Through a different lens

"Through a different lens..." is a regular column in 0.618... that drives below the surface of the sustainability and finance debate and examines the issues from an academic perspective or from that of a guest writer. In this issue, three American scholars examine the views of the United States insurance industry on climate change.

Insurers not of one mind on climate change

Evan Mills, Eugene Lecomte, and Andrew Peara

According to the Munich Reinsurance Company, the world's nations have endured nearly one trillion dollars in economic losses (and 170,000 fatalities) due to 8800 natural disasters over the past fifteen years. Three-quarters of the loss costs were weather-related, and a fifth were insured. Over the past 50 years, the number of weather-related natural disasters has been steadily rising, as have the total and insured losses. Nearly 60% of these losses are visited on U.S.-based companies, and between 1970 and 1999 losses (adjusted for inflation) grew nine-times faster than population. Meanwhile, the insured fraction of total losses has increased steadily, as has the size of those losses in relation to premium income. Bankruptcies of large and small insurers alike have been triggered by weather-related natural disasters.

Vulnerability

Weather-related events touch a surprisingly diverse set of insurance providers, although the degree of vulnerability varies substantially. Property insurers are more vulnerable than are life and health insurers, and within the diverse property segment some insurance lines are more vulnerable than others. While the total available reserves are large compared to catastrophe losses experienced in the past, not all of these funds are available to pay such losses. In fact, in the U.S. about 90% of these reserves are associated with types of insurance that have relatively little if any weather-related exposure (e.g. workers compensation, medical malpractice, liability).

The effects of increased losses can lead to upward pressure on insurance reserves and prices, the sensitivity of insurers' stock prices to major weather-related events, and an increasing number of insolvencies. Large and small insurers alike have been impacted by weather extremes and will be more so in the future if the frequency or intensity of weather-related events increases. The continued insurability of such risks is a central question, especially given that most experts – and the Intergovernmental Panel on Climate Change (IPCC) – project increases in extreme events going forward.

One of the vexing dilemmas facing insurers is the difficulty of disentangling the causes of weather-related loss events. This is especially true for those potentially related to human-induced climatic change versus natural climate cycles, and those having to do with human activity that could accelerate or dampen the process (demographic trends, increasing property values, disaster mitigation efforts, etc.). In many cases, upward trends in losses have shown to be a product of both human and climatological factors, but an in-depth understanding is hampered by technical complexity and insufficient information. Compounding the problem, climate change research is rarely conducted with insurers in mind. Importantly, the most recent assessment from the IPCC reports that certainty of past and future climate changes is higher than ever and that impacts on natural and human systems are already perceptible. The IPCC report looked at insurer vulnerabilities in some depth.

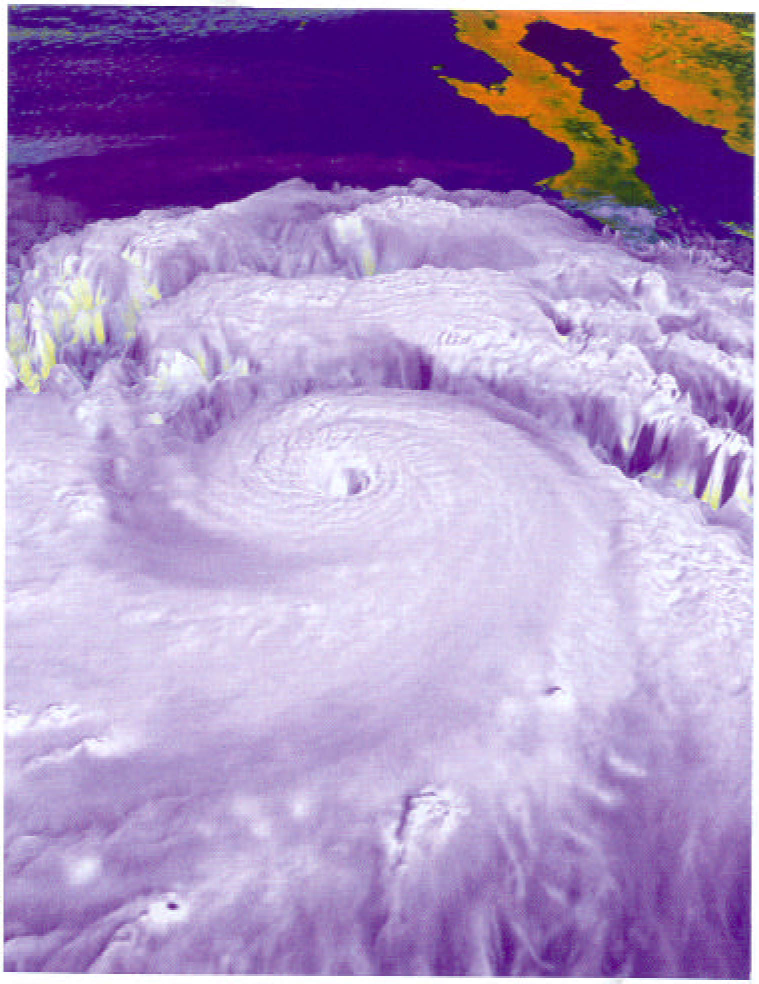
While a number have given some attention to the issue, the vast majority of individual firms and many trade organizations have not indicated an opinion (at least not in the public forum). A few have taken definitive positions that there is a material threat, while others have adopted equally strong views to the contrary. Some have elected to pursue research and the fortification of society against climate change, and others to adopt a "wait-and-see" stance. U.S. insurer involvement in the issue was significantly greater in the mid-1990s than it is today, with many insurers paralyzed by conflicting reportage on the topic and skeptical about the political and scientific assessments of climate change.

