



How Will Insurers Deal With Their Most Expensive Catastrophe?

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"We can look at Hurricane Andrew. We can look at the Northridge earthquake. But this event has caused the largest workers' compensation loss in history, by multiples. It is the most expensive aviation disaster in history by God knows how many multiples," says [Paul Kleindorfer](#), Wharton professor of decision sciences, economics, and business and public policy. "Business interruption losses, property losses – everything you could possibly imagine having insured, anything ever borne as a risk on some insurer's or reinsurer's balance sheet – in every one of those cases, this is the biggest catastrophe. World War II and Vietnam had considerably larger losses, but if we're talking about *insured* losses, this is the largest catastrophe in the history of the industry."



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That is how Kleindorfer – hardly a man given to hyperbole – sees the impact on the insurance industry of the Sept. 11 terrorist attacks. He was one of several Wharton professors and insurance experts who spoke to Knowledge@Wharton about the situation the industry faces and how companies can deal with it.

In 1992, Hurricane Andrew cost insurers some \$19 billion. As a result, eight small U. S. companies went out of business. In the present disaster, according to [Jean Lemaire](#), Wharton professor of insurance and actuarial science, each of the World Trade towers alone will cost \$2.5 billion in property insurance payouts. And that's just the tip of the iceberg. Today insurers face the growing realization that they may have to pay out between \$15 billion and \$40 billion in damages. How will the industry cope? Will it need an as large or even larger bailout package than the \$15 billion the airline industry got this week? What's the prognosis for the insurance sector overall? And what strategies can companies adopt to survive?

Some early questions have more or less been answered. For example, according to Matt Mosher, group vice president of the property-casualty rating division of A. M. Best, a company which reports on the financial condition of insurance companies, "it seems fairly clear that the industry will stand by its coverage as far as any disputes over the war clause or terrorism are concerned." It is also reasonably certain that life insurers will meet their obligations (or attempt to meet them) even in cases where a body is not recovered.

Wharton decision sciences professor [Howard Kunreuther](#) agrees. "If there is a life insurance policy, and that person is declared missing, it will still be honored," he says. "It is hard for me to imagine it wouldn't be." But other uncertainties still loom large: Many other claims may be contentious. Lemaire assumes "insurers will be very lenient. It will give them a bad name if they are not. But what matters is not just the willingness to pay but the ability to pay."

Wharton professors argue that the events of Sept. 11 are different, from an insurance point of view, than natural disasters. "The cost of a hurricane is fairly closed," says [Neil Doherty](#), a Wharton professor of insurance and risk management. "The amount of damage can be scanned and estimated, and hurricanes don't typically lead to enormous waves of liability losses, a massive loss of life, or a huge amount of workers' compensation claims. In contrast, the cost of these terrorist attacks is potentially open-ended." Kunreuther says predictability is another differentiator. "With hurricanes and earthquakes, the insurance industry has some estimates of the chances of these events occurring. You have scientific and engineering data, and a sense of what's likely to occur. With terrorism, everything is up for grabs."

What insurers refer to as a "concentration of risks" also makes the present disaster unique. Says Lemaire, "Hurricane Andrew hit a whole area and involved a lot of insurers. Here, we may be talking about far fewer insurance companies. Let's say a company had dozens of employees in the WTC, people presumably with incomes solidly above average, and life insurance benefits two to four times their annual salary. That can pile up to millions of dollars. And one insurer probably covered that whole company."

Which companies are being hit hardest? The professors agree that the brunt of the burden will fall upon the reinsurers, the companies that essentially insure the primary insurance companies against catastrophic loss. Doherty explains: "These types of tail-end cover, as they call it, just for the very big losses, are the bulk of the reinsurers' income and liability." But, he points out, primary insurance companies may suffer too if reinsurers can't make their payments to them.

Gigantic reinsurance claims contribute to making this disaster an international one. A Reuters report on Sept. 17 included a list of major property and liability insurers and re-insurers around the world, along with the companies' own estimates of what they expect to pay out. The companies range from Generali of Italy, which anticipates its liability between \$5 million and \$10 million; to PartnerRe (Bermuda), \$350-400 million; and Employers Re (U. S.), \$600 million. Topping the list is Munich Re of Germany, which could lose some \$900 million.

"Each airline company and every insurer has a big network of reinsurers," says Lemaire. "The most important reinsurers are in Western Europe: six or seven in Germany and one in Switzerland. But they're also in Japan, Hong Kong, the U.K., and other countries. Citizens of pretty much every country you can think of that has money will pay for this event, including Middle Eastern countries and possibly even Afghanistan."

