



RISK & INNOVATION

Managing The Unknown: The Role Of Risk Transfer

OVERVIEW

9/11. A series of devastating US hurricanes. The global financial crisis.

Many industry experts see these events as major watershed moments that have drastically changed the insurance and reinsurance markets over the last two decades. But the primary event that impacted how companies transfer risk was the 2007-8 global financial crisis and its aftermath, which had its roots in the US housing market but affected financial institutions and economies worldwide.

The worldwide financial shock in 2008 set off a chain of events which have led to new thinking about risk and, in turn, reshaped the mortgage market – both in terms of how mortgages have been insured and by creating opportunities for opening new forms of capital to their help in their insurance.

Now, nearly a decade on, attitudes towards risk are still shifting. The mortgage market – one of those most affected by the crisis, especially in the US – has been one of the most significantly impacted. Whereas in the immediate aftermath of the crisis, the mortgage category was seen through the lens of insurance risk, today it is increasingly being seen through the lens of reinsurance opportunity.

Are there wider lessons here for organizations seeking ways to better transfer their risk exposures in what remains an uncertain global economic environment?



IN DEPTH

Risk transfer is, in simple terms, the transfer of risk from one party to another. It encompasses insurance, in that the buyer of an insurance policy transfers some of the risk to the insurance company.

Reinsurance traditionally insures the insurer. As risk transfer has evolved over the last decade, there are new opportunities for the reinsurance market.

Innovations in risk transfer can best be thought of as “new ways to bring capacity to the market to solve business challenges,” says Bryon Ehrhart, Global Head of Strategic Growth and Development. “Over the next decade, data and analytics will present a variety of new ways to connect risk with capital to mitigate exposures,” he says. This in turn should make the entire economic system more resilient.

The Role Of Reinsurance in Risk Mitigation

Imagine, for example, an insurance company is exposed to commercial risk from weather events but minimally exposed to risk from burglary. Now imagine that the company comes to the conclusion that weather risk is rising but risk from burglary is falling. In that scenario, the company might seek to reduce its exposure to weather risk by transferring a portion of its risk portfolio to another party, to reduce the likelihood of having to pay a large obligation resulting from an insurance claim. It will, in short, take out its own insurance policy with a reinsurer. Any party which takes on this risk from an insurance company becomes, by definition, a reinsurer.

The arrangement gives the insurance company more security and stability and if insurers do incur exceptional losses, liquid assets can be more readily available. This means that customers of those insurers can be more confident that the potential impact to their own businesses will be minimized, even in the case of major systemic shocks.

Such moves towards reinsurance risk transfer today are helping to ensure that the global economy has a more robust underlying foundation, based on strategic risk transfers by insurers that help businesses improve their resilience.

9/11 And Major Hurricanes: New Perceptions Of Risk

“Industry-changing events, from hurricanes to 9/11, can alter the market,” says Ehrhart. Both 9/11 and the wave of hurricanes in 2004 and 2005 – namely Hurricane Katrina – were seen within the insurance industry as ‘trigger events,’ because they had such a significant impact that they led to large scale change.

Where 9/11 led to regulatory changes and a heightened awareness of the global risk of terrorism and the scale of its potential physical, human and economic impact, Hurricane Katrina led to an evolution in catastrophe modeling and a raised awareness of the growing incidence and magnitude of weather-related risk.

For example, Hurricane Andrew in 1992 triggered the development of catastrophe bonds, a sector now worth around \$25 billion. Because some damaged structures had not been entered into catastrophe models correctly before Hurricanes Katrina, Rita, and Wilma, subsequent loss estimates were initially very inaccurate, which brought about changes in the approach to catastrophe modeling.

This new awareness of flaws in the data led to a fundamental rethink that has already improved future catastrophe modeling. “This helps us determine a range of possible outcomes to compare to an organization’s risk appetite and ultimately, transfer or contingently finance the risk exceeding the risk appetite,” explains Ehrhart.

Where 9/11 marked a new era in perceptions of the global security threat from terrorism, Hurricane Katrina also helped highlight a trend that had been building more slowly, prompting action that – with hindsight – some may have considered overdue.

Katrina was part of an extended period of more violent hurricanes which shook the United States between 2003 and 2005, and highlighted the fact that natural disaster losses had steadily increased across the world for decades.

Since 1980, annual losses to both governments and to the private sector from global catastrophes such as cyclones, storms and floods have increased at a rate of 4 percent above inflation. Insured losses have grown at 7.3 percent per year. Even today, however, the vast majority – 76.5% – of global disaster losses remain uninsured. The 2003 to 2005 hurricane period brought this risk to wider attention. There is today an opportunity to deploy even more capital to bridge the catastrophe protection gap, protecting lives and boosting the global economy's resilience to natural disasters – which have led to global economic losses of around \$3.6 trillion from 1980 to 2015.

