

SilverStone Group

RISK MANAGEMENT

Property & Casualty

Severe Weather Advisory

A Bad Forecast for the Reinsurance Market

by Adrian Bento

The images capturing the overwhelming destruction caused by the recent earthquake and subsequent tsunami in Japan serve as an ominous reminder that even the most robust man-made structures are defenseless against nature's brutal forces.



The 9.0 magnitude quake has been compared to hitting Japan with the same force as 30,000 atomic bombs. In addition to the devastating loss of life and wreckage left to clean up, this natural disaster (as with any) will have a reverberation of negative impacts on not only Japan, but the rest of the world as well. It is imperative that we address these consequences *now* so that we may proactively prepare for their inevitable repercussions in the *future*.

A trickling effect

The ultimate cost of the damage will take several months, if not years, to fully quantify. Initial estimates using various software modeling packages are calling for an economic impact ranging from \$122 billion (World Bank) on up to \$300 billion (Risk Management Solutions, Inc.). One of the variables currently hard to measure is the expected domino effect that the reduction in Japanese manufacturing will have on supply chains. This is particularly pertinent in the technology sector, as Japan accounts for about 40% of worldwide chip production. There is already speculation that the iPad manufacturing process may be compromised.

Reinsurance takes a hit

The current projections on the ultimate financial ramifications of this disaster are taking focus in the insurance market. Estimates of the insured portion (using the same modeling devices referred to above) range from \$25 billion to \$35 billion. While this number may be dwarfed by the total expected economic damage, the potential impact of these dollar amounts could be significantly destructive on a global scale.

Most of the insured loss will be absorbed by carriers outside of Japan, which will ultimately impact the reinsurance market. Some reinsurers have made preliminary loss estimates for Munich Re (the world's largest player in the reinsurance market) nearing \$2 billion, and fellow reinsurance powerhouse Swiss Re is expected to pay out as much as \$1.2 billion. AIG/Chartis projects a loss close to \$1 billion. Considering that the worldwide aggregate for international property "catastrophe" reinsurance premiums totals around \$8 billion annually, the magnitude of this loss begins to come into perspective.

When it rains, it pours

The Japanese quake is just one of several natural disasters to make a significant impact on the reinsurance market during the first quarter of 2011. Two other large events preceded it: the January flood in Australia and the February earthquake in New Zealand. The combination of these two natural disasters alone is estimated to cost the insurance industry \$10 billion to \$14 billion. A number of reinsurance carriers have indicated

that they have already blown their catastrophe budgets for the year due to this onslaught of natural disasters. Some have even gone a step further, admitting that they no longer view these as earning events, but rather consider them as capital eroding episodes.

To make matters even more challenging for the reinsurance market, the catastrophe modeling programs (such as the aforementioned) have consistently underestimated the damage caused by wind events in the U.S. These miscalculations started as far back as Hurricane Ivan in 2004. As a result, modelers have started introducing new programs that they claim are more accurate in their predictions. The new systems have adjusted their estimations to include a higher incidence of worst case scenarios, should a hurricane make landfall in the Gulf Coast, Florida and/or the East Coast. In many instances, property damage is projected to increase by 100% over those generated by the outgoing models. Given these changes, primary insurers and reinsurers will have to pay significant attention to the management of their aggregate exposures.

Warning – rising prices

It is not surprising that those involved in the reinsurance market are wondering how to handle the transition from having excess capital to now needing to transfer these losses onto their customer base (the primary insurance carriers). As costs are shifted to the primary carriers, they will have little or no room to absorb the additional expenses, given their razor-thin operating margins (the result of nearly a decade of rate erosion) and, unfortunately, will be forced to price these into their products.

Blue sky ahead?

The inadequate projections made by the former catastrophe modeling programs did not prepare the reinsurance industry for the unfortunate series of events that has led to the potential rise in product pricing. However, industry experts are learning from these mistakes and are adjusting practices to prevent a repeat of this unexpected economic downturn.

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