Wharton professors believe that the large reinsurers will probably be able to meet their claims - staggering as they are. "Given the fact that it was the World Trade Center," says Mosher, "there were pretty substantial tenants in there who dealt with high-quality insurers. Those insurers in turn have substantial reinsurance protection with name-brand companies known for their size and financial strength, such as Berkshire Hathaway, GE, Munich Re and Swiss Re."

Kleindorfer agrees that "if it's a company like GE, XL Capital or Munich Re, people know they'll get paid." But he asserts that several other reinsurance corporations are involved in one way or another in the WTC catastrophe. He explains that primary property-casualty insurers, seeking risk management and diversification, often cede aspects of the liabilities they underwrite. "Before long you have a layer cake in which hundreds of international reinsurance companies own pieces of coverage of properties such as the WTC. The question is, which ones will go down? We don't yet know. There are indications that Lloyd's of London is in jeopardy. It already had financial difficulties and was not nearly in shape to sustain a significant loss. That's an example of a major player that could sink into the abyss of this event," says Kleindorfer.

Kleindorfer believes that hundreds of smaller companies – for example, those that belong to the ReInsurance Association of America – may have no option but to contest every claim. "They're out of business if they don't," he says. On the subject of specific insurers and reinsurers that may falter, several professors referred to Morgan Stanley's September 17 Industry Overview ("World Trade Center Special Issue") chronicling the disaster.

Some professors wonder if insurers will be able to pay for the "next big hit," even if they are able to pay for the present catastrophe. Says Doherty, "If the cost of the terrorist attacks turns out to be \$30 billion or \$40 billion, I think the industry can cope. On other hand, what if there's another attack, or a major catastrophe in this hurricane season?" Adds Lemaire: "In 1992, natural disasters cost \$32 billion worldwide. This attack makes 2001 already a bad year by itself. So cross your fingers - basically now we're at the mercy of storms in Western Europe, or floods in Japan or Taiwan."

According to Mosher, one of the thorniest issues is that of business interruption claims by companies that were located in the WTC. How high will those claims go, and how extensively will they be honored by their insurers? "These are service businesses," says Mosher, "and they have set up offices in other places, but are they able to do the same business in these new offices as they would have prior to the collapse of the WTC buildings? Trying to determine the cost will be difficult."

Kleindorfer says that the liability on business interruption claims could range from "a few billion to several tens of billions. Business continuation claims entail a long negotiation process. Here it may not be clear whether the losses that have occurred at companies like Merrill Lynch or Cantor Fitzgerald – a firm on the 105th floor of the World Trade Center that was almost completely wiped out - are due to the event

or due to the general decline in the financial services side of the economy. The insurer might argue that what is indicated as a loss mostly results from revenues the business never would have cashed in anyway. So we're in for a long wait before we actually know what the claims are and which ones will be recognized."

The uncertainties don't end there. According to Mosher, since the two planes hit the trade towers within 72 hours of each other but were from two different airlines, it's unclear from an insurance standpoint whether the attack will be considered one event or two. That decision will affect what policy limits apply.

Doherty asks, "Is this attack going to stimulate a wave of liability claims? Are lawyers gearing up to bring class-action lawsuits against the architects and the airlines? Will massive lawsuits be filed because asbestos has been released into the air?" Doherty notes that a Supreme Court decision in 1997 allowed claimants without noticeable asbestos damage to sue based on fear and potential future medical costs.

"Insurance companies are very, very worried about these issues," says Doherty. "There has been some debate in Washington about limiting liability for airlines in this disaster, but there might also be some pressure for tort reform here." To Doherty's list of possible claims, Mosher adds potential disability lawsuits from bystanders who became eyewitnesses to the horrifying events of Sept. 11.

Lemaire points out that "one of the ugly but necessary parts of insurance is that we must put a dollar figure on a life. For airline disasters, the current price tag of a life is \$2-3 million. That's what the lawyers for the victims of the recent Concorde crash are negotiating around. You'd hope lawyers for this wouldn't pounce on that figure."

Reputations, too, are at stake here. Kleindorfer says that all large insurers and reinsurers have clarified that "they want to be known as the reinsurance company that stood up, took its knocks and paid its claims. That's how I'd expect them to behave, if they plan to be in business for the long run and to charge increased premiums now that things are riskier." Kunreuther agrees: "There is an element of goodwill that's been a part of this whole process. But when it comes to actually settling claims for liability, I'm not sure how contentious the process will be."

Faltering financial markets will further affect the insurance industry's capacity to cover claims. "By my rough estimate, the market has dropped 1,000 points since the attack," notes Mosher. "This will have an impact on the overall financial position of the industry, and on the liquidity of some companies that need the cash to pay claims." Doherty adds that in view of the hit that insurance stock prices have taken, these companies will find it difficult for them to raise new capital.

