cede to Pool Re. All the premiums accumulated within Pool Re (both the current year and any premium from previous years that has not been called on) are available for paying claims in excess of the standard £100,000 per loss. If these funds are exhausted, the participating insurers will contribute up to 10 percent of the premiums they have remitted to the pool in the year in question. Further claims are met by drawing on any investment income that has accumulated in Pool Re. Any further claims are met by the government, as the ultimate reinsurer. The objective of Pool Re is to provide continuing coverage against terrorism, with minimal distortion to market-set prices and zero cost to the government over the long run.

Although there have been twenty terrorist attacks since the establishment of Pool Re (fifteen attributed to the IRA, the rest to Palestinians or animal rights activists), its resources have not been stretched, and after an initial rate hike, rates gradually have been reduced. Pool Re's coverage is confined to commercial properties, and it excludes nuclear energy risks, certainly a potential terrorist threat.

American calls for a mutual reinsurance pool with the government as reinsurer of last resort involve broader coverage than that offered by Pool Re. That broader coverage would include residential property, business interruptions, and worker's compensation, a line of insurance that is in trouble after September 11. AIG, Chubb, and Hartford Financial Services have advocated mutual insurance plans with a government backstop.

Some in the United States have advocated only temporary provision of government guarantees to reinsurers. The distrust of government that motivates this position leads also to the suggestion that no premiums be charged for government reinsurance services, since such "taxes" would enable government involvement to continue.³

DESIRABLE FEATURES IN A FEDERAL TERRORISM INSURANCE SYSTEM

If we adopt government guaranteed reinsurance, certain principles are relevant:

1. There should be no delay in reestablishing a reinsurance market for risks associated with terrorism. It is likely that private reinsurance will return if results are good over the next few years. If results are not good, we need the government guarantees even more.
2. Government reinsurance should provide a market for terrorism coverage, not subsidized coverage. If a permanent institution is established that charges premiums, these must be adjusted to cover losses over the long run.
3. The government should rely on private insurance as much as possible. Its support should only cover the "tail" of very large losses.
4. Insurance rates should reflect differences in expected losses, even if this creates a disadvantage for our great cities. Cities already overcome many cost disadvantages (the cost of crime, for example). If the risk of terrorism is greater, prices should reflect that, to the extent that it can be measured.

³ See Peter Wallison, "Government Coverage of Terrorism Reinsurance," American Enterprise Institute, Washington, D.C., November 2001.

Case 1: Insurance against Riot and Urban Disorder: A Program that Met a Temporary Need⁴

Following the urban civil disorders of 1968, private insurers became reluctant to offer property insurance in high-risk urban neighborhoods. The National Insurance Development Program was created within the Department of Housing and Urban Development to ensure that affordable property insurance would remain available. The program later was transferred to the Federal Emergency Management Agency (FEMA). While the program required private and state participation, federal reinsurance absorbed 90 to 98 percent of the risk.

The program was designed to last five years, but claims were much lower than had been anticipated, and in 1970, program premiums were used to subsidize a crime insurance program. The original program was discontinued in 1984 because it was so little used.

Case 2: Flood Insurance through FEMA: A Program with a Problem

National Flood Insurance also was established in 1968, in response to reluctance by private insurers to sell flood coverage. Increasing encroachment on floodplains and oceanfront building created risks that private insurers were reluctant to insure. The premiums charged under the program are by design not actuarially sound; they are intentionally subsidized. Congress periodically appropriates funds to support flood insurance.

In the past few years, environmental groups have offered a critical evaluation of National Flood Insurance. They claim that classic moral hazard problems are aggravated by subsidized flood insurance. In particular, the program encourages building in fragile ecosystems where losses are common. According to the National Wildlife Federation, 31,574 properties in 300 communities--fewer than 1 percent of all National Flood Insurance-covered properties--receive 20 percent of all loss payments and half of all repetitive loss payments (which result when a property is rebuilt and subsequently redestroyed). Lax enforcement of rules has resulted in repair and rebuilding of properties that should have become ineligible for coverage because of repeated losses.⁵

Case 3: Earthquake Coverage in California: Enough to Meet the Need?

In 1994, Northridge, an outlying neighborhood in Los Angeles's San Fernando Valley, was hit by an earthquake that registered 6.7 on the Richter scale. The resulting property losses came to about \$12.5 billion, of which approximately \$5.5 billion were covered by earthquake insurance.⁶ In the following months, private insurance companies withdrew from the California market, and since law at that time prescribed that homeowner insurance include earthquake coverage, insurers withdrew from the homeowner insurance market as well.

In response, fifteen private insurance companies were brought together in 1996 by the state of California to establish the California Earthquake Authority (CEA), "a privately funded, publicly managed" consortium. These companies offer standard earthquake insurance coverage, separate from homeowner coverage, pooling their capital and seeking reinsurance jointly.

Only about a quarter of homes in California have purchased earthquake insurance; of these, about two-thirds are covered by companies within the CEA consortium, the rest by companies that offer policies independently. The low acceptance of earthquake insurance in a very risky

⁴ Most of the information for Cases 1 and 2 is drawn from the testimony of Thomas McCool of the General Accounting Office before the Senate Committee on Banking, Housing and Urban Affairs, October 24, 2001.

⁵ National Wildlife Federation, *Higher Ground: A Report on Voluntary Property Buyouts in the Nation's Floodplains*, Washington, D.C., 1998.

⁶ California Earthquake Authority Auditor report, February 2001, p. 17.

region (a quake that registered 7.0 on the Richter scale hit an uninhabited desert in California in 1999) can be attributed to the high cost of earthquake insurance plus the relatively poor terms of the standard policy. The standard policy carries a 15 percent deductible and places severe limits on coverage. A measure of the deterioration of the quality of coverage is the California Insurance Department's estimate of potential losses in a Northridge-scale earthquake: Of the \$5.5 billion in covered losses from the 1994 quake, the consortium would have been liable for about \$3.6 billion under terms of the policies in force in 1994, but under the standard policy introduced in 1996, consortium companies would only have covered \$1.8 billion of the losses, half as much as the earlier policies. In spite of the deterioration in coverage, insurance rates are much higher today. This reflects the high cost of reinsurance.⁷

With the memory of Northridge fading, competition in the insurance industry has led to entry of new primary insurers offering earthquake coverage and to some reductions in reinsurance rates. This is a mixed blessing, however, since the new primary insurers can pick the risks they want to cover (unlike the CEA consortium, which must offer insurance to all homes), leading to the possibility that the CEA will be left with only the worst risks, driving reinsurance costs even higher.⁸ The CEA is structured to be actuarially sound, so premiums would rise if the quality of risks deteriorated.

With capital and lines of reinsurance to handle losses up to \$7.6 billion, the CEA has reestablished earthquake coverage for homeowners in California. But a really catastrophic earthquake would likely exceed CEA's capacity, even though it covers only a small proportion of all eligible homes.

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⁷ Ibid.

⁸ This issue highlights the two-edged sword that guaranteed coverage represents. By offering coverage to all homes, no matter how close to known fault lines, CEA blunts incentives to avoid dangerous building sites.