Creating China's Catastrophe and Agricultural Reinsurance Finance Industries

by **JOHN MILLIGAN-WHYTE**

China can be the world leader in investing in and commercially financing massive recovery costs from catastrophes including major earthquakes, storms, droughts and floods. Once China has these financing mechanisms working well domestically, it can scale them internationally. This is the first of a series of articles explaining how this can be done.

China's historic agricultural losses are 6% to 10% annually, but peak losses can reach 25% or more. China has the highest exposure to earthquake risk in the world and its growing urban concentrations of people and industry create huge risks and recovery costs. China has far too much geographic concentration of catastrophe risk. The China Insurance Regulatory Commission indicates that less than 1% of earthquake recovery costs are covered by insurance, which hinders reconstruction. Recovery costs are currently financed by Chinese government entities. The peak risks and recovery costs are too massive for Chinese insurance companies or the international reinsurance companies to finance. Only the global capital markets have the size, turnover and investor base to invest in and finance China's peak risks commercially. Financing catastrophe risks in the capital markets is a major global emerging financial industry.

China's trading partners and particularly developing nations do not yet have the catastrophe recovery financing they need to protect their economies. Approximately 60% of global economic losses from natural and man-made disasters are uninsured. China is the only nation with the combination of credible financial resources, government controlled economic management capabilities and huge domestic market size needed play the leading role in developing the global agricultural loss and catastrophe recovery finance industries. It has US$3.83 trillion in foreign governments' currency and debt securities that need to recirculate in the global economy. Investing in reinsurance companies and the new asset class of insurance linked securities are an important new diversification of China's investments.

China's central bank's State Administration of Foreign Exchange has purchased 3% of Munich Re, the world's largest insurance and reinsurance group. Investments in reinsurance and insurance linked securities have the merit of being non-invasive. "There are only 10 countries that accepted the largest net foreign direct investment from China between 2004 and 2010. In 2011, US$32.8 billion worth of investments proposed by China failed to be completed. That's more than half the US$60.1 billion in overseas deals made by Chinese companies in 2011. But investments by Chinese companies have generated political backlash in some countries, and several big deals have fallen victim to regulatory concerns" according to China's Ministry of Commerce.

China's reinsurance investments are good for the whole world. We live in new eras of global financial and economic instability and of the increasing frequency and severity of economic and insured losses from natural catastrophes. The *Financial Times* summed up these new eras danger, "The world must prepare to be shocked. The 2008 financial crisis illustrated the possible consequences of excessively disturbing an obscure corner of a complex system. The result then was a swift, large and unpredicted dislocation in the way the system worked. Adaptation to the outcome was not an option and massive intervention was

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needed. The climate and the natural world are also complex systems. They are being disturbed excessively and at unprecedented speeds. This is not just a point for future generations. The rapid disappearance of the Arctic summer ice was unpredicted. The short-term slowing of warming, possibly explained by heat absorption by the oceans, was unpredicted. Both may have unanticipated and possibly disruptive weather consequences on a timescale of a decade or two. There will undoubtedly be other surprises in a world grown used to comparative stability Both systems are intertwined with our complex economy and social organization, not least through the way we produce food."

China, America, and other nations' governments subsidize food prices. They find it politically and economically necessary to do so and global food prices only increased 2.5% from 1990 and 2005. But, they increased 74% from 2005 and 2012. Recent research indicates that a global temperature rise of 2 degrees Celsius triggering increased rainfall and drought increases the violence, government breakdowns and wars by over 50%. We see this occurring in one nation after another. A *2014 UN Climate Science Report* warns that mankind will "struggle to adapt to dangerous levels of climate change indefinitely and that there are barriers to our ability to adapt to the projected floods, droughts and other extreme weather events." Climate change is now irreversible.

Finding ways to finance huge economic recovery costs in the new eras of global climate change and financial instability are essential. Secretary-General Ban Ki-moon warned in a 2013 UN report, "It is clear that direct losses from floods, earthquakes and drought have been under-estimated by at least 50%. So far this century, direct losses from disasters are in the range of US$2.5 trillion. Economic losses from disasters are spiraling out of control and can only be reduced in partnership with the private sector. There is no doubt that disaster risk financing through insurance, reinsurance and capital market instruments such as catastrophe bonds can help countries catch-up after disaster strikes. Such risk financing and transfer has a very important role to play alongside efforts to minimize and mitigate disaster risk." The UN report presents this message international insurance and reinsurance companies are using to promote the growth in their businesses.

But, the business models of international reinsurance companies are being undermined by the impacts of the two new eras. They face unknown larger levels of geophysical and weather losses, inadequate pricing of catastrophe coverage and lower investment income. They are finding it hard to compete with the benefits their customers and investors can get from using insurance linked securities to access the capital markets instead of the reinsurance markets.

