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Perception of Risk and Crisis Response

By Don Mango

IN OUR ERM STRATEGY to date, actuaries have reached out to other risk professionals operating in the financial domain, particularly banking. This made sense since the nature of the risks and techniques seemed highly comparable. However, as we venture deeper into the risk management space, we are discovering the importance of relatively unexplored dimensions including risk perception and communication. It is becoming clearer that there are kindred risk professionals out there; we just need to cast a wider net.

In some of that casting around perception of risk, I found the journal *Risk Analysis*, which I received as a member of the Society for Risk Analysis. Their Web site (www.sra.org) tells their story:



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The Society for Risk Analysis (SRA) provides an open forum for anyone interested in risk analysis. Risk analysis is broadly defined to include risk assessment, risk characterization, risk communication, risk man-

agement, and policy relating to risk. Our interests include risks to human health and the environment, both built and natural. We consider threats from physical, chemical, and biological agents and from a variety of human activities as well as natural events. We analyze risks of concern to individuals, to public and private sector organizations, and to society at various geographic scales. Our membership is multidisciplinary and international.

Many of the SRA articles referenced Paul Slovic's 1987 article,¹ which appears to be the seminal article on perception of risk. Slovic examines the judgments people make when asked to evaluate hazardous activities and technologies—in short, how people think about and respond to risk. Slovic highlights two critical factors or dimensions of risk perception, “dread risk” and “unknown risk.” Dread risk is characterized by perceived lack of control, catastrophic potential, fatal consequences and the inequi-

table distribution of risks and benefits. Unknown risks are unobservable, new, and delayed in their manifestation of harm. Research has shown that lay people's risk perceptions and attitudes are closely related to the location of a risk within this space of factors. There are also indications that dread risk is the more dominant factor.

IMPACTS OF CRISES

Risk analyses of severe events (e.g., industrial accidents, pollution spills, product recalls) often focus on the immediate material and human damage. However, the full impacts extend far beyond the direct harms to include significant indirect (including non-monetary) costs. For example, all companies in a given industry sector can be negatively impacted by an incident involving one of their member companies. This type of “reputational spillover” was evidenced in the 2008 financial crisis when the stability of all banks was called into question by the failure of Bear Stearns and Lehman Brothers. The amount of spillover or ripple effects relate less to tangible damage and more to portend—what the incident implies regarding the unknown and the dreaded. Clear examples of this include Three Mile Island, Bhopal and September 11. Slovic discusses Three Mile Island which, despite resulting in no deaths and limited if any latent cancer impact, nevertheless led to a wave of regulatory and societal impacts to the nuclear power industry, including massive regulation and a persistent reputational hole which is at odds with the scientific evidence surrounding the safety of nuclear power. Per Slovic:

It may even have led to a more hostile view of other complex technologies, such as chemical manufacturing and genetic engineering. The point is that traditional economic analyses tend to neglect these higher order impacts, hence they greatly underestimate the costs associated with certain kinds of events.

In terms of portend and subsequent impact, it is hard to overstate the repercussions of September 11. This “dread and unknown” framework puts worldwide response in clear context: a covert network enemy, unlike any seen before, capable of wreaking havoc through conventional explosive, airplanes, anthrax, or dirty bombs (had we ever

FOOTNOTES:

¹ Slovic, Paul S., “Perception of Risk,” *Science*, New Series, Vol. 236, No. 4799. (Apr. 17, 1987), pp. 280-285.

heard of that before?), has rendered us in a chronic state of shock. In this state, we have rationalized the sacrificing of personal freedoms and civil rights in exchange for the increased vigilance we have been told is necessary to battle such foes (see the Patriot Act). Imagine the collective state of mind necessary for the American public to agree to such retractions of constitutional protections. This is risk perception on a national scale.

CRISIS RESPONSE

Risk management professionals can use these research insights to help forecast public responses to crises and formulate appropriate communication strategies. For opaque financial firms like insurers, perhaps the most pressing post-crisis need is to restore public confidence and trust. In a very timely SRA article from 2009,² Timothy C. Earle differentiates between these two terms which are (improperly) used interchangeably:

Trust is social and relational; confidence is instrumental and calculative. We define trust as the willingness, in the expectation of beneficial outcomes, to make oneself vulnerable to another based on a judgment of similarity of intentions or values. Confidence is the belief, based on experience or evidence (e.g., past performance), that certain future events will occur as expected.

Trust is based on a sense of shared values or aligned incentives—membership in the same group, a reputation to uphold, or a brand to preserve. Trust is more emotional and intuitive, and does not require specific demonstrations. Trust is also a resilient asset that is quick to build. When trust is strong, potentially damaging information can be construed in benign or even positive ways—your firm will receive the benefit of the doubt and the incident will likely be dismissed as not indicative (portentous) of greater troubles to come.

Confidence on the other hand is rational and scientific, based on demonstrations of past performance, with evidence of processes and procedures designed to prevent future blowups and mishaps. Confidence is evidence-

based, specific and detailed, making it difficult to build, fragile, and therefore easy to lose. A loss of confidence can cause potentially beneficial information to be interpreted in negative ways—indicative of more problems to come.

Clearly this is fertile ground for research. The takeaways for risk professionals:

- risk perceptions are complex and subjective;
- they are influenced by trust and confidence, reputational assets which are built-up during periods of calm then drawn upon in crisis;
- post-crisis interpretations of the ongoing viability of a firm can swing on the potential for spillover effects and indications of further problems;
- timely and effective post-crisis response communication, informed by an understanding of the underlying psychology, can mitigate potential damage. ♦

FOOTNOTES:

² Earle, Timothy C., "Trust, Confidence, and the 2008 Global Financial Crisis," Risk Analysis, Vol. 29, No. 6, 2009, pp. 785-792.