Kunreuther says the attacks on the WTC and the Pentagon will dramatically change the way the insurance industry views risk in the future. "This is a good example of an event that the insurance industry, in its own planning process, did not think could happen," he says. "The idea of four airplanes crashing in the space of a couple of hours was not built into their scenarios. No one could have seriously considered the possibility of two planes hitting the WTC and that the towers would collapse. Insurers are almost certainly going to change their view of the world of uncertainty.

"We, as a society, will have to re-think our strategies for dealing with low-probability events, and reconsider the role of government. It will be extremely difficult for the private market to do what may be necessary for dealing with future events. And the insurance and reinsurance industries will have to re-think which events are insurable. This is going to change the way the insurance industry does business."

Warren Buffett, whose Berkshire Hathaway conglomerate owns companies like General Re and National Indemnity – which could end up having to pay policyholders more than \$2 billion in claims – has already argued in favor of a strong role for the government. On Sept. 24 the *Wall Street Journal* quoted him as saying that "the government is going to have to be the ultimate insurer for acts of terrorism. An industry with very large, but finite, resources is not equipped to handle infinite losses." The *Wall Street Journal* reports that the government is thinking about introducing legislation that would make the government the "insurer of last resort."

[Jerry Rosenbloom](#), a professor of insurance and risk management at Wharton, believes that insurance costs will soon rise sharply. "As losses start to amount, we can expect very large rate increases and larger

deductibles," he says. "In the future, insurance companies will place much greater stress on prevention and security. It may be much like the way earthquakes are treated: You'll need buildings built a certain way, prevention devices and alarms. We will see all kinds of new requirements before an insurance company will write the risk." Insurance and risk management professor [J. David Cummins](#) also predicts a big price spike, "by virtue of not only having been hit hard, but also revising upward the probability and severity estimates for events of this type. This is the first really big non-natural catastrophe event."

How likely is an airline-style government bailout likely for the insurance and reinsurance industry? While some publications have reported that a rescue package is in the works, several professors do not so much anticipate a bailout as various other ways the government might become involved. Doherty thinks the attack may give rise to possibilities for legislative action on insurance. "One issue that's been about for some time is whether the industry should be able to build up reserves for catastrophic events without having them taxed as current income. The current tax situation discourages insurance companies from reserving for remote contingent events, which makes them much more vulnerable. This event might make the legislation go forward."

Cummins suggests that an appropriate area for government intervention would be to provide government-sponsored, reasonably-priced (not subsidized) reinsurance contracts that insurers could buy, describing a not-yet-enacted concept known as Catastrophic Excess of Loss (or XOL) re-insurance. "If a loss occurs, the government borrows and pays the money to the insurers," he says. "The idea is that it breaks even in expected value, but you can access the government's borrowing power. Insurers don't have the ability to borrow or issue equity at favorable prices following a big [hit], whereas the government can borrow and lend at the risk-free rate. So this gets insurers over the capital market imperfection that a private firm has trouble funding itself after a disaster."

"This attack really raises the question, is this a commercially insurable risk?" asks Rosenbloom. "How do you know what to charge for it if the magnitude of losses is so great and unpredictable? If you look at history, certain kinds of losses have been considered not totally manageable by the private sector, such as unemployment and nuclear events. For the real super-catastrophe, we may need a combination of private insurance companies, the government and maybe the capital markets."

What prognosis do Wharton professors offer for the industry? They believe that liquidity will be a challenge for all the firms involved, and that some smaller insurers might go belly-up. But unless loss estimates climb even higher than the \$30 billion - \$40 billion range that has been estimated so far, the sector as a whole will be able to weather this storm.

Kleindorfer outlines a scenario in which the large reinsurers might not only survive this event, but turn it around down the road. "Reinsurance is a multi-year arrangement," he says. "If you take a big hit in year T, then in year T+1 rates will go up. If you have years in which you pay nothing, you'll share some of those benefits with the client. It's interesting that Warren Buffet says he's looking to acquire a reinsurance company and buy stock of many others. He expects that even for those that have been hit significantly, the market has overreacted, because they'll be able to raise their rates for almost all property-casualty insurance in view of this event. For example, if Munich Re gets hit with 2% to 5% of its accumulated surplus, but could raise its rates by 10% or 15% immediately and have that accepted as the new norm in the reinsurance market, it could more than recover its losses."

Lemaire, a former CEO of an insurance company in Brussels, says that the terrorist attacks mark a watershed for the industry. "One of the problems with insurance is with things that are never forecasted," he says. "We can write policies with all the fine print you want, but there will always be new cases and cases in between. This event is really testing the limits of what the insurance companies can do."