In the early 1990s a large earthquake and hurricanes revealed that insurers and reinsurers had dangerously underestimated their exposure to catastrophe losses. "A US$100 billion natural catastrophe loss that would bankrupt many insurers and reinsurers would represent only 2% of the New York Stock Exchange asset value and less than 1% of the value of the US capital market, where movements of this magnitude and net asset value amounts are the norm. Many catastrophes will be uncorrelated with economic conditions, and investments in catastrophe risk could therefore help market investors diversify their portfolios. Thus, it seems promising to diversify cataclysmic risk in the broader securities markets, much as is now done for home mortgages." That is how a Harvard Business School Professor promoted the embryonic insurance linked security industry in 1999.

Tragically, by 2008 securitizing home mortgage default risk in the capital markets triggered the era of global financial and economic instability. If the securitization of natural catastrophe risks is not properly regulated that will trigger the collapse of the global financial system. The United States government is struggling to regulate its politically powerful banking, hedge fund and securities industries. China's government has much greater ability to provide a blueprint for stabilizing regulatory framework for the global insurance linked securities industry.

Securitizing catastrophic risks is rapidly destabilizing and transforming the global reinsurance markets. But, new capital from the insurance linked securities industry is needed in the new era of catastrophe losses. In 2012 the reinsurance markets had approximately 200 international reinsurance companies with only US$480 billion in total capital plus US$48 billion from new insurance linked securities investments from the capital markets. A single or series of major catastrophes will bankrupt a major reinsurance companies and international reinsurance markets. For example, as a geophysical result of the 2011 earthquake in Japan there is now an estimated 81% to 93% probability of a major earthquake in Tokyo. According to the Japan Cabinet Office, that would cause US$1 trillion in insured losses plus US$1.7 trillion of uninsured economic losses. The impacts of one or more such natural catastrophes on the global financial system and economy are incalculable. The strain of such losses or the insolvency of major insurance and international reinsurance companies would destabilize the credit and capital markets.

Three of the worlds largest reinsurance companies have been named by The International Association of Insurance Supervisors and the Financial Stability Board as constituting systemic risks threatening the collapse of the global financial system. Because of these companies' great success and size China accepts them as reinsures of Chinese risks. But, these European companies have huge exposures to European sovereign debt. Since they have 31.5% of the global reinsurance market, they have huge exposures in the new era of the increasing frequency and severity of catastrophe losses. Their size also magnifies the impact of the current inadequate pricing of catastrophe coverage and low investment returns. These three companies have built far too high concentrations of risk. The purpose of insurance and reinsurance is to safely distribute risk.

Fortunately, foreign companies control only about 4% of China's insurance market and 1% of its reinsurance market. Foreign companies' mindsets and business agendas of taking Chinese market share from Chinese companies are not aligned with China's needs to develop and control its own politically sensitive catastrophe and agriculture insurance and reinsurance industries. But China's insurance and reinsurance companies have relatively short histories and are preoccupied with fast domestic growth. They are also experiencing difficulty in "going global" due to their current limited international experience.

The State Council, five government ministries and China Insurance Regulatory Commission are seeking to develop reliable, well-designed products, which fulfill China's needs for over ten years. Although the government is providing approximately US$4 billion in agricultural premium subsidies annually, the products being offered are not yet adequately designed or commercially profitable. Chinese insurance and reinsurance companies focus on developing other lines of business and find providing agricultural and catastrophe coverage unattractive.

There has been consideration of creating a single "super minister" responsible for and able to create necessary reforms and action. Such a specialized, top down driven focus and co-ordination is urgently needed. With that in place, the problem of how China can design and operationalize its domestic insurance and reinsurance and finance industries and scale them globally can be solved.

There is a successful model for China. Bermuda became the world's most innovative reinsurance center. That attracted over 11% of the world's annual reinsurance premiums. Bermuda provides over US$2 trillion of the US$3.5 trillion of catastrophe reinsurance coverage globally. It grew in into the world second largest reinsurance market by pioneering a highly attractive regulatory framework. It regulates different types of insurance and reinsurance companies in ways suited to each class of companies' different responsibilities and assets. Reinsurance companies with over US$168 billion in equity and US$500 billion in assets operate in a small, interacting cluster in Bermuda's capital city. It is a highly attractive venue for insurance linked securities investors also. Using Bermuda's success as a model, China can become the worlds leading investor, provider and consumer of agricultural and catastrophe reinsurance finance.

Sidebar

John Milligan-Whyte

John Milligan-Whyte, co-author the Whyte Daimin Reinsurance Finance Center Plan for China's Potential Roles in a Sustainable Global Catastrophe Reinsurance Finance System, was Chairman the Committee Advising Bermuda's Minister of Finance on Reinsurance, a member of Bermuda's Law Reform Commission and the United States' National Association of Insurance Commissioners' Advisory Committee that drafted the US Model Insurance Act and Vice Chairman of the American Bar Association Insurance Section. He is Chairman of Whyte Daimin Investments Limited and a former director of insurance, reinsurance and hedge fund companies, the first non-Chinese recipient of the China Business Leaders Summit's Outstanding China Business Leaders Social Responsibility Award and co-recipient of the Asian M&A Deal of the Year Award in the first foreign acquisition by a Chinese state owned company.