The US Mortgage Industry: New Forms of Capital

The 2008 financial crisis pushed US mortgages – and their risk – into global headlines. This shock triggered a set of reforms and changes which, taken together, mean that today's mortgage market, particularly in the US, is more transparent and less risky.

Firstly, the mortgage crisis triggered significant regulatory reform. Fannie Mae and Freddie Mac are the two government sponsored entities (GSEs) which issue and securitize mortgages. In 2012, the US government created a new regulator and conservator for both organizations called the Federal Housing Finance Agency. As a result, mortgage holders, investors, insurers, and taxpayers now know that the sector has better oversight and regulation than in the lead up to the crisis.

Secondly, Freddie Mac and Fannie Mae's housing risk is now insured. During the crisis, the undercapitalized organizations were rescued by the taxpayer with low-interest loans at the Federal Reserve, and Treasury Department stock purchases.

Today, the GSEs are required to share their mortgage default risk with many different forms of private capital. As a result, both GSEs created their own insurance products to share credit default risk on an aggregate excess of loss basis. This means that the traditional mortgage lenders in the US have been spreading their own liabilities, reducing the risk of being hit by a major shock, while at the same time increasing trust in the industry, and so reducing the likelihood of future short-term economic uncertainties leading to a panic that could prompt a fresh crisis.

"Reinsurance rates have been softening for a decade due to record levels of capital and the lack of severe natural catastrophes over the time period. US Mortgage credit has emerged as an opportunity to help prepare for and mitigate future crises. We are working to ensure that re/insurance supply meets the high level of demand for this type of risk transfer," says Monaghan.

The perception of the mortgage insurance market has changed and is increasingly associated with opportunities to deploy *reinsurance*. On the basis of current mortgage insurance rates and expected policy lifetimes, one year of loans could generate \$4 to 5 billion in industry mortgage insurance premiums, while also providing systemic protection.

Learning From A Crisis

In retrospect, the financial crisis of 2007 and 2008 – like 9/11 and Hurricane Katrina before it – was a watershed in risk management. It was the point when perceptions of mortgage risk changed; whereas before it had been seen as low risk, the crisis made it clear that that was not the case. As a result of new government regulators and regulation, demand for new forms of mortgage risk transfer increased. Today, mortgage reinsurance is a growing part of the market and intermediaries are working hard to ensure that supply can meet demand.

In June of 2016, Freddie Mac reached a milestone: \$5 billion of its mortgage credit risk had been transferred off its books. Kevin Palmer, senior vice president of single-family credit risk transfer for Freddie Mac, stresses that education is key in thinking about the opportunity they had with *reinsurance*. He states that reinsurance "is helping to bring new sources of capital into the credit risk transfer arena – that's good news for US taxpayers and investors worldwide."

It's a classic case of not putting all your eggs in one basket – an old lesson, but a good one for managing risk more generally.

Diversification can and should lead to greater resilience – not just for reinsurers, but for almost any business in this time of disruption and economic uncertainty. “Those reinsurers that have made investments in the requisite talent and technology have reaped the benefits of a diversified business line,” notes Eric Andersen, CEO, Aon Benfield.

But sometimes it takes a major shock to prompt the change in perception of potential risk that can drive such changes in attitude and risk management – not just within an individual organization or industry, but across the wider economy as a whole.

TALKING POINTS



“Private reinsurers and investment banks have innovative products that offer sovereign financial solutions to countries against natural hazards. However, many countries often need assistance in building institutional capacity to be able to evaluate whether proposed products are effective, well-priced and fit within a government's existing disaster strategy.” – Gloria M. Grandolini, Senior Director for Finance and Markets Global Practice, World Bank Group



“How you feel about risk is an important starting point when it comes to diversification. In order to know how to allocate your investments, you need to understand the level of risk you're willing to tolerate for the returns you're hoping to achieve.” – Legal & General

FURTHER READING

- Investing In Pre-Crisis Financial Risk Management Eases Post-Disaster Recovery Needs – The World Bank, August 15, 2016
- Innovation, Expansion, Diversification Key To ILS Growth: Industry Leaders – Artemis, September 28, 2016
- How Public Universities Are Transferring Risks To Private Sector – Insurance Journal, August 30, 2016
- Asian Development Bank Secures Landmark Risk Transfer Arrangement – Public Finance International, October 4, 2016
- Global Insurance Market Opportunities: Riding the Innovation Wave – Aon report

