

HOMELAND SECURITY GUEST ADDRESS MANAGING THE RISK OF TERRORISM?

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ABSTRACT

The threat of terrorist attacks in the U.S. continues to pose a risk to the insurance industry. In a sector where financial stability is the hallmark of leading firms, the need for complete portfolio management for terrorism risk is evidenced by major attacks. The first attack on the World Trade Center in 1993, the 1995 Oklahoma City Bombing, and the catastrophic events of September 11, 2001 all serve as reminders to the insurance markets that man-made catastrophe risk should be proactively underwritten and managed. As the terrorism landscape continues to evolve, the insurance industry is seeking to quantify, underwrite, manage, and transfer risk from this unfamiliar peril.

RMS has developed an extensive terrorism advisors network consisting of the world's leading authorities on terrorism risk for collaboration on the RMS terrorism model. The RMS® U.S. Terrorism Risk Model provides a comprehensive analysis of terrorism risk in the U.S., quantifying risk from both foreign and domestic terrorist organizations. It supports multi-line risk analysis for both certified and non-certified events causing property loss, business interruption, and workers compensation claims.

The model quantifies the impact of a representative suite of potential terrorist attacks, ranging from various conventional weapons historically used by terrorists including chemical, biological, radiological, and nuclear (CBRN) weapons, also known as "weapons of mass destruction." Attacks are simulated using sophisticated models that analyze the impact of these weapons on property and people. Casualty estimates produced by the model can assist with risk assessment of other insurance lines including life, personal accident, and accidental death and dismemberment.

Attacks are modeled at potential terrorist targets across the U.S., implementing techniques for target prioritization that replicate the processes of target selection known to be employed by terrorist organizations. The numbers and types of attacks incorporated in to the model include the potential for multiple synchronized attacks, a signature of Al Qaeda and its associated organizations around the globe.

Terrorism is a rapidly changing risk. RMS regularly assesses and reviews the risk environment, producing a periodic Terrorism Risk Briefing for clients and parameterizes the probabilistic model through the provision of Risk Outlooks. Clients are able to use alternative Risk Outlooks to perform sensitivity analyses and test risk management decisions under different assumptions for potential future developments.

AUTHOR BIOGRAPHY

GORDON WOO, Ph.D., is a catastrophist, specializing on mathematical aspects of catastrophe insurance risk modeling. Since 9/11, he has focused on developing a quantitative framework for modeling terrorism risk, and is the chief architect of the RMS terrorism model. His work on terrorism has been publicized widely, in periodicals ranging from the Wall Street Journal to the Swiss Military Review. He has served as a terrorism expert panelist for both the Department of Homeland Security and the UK Cabinet Office. Dr. Woo graduated top of his mathematics class at Cambridge University. He completed his Ph.D. as a Kennedy Scholar at M.I.T., after which he was elected a Junior Fellow of the Harvard University Society of Fellows.