

A More Dangerous World **Why we misunderstand risk.**

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The earthquake in Haiti is an omen for what the new decade has in store. We will see more natural disasters, and of larger scale, in the coming years. The trend is already accelerating: more than half of the planet's 20 costliest catastrophes since 1970 have occurred since 2001. Because of the world's quickly growing population and larger concentration of assets in high-risk areas, and its increasing social and economic interdependency, these disasters will only increase in frequency.

Economic analysis helps determine how people will respond to this more dangerous world. But the traditional economic view suggests that human actions can be predicted as if people were always completely informed, perfectly responsive to economic fluctuations, and rational, in the sense of having stable, orderly preferences that always maximize their individual economic well-being. In fact, disasters seriously challenge this view. The current situation in Haiti highlights three critical elements where behavioral scientists have found the rational predictions of many economists to be flawed.

First, people don't think disasters will happen to them. This is partly because the human mind is not very good at understanding a low probability of occurrence. What does it mean to you to live in a flood plain or an earthquake zone if you learn that there is a one-in-100 chance of experiencing a disaster next year? For many it is hard to translate this number into concrete action. As a result, people typically just ignore these dangers. This explains why so few countries have implemented risk-reduction measures that have proved to be cost-effective. Betting against the odds—or Mother Nature—people continue to build in high-risk areas, and don't prepare. Then disasters hit with catastrophic consequences.

Second, we fail to learn from others' misfortunes. After the strong emotion people typically feel during a crisis (driven in part by live media coverage), their attention fades. This is true in developing and developed countries alike. Nine months after Hurricane Katrina, one of the most devastating hurricanes in U.S. history, a survey of more than 1,000 residents of U.S. coastal areas revealed that 85 percent of them had done nothing to protect their homes against future catastrophes. Those who had not suffered from the hurricane personally viewed the possibility of a disaster hitting their homes as so improbable it could simply be disregarded. Two years later, Hurricane Ike struck Texas, killing more than 100 people and causing more than \$35 billion in damage.

Third, research shows that humans can't grasp the full significance of disaster statistics. If you heard that 150,000 people perished in Haiti, and later learned it was 230,000, would your brain appreciate the difference? Probably not. But the difference is huge; 80,000 is more than the number of people who died last year from car accidents in the European Union and the U.S. combined. Moreover, people are more likely to offer aid to an individual they can identify and relate to, like an orphaned child, than to a larger group of people in need. Insensitivity to the prospect of large losses of life, a form of "psychic numbing," violates the traditional view of economic rationality, according to which we should care more about two people suffering than one, and even more about thousands of deaths. Often we don't.

What lessons should decision makers draw from these observations?

We know that human reason often fails when it is most needed. People have intuitive and analytic thinking skills that work beautifully most of the time to help them navigate life. But those skills often fail when the potential losses are catastrophic or their probability appears to be low enough that the risks can be ignored. Understanding such behavioral quirks is critically important to those in charge of developing long-term strategies to make their countries more resilient.

Overcoming these obstacles to rationality requires that the knowledge developed by decades of research on human behavior in the face of risk be translated more systematically into actionable decisions. This constitutes the very foundation of a new and more effective response to catastrophic risk. It is essential for the economic recovery of Haiti today and for mitigating all the disasters still to come.

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