Tools

Insurers have a number of tools for reducing their financial vulnerability. These include purchasing reinsurance, raising rates, non-renewal of existing policies, and the cessation of writing new policies. They may also limit their liability by capping amounts of insurance available, placing special limits of liability on coverage, providing coverage on an "actual cash value" basis (taking deductions for depreciation and/or betterment) instead of paying for the replacement cost, and increasing the deductibles paid by their customers. They may also pool their risks and strive to increase their investment income, and, if sufficiently burdened, reduce dividends to share and/or policyholders. Implementing some of these measures may require legislative or regulatory action and present possible political and market risks.

Meanwhile, insurers – in consort with other parties – also possess a diverse toolkit of engineering approaches to managing and minimizing the losses caused by natural hazards. These include use of geographic information systems to better understand and pinpoint risks, land-use planning, flood control programs, early warning systems, sustainable forest management, coastal defense, and wind-resistant construction techniques supported by building codes. However, some within the industry question whether even the combined effect of these types of loss control are sufficient.

Insurers are also able to transfer or share loss costs with governments, self-insureds, consumers, and to the capital markets. Insurers point out, rightfully, that not all risks are commercially insurable in a market economy. Seeking reductions in private



sector insurance coverage for climate- and weather-related hazards produces increased pressure on government to assume the associated risks. Governments, however, have repeatedly shown reluctance to increase their existing insurance exposures and liabilities for providing disaster relief. This tension is a central dilemma facing society in the face of rising catastrophe losses, especially since government-insured crop and flood losses are particularly likely to increase under climate change.

Insurers have treated loss control as a relatively "local" enterprise, whereas it would entail a rather dramatic shift in self-perception for insurers to engage in the activity at a (literally) global scale. Moreover, we have seen no quantitative analyses of how climate changes could effect the "probable maximum loss" estimates upon which insurance pricing and planning rest.

With some notable exceptions, the preponderance of existing U.S. insurer activities fall in the area of pre- and post-disaster loss mitigation, rather than involvement in climate science or

