



Insurance and Other Financing Mechanisms

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Introduction

Insurance practices have long been evident – Chinese literature from 3,000 BC describe boat captains redistributing cargo to share the risk of catastrophic loss when a group of ships approach a dangerous bend in the river. Modern insurance practices come from the great urban fires of the 1600s and 1700s. The modern practices are well tested and proven over several hundred years. The foundation is in managing the risk of catastrophic fires. The focus is on pooling modest premiums collect from many that reflect individual risk to pay for the catastrophic losses of a few. The business of insurance ideally seeks to prevent consumers from experiencing losses, so there has been a long-standing focus on promoting adaptation to prevent loss of life and property damage. This is well established for fire risks.

Insurance coverage of severe weather damage risks was introduced approaching the middle of last century. Fire insurance policies were expanded to cover severe weather for homeowners and businesses. Initial weather loss claims were very small, but they have since been growing much faster than most other claims. Over the past 30 years global severe weather insurance claims have increase 20 fold.

This paper will summarize the present situation, how it may evolve in the future and the opportunities and challenges for extending insurance and other financial mechanisms to assist in the reduction of costs in developing countries.

Insurance Today

Insurance has emerged over the past fifty years as a primary mechanism used by individuals and businesses in developed countries to manage the risk of property damage and support economic recovery as a result of extreme events. Nevertheless most people presently do not have insurance coverage, in particular the poorest and most vulnerable people living in developing countries currently do not have insurance.

With annual premiums of \$4 trillion, insurance is the world’s largest industry by revenue. The purchase of insurance by individuals and businesses is high and stable in affluent countries in Europe, North America and Asia. The purchase of insurance is only emerging in developing countries, yet these markets are the regions of future growth for the industry.

What are the strengths and weaknesses evident in insurance coverage of severe weather risks in developed countries?

There are several insurance companies and reinsurance companies that operate around the world. There are also thousands of insurance companies that operate in specific local markets. Insurance is one of the world's most competitive industries, with many insurance companies competing in most major markets.

There are several insurance industries including life and health insurance and property and casualty insurance. The change that has affected the climate over the past 30 or 40 years has had little measurable impact on several insurance industries including life, auto and liability insurance, and the impact has certainly been less important than the global financial crisis, aids and other shocks. In contrast, climate change is already having a profound impact on the property insurance and reinsurance industries. Over the next 30 or 40 years further change with climate will continue to challenge the property and reinsurance industries. Some analysts believe that there may be a significant impact on the liability insurance industry, while some others believe that the impact will remain modest. This aspects need to be further explored.

What changes in insurance coverage are expected over the near-term?

In most major markets severe weather claims have recently escalated to the point where property insurers are now beginning to apply to climate risks the techniques that have been proven in the management of fire risks. Insurers are now becoming more involved in the identification of best adaptation practices to minimize the risk of climate damage, and communication of this information to society. This is expected to include public-private public education and outreach initiatives.

Insurers are also learning to measure the risk of damage due to extremes, and link this knowledge to insurance practices with respect to pricing and coverage. It has long been insurance practice that consumers with higher risk pay more for coverage, and those with lower risk pay less, but measures of climate related risks are only recently emerging as a tool to support insurers.

Change is coming but insurers have a history of gradually adapting their practices, unless confronted by a major shock to the industry. Hurricane Andrew in 1992 launched the beginning of modern hurricane risk management by insurance companies operating in the Florida. The 2004 and 2005 hurricanes further refined the industry's effort in Florida and launched similar reform in other US coastal states. Similarly industry management of wildfire risk more advanced in California and Australia, and management of flood risk is most evident in the U.K. and continental Europe.

What financial tools are emerging in developing countries and what changes in financial protection are expected in developing countries?

Insurance is only beginning to appear as a financial tool in developing countries and then only for the more prosperous and business communities. There are some initiatives, such as that

through MunichRe and others, that need to be explored in IPCC report and clarified as to how these could be most effective. The success of microfinance approaches in India and other countries could be examined as a successful analog to insurance and other financial mechanisms for supporting risk reduction in developing countries. Further the Asian Development Bank and the World Bank have initiated some financial mechanisms that will provide financial support for development in response to climate change and natural hazards in developing countries. The new international Integrated Research on Disaster Risk Programme, now just underway with the co-sponsorship of the International Council for Science, the International Social Sciences Council and the UN International Strategy for Disaster Reduction, will be a 10-year study on disaster risk reduction and it will include internationally coordinated research on this topic (as well as many others).

How can the international climate change discussions accelerate the appropriate use of insurance mechanisms to protect the world's poor and support adaptation?

This part of the report should focus on mechanisms such as the Bali Action Plan and the other adaptation strategies to develop a framework for addressing these issues. There are also non-climate forums, such as the Global Platform meetings of the UN ISDR and the International Disaster and Risk Conferences in Davos (held biannually), that can be used as mechanisms for discussion and identification of mechanisms to move this agenda ahead.