THE AUSTRALIAN
THE HEART OF THE NATION

Covering the cost of natural devastation

By Erwann Michel-Kerjan -- January 17, 2011

SINCE December, Australia has been facing historic flooding that surprised the entire country. Although the risk was known, many were ill-prepared because these floods are not just another average flood, they are of very large-scale magnitude. Three-quarters of Queensland has been declared a disaster zone.

In the immediate aftermath, most of the efforts need to be focused on rescuing and helping the victims of this disaster. But what happens after that?

From my experience working with several other countries, Australia's political leaders will soon have to address the following questions: **First**, who will be responsible for uninsured losses? Most likely the answer will be government relief. This is problematic, because it creates a high level of expectation down the road that, given the growing public debt, may be hard to fulfil. Politically, however, this is what governments are often called upon to do. So, there is likely to be massive relief, but how much and under what criteria, and how quickly victims will receive it, still needs to be decided.

Second, what should be done to better prepare the country for large-scale events? Where should we start and with whom? This will be about improving risk assessment, land use regulations, limiting new construction in high-risk areas, investing in individual and collective risk reduction measures to make communities safer, improving the quality of the warning systems and scaling-up rescue teams' capacity. Beyond good words, this will be hard to do; it is everywhere.

Third - and this is critical - how can the country organise a national sustainable financial protection against extreme events?

These tragic floods provide a real opportunity to think strategically about catastrophe management in the 21st century. As such, Australia is not unique. Rather it has joined a growing group of countries that have faced truly historical devastation from natural disasters in recent years.

One figure is eye-opening: the direct economic cost of natural disasters worldwide between 1980 and 1989 was about $US250 billion. It quadrupled to more than $US1 trillion between 2000 and 2010. In the US, Hurricane Katrina, which made landfall in August 2005, inflicted economic losses from wind and storm surge estimated at about $US165bn (2010 prices), about one-third of which was paid by private (wind) and public (flood) insurance. Last summer, China's worst floods in a decade cost $US50bn, virtually all of which paid by the government, since insurance penetration is really low. Last year, too, one-fifth of Pakistan was under water and 22 million people (equivalent to the entire population of Australia) were affected: another example of truly large-scale floods.

The driving force for this rapid increase in the cost of disasters is fast population growth (there are today one billion more people on the planet than 10 years ago, and in the next 15 years another billion will be added) and much larger asset value in exposed areas. Climate variability toward more extreme events might also be to blame here. Because of that, and unless we start profoundly rethinking our way of looking at these vulnerabilities, the coming years will bring even more devastating catastrophes in many more parts of the world, affecting many more people. Think also droughts, cyclones, earthquakes, bushfires.

For Australian leaders, it might be tremendously helpful to look internationally for benchmarks on flood risk financing. In the US, flood risk has been mainly covered by the federally run National Federal Insurance Program since its creation in 1968.

This is a public-private partnership in which the federal government creates flood zone maps and sets premiums. Private insurers sell the flood policies on behalf of the government and handle claim assessments. (As such they play the role of financial intermediary but do not bear any of the risks.) The NFIP covers $US1.2 trillion in assets today. In the aftermath of Hurricane Katrina in 2005, the program did not have sufficient reserves to pay the historical amount of claims it faced. Between 2005 and 2008, the program had to borrow $US19bn from the US Treasury. This raised serious concerns about its ability to sustain itself after truly catastrophic floods. Enforcement of mandatory insurance requirements in high-risk areas has also been a problem. Discussions in congress and at the White House, and with experts in the field, are under way to determine how best to reform this program, set to expire this year.

In Britain, flood insurance is provided exclusively by private insurers and is usually included in homeowners' insurance policies. Mortgage lenders require a property to have full insurance coverage, and in this way, many homeowners are de facto covered against flood. The government has the responsibility of mitigating the risk of flood and there has been debate about government responsibility after the extensive floods in 2007.

In France, insurance coverage against flooding and other natural hazards is mandatorily included in homeowners' policies sold by private insurers as well (independent of one's level of exposure to the hazard; national solidarity principle). Homeowners' insurance is mandatory and well-enforced. Flood insurance penetration is thus almost 100 per cent. In return for providing this coverage, French insurers benefit from reinsurance capacity at a very competitive price via the government-run reinsurer, which benefits from an unlimited guarantee from the French Treasury.

In Germany, flood insurance is provided exclusively by private insurers but on a voluntary basis and as a supplement to homeowners' insurance coverage. Although homeowners' insurance penetration is high in the country (nearly 90 per cent), flood insurance penetration is only about 10 per cent for single homes. This means the entire country accepts de facto to pay for future victims of flooding, as happened after the Elbe floods in 2002.

In the coming weeks and months, Australia will have to decide what catastrophe management and financing solutions would best be aligned with its social, economic and political priorities. Ideally, the answer will provide signals as to the level of exposure people face and increase personal responsibility towards mitigating those risks.

It will also consider equity and affordability. These questions have been at the forefront of the activities of the Wharton Risk Centre for more than a quarter of a century and also triggered, more recently, initiatives by boards of multinational corporations, the Organisation for Economic Co-operation and Development, the World Bank, the UN and the World Economic Forum. Not surprisingly, these will be central to this month's discussions in Davos.

Erwann Michel-Kerjan is managing director of the US Wharton Business School's Risk Centre and chairman of the OECD Secretary-General High-Level Advisory Board on the financial management of catastrophes. See www.AtWarwiththeWeather.com and www.TheIrrationalEconomist.com for books.