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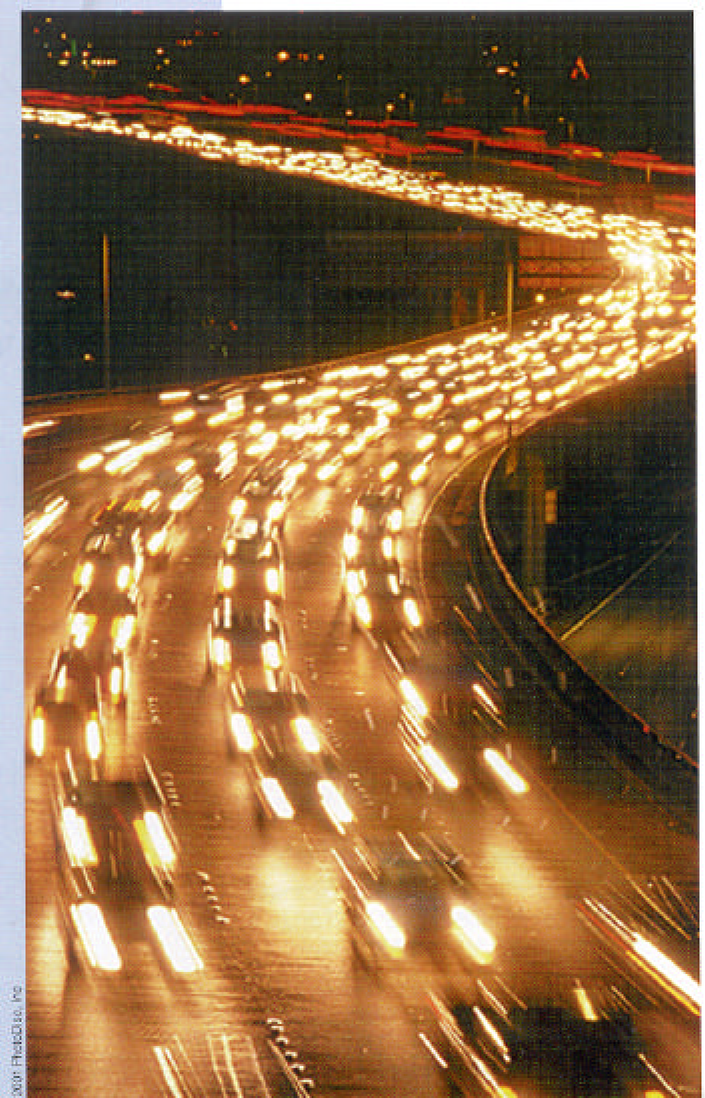
> *"The importance of probability can only be derived from the judgement that it is rational to be guided by it in action; and a practical dependence on it can only be justified by a judgement that in action we ought to act to take some account of it."*
>
> John Meynard Keynes.

mitigating the potential effects of climate change itself. An important semantic point is that while the climate-change research community uses the word "mitigation" to refer to measures that promise to reduce the process of climate change, the insurance community uses the term to refer to measures that reduce the likelihood of losses from climate-related (and other) events.

Points on the compass

Our in-depth interviews with insurance executives and extensive review of the literature found that insurers have assumed positions on all points of the public policy compass. Many of the insurance executives exhibit a genuine desire to make a contribution toward safe-guarding the public and their policyholders. However, most claim to lack the scientific knowledge needed to participate in the climate-change debate. Ironically, some stridently declare a lack of expertise and in the same breath state with authority that climate change is not taking place.



Over the past decade, U.S. insurers, to their credit, have been involved in a large number of activities in which the question of weather-related losses (and in some cases climate change itself) have been addressed. While this evidences considerably more involvement than many outside the insurance community are aware of, what does not emerge is a sense that these events have built upon one another towards some sort of consensus on the matter or towards a coordinated plan of action extending beyond preliminary discussion and fact-finding activities.

Given the potential for disruption caused by climate change, it is notable how limited U.S. insurer activities have been (at least as is evidenced in the public record) to analyze the problem. At the highest level, we discern three basic types of "perceptual barriers" to more in-depth insurer involvement and collaboration with non-insurer groups. These include: (1) uncertainties regarding the science of climate change, (2) distrust, emanating from parochialism and provincialism among stakeholders; and (3) lack of knowledge and the failure to fully understand stemming from insufficient dialog among stakeholder groups. Underlying these, we identify an extensive series of barriers that fall into the categories of "legal and regulatory", "technical and informational", "economic and market", and "political".

We touch on the sometimes remarkable differences between the activities and statements of U.S. and non-U.S. insurers. These include the relative weight of green marketing and green politics, the role of governments in natural disasters, conceptual approaches to loss prevention and mitigation, and the perception of new business opportunities presented by climate change risks. Likewise the regulatory role and tax-law environment, as well as the tone and tenor of government relations with insurers, and differences in corporate culture and the timeframes with which insurers measure their futures can differ dramatically among countries. It was 27 years ago that European insurers first articulated concern about climate change (16 years before their U.S. colleagues first publicly addressed the issue). Yet, it is also fair to say that, in a few select ways, U.S. insurers are ahead of their European counterparts.

Non-insurer organizations in the U.S. often evidence little appreciation for differences in conditions faced by themselves and insurers. Although generally well intentioned, we find that efforts to involve insurers in the climate change discussion have met with very limited success. We believe that the problem stems in part from non-insurers' lack of knowledge about the intricacies of the insurance business, i.e., its history, regulation; the common misperception that insurers are a monolithic group and occasional overstatement of the facts on climate change. Meanwhile, mutual understanding is also hampered by insurer perceptions that these groups are politically rather than scientifically motivated or that non-insurers cannot bring true value to their core business.

Bridging the gap

It appears that differences in worldview and analytical orientation have served to separate many insurers and non-insurers on the question of climate change. Some of these differences may prove irreconcilable, but others certainly stand to be bridged through increased mutual understanding and interdisciplinary, cooperative research and inquiry. Both communities – and their constituencies – no doubt stand to benefit from engaging with the other in a more comprehensive dialog. From various quarters within the insurance community, we are already hearing a call for a more holistic approach, one that integrates no-regrets environmental protection with the discipline of disaster risk management.

This article summarizes an extensive report: "U.S. Insurance Industry Perspectives on Global Climate Change." Copies may be ordered at emills@lbl.gov.

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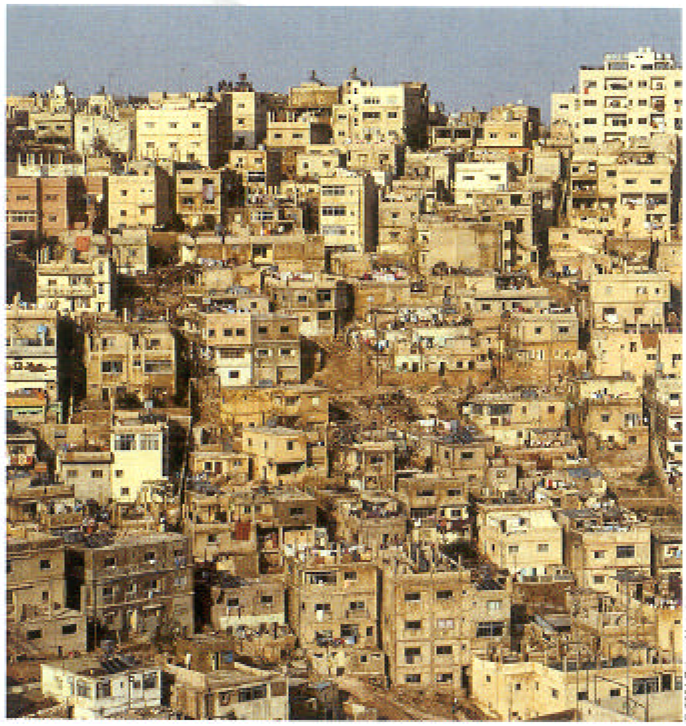

Award for new Credit Suisse Group environmental report 1999/2000

www.credit-suisse.com/sustainability

Credit Suisse were honoured during a recent presentation for the best environmental reports by Swiss companies. The reports were judged by environmental experts of PriceWaterhouseCoopers and an independent jury. The Group's new Environmental Report 1999/2000 came in third (out of 34 reports) in the large company category, after Canon and Sulzer. Martin Wetter, member of the Executive Board of Credit Suisse Banking and Environmental Officer of Credit Suisse Group, accepted the prize on behalf of the company. The full version of the new CSG Environmental Report 1999/2000 is only available online.

Yasuda Fire & Marine Insurance launch new website

www.yasuda-pavilion.com

Yasuda Fire & Marine Insurance Co. Ltd.(Tokyo, Japan) have just opened up the English version of their website. The purpose of this new site is to relay their primary message of 'Taking on environmental issues as part of all our lives'. The site is tailored for children, with special features such as 'EcoTheatre animation clips' that explain environmental issues in a simple and fun way to learn. Also featured is an 'EcoQuiz' as well as a Message Card service and Message Board. Through "Message Card Forest", they have set up a donation fund for environmental NGOs (for every card sent, 20 yen will be donated by Yasuda).