

Climate Change

Collective Social Responsibility Through Catastrophe Bonds

From Time Immemorial, People Have Been Fighting the Effects of Natural Disasters.

Natural disasters pose great challenges for the economy in general, the insurance industry in particular as well as society. The rise in weather-related natural disasters, demographic change and an increase in insured value in the affected regions lead to rising insurance losses. As a result, the demand for protection and insurance coverage is growing.

This risk puts a serious strain on the equity base of the insurance industry. So, equity optimization is one of the reasons to transfer the risk to the capital market.

Is the reinsurance system equal to the great challenges and does it have sufficient equity to cover the future increase in losses?

Hurricane Andrew – Birth of the capital market-based insurance risk transfer

Traditional reinsurance underwrites risks worth a multitude of the equity base. When in 1992 hurricane Andrew caused an insured loss of USD 15.5 billion in the US, several insurers had to file for insolvency. To cover these so-called peak risks, insurance companies need a large capital backing. It soon became clear that the increase in natural disaster events required additional cover capacity. At the same time, it was recognized that it was necessary to stabilize the traditional reinsurance system, which is known to be a very intricate network, through alternative risk coverage capital. This was achieved with the help of the capital market through so-called insurance-linked securities. The market growth of the collateralized risk transfer has been remarkable and was further fuelled by its excellent performance in the 2008 financial crisis.

The gap between insured loss and economic loss has always been large and is 100% in less developed regions.

At this point, politics intervened when it became apparent that the cost of protection in the form of premium payments was lower than the costs arising from natural disasters, particularly in less developed regions. The World Bank, governments and the capital market work together in a global partnership by insuring the event risk via the capital market.

Even in developed regions, there is a growing recognition that it is necessary to close the large insurance gap. Governments have little leeway to use tax money to mitigate the effects of natural disasters. Compulsory insurance is just one option to further reduce the insurance gap.

Insurance is a particular form of solidarity. Catastrophe bonds demonstrate the high efficiency of the "purchased aid" which today is more needed than ever.

What has proved itself in industrialized regions, is now attracting growing interest in less developed regions, as it becomes clear that making good the damage caused by natural disasters time and again poses great challenges for politics and society. Either capital is provided too late, disappears in corruption or funds needed for emergency measures and speedy reconstruction do not flow at all. It is not uncommon that the scars of natural disasters are still very evident even after years. In some cases, the affected societies struggle with the aftermath for a long time which can permanently jeopardize the stability and development of a region. The resulting discontent of the population presents a threat which governments increasingly realize and causes a re-thinking of how to help quickly and efficiently after a natural disaster.

Insurance promotes individual responsibility, is a prerequisite for attracting new capital and protects the achievements and prosperity of society. Mobilizing additional financial means from various sources enables even emerging and developing countries to afford to safeguard against natural disasters. The World Bank, countries and subsequently the capital market perform important financing functions.

Entering into a global partnership. World Bank, WHO and governments successfully use catastrophe bonds.

Among World Bank, WHO and governments, catastrophe bonds are becoming an all-purpose tool in fighting the effects of pandemics, earthquakes and major storms. Increased and targeted safeguarding against disaster events in less developed regions is steadily evolving into a key element of supranational engagement. The example of pandemic risks clearly shows the close connection between alternative insurance risk transfer and social responsibility to protect the world population against major economic losses and social suffering. The following examples give an insight into the manner of cooperation as well as motivation and mechanism of catastrophe bonds.

In 2017, the World Bank launched the first ever pandemic insurance in the form of a CAT bond in the amount of USD 500 million to ensure the financing of emergency measures to prevent the spread of pandemics (Pandemic Emergency Financing Facility – PEF). The spread of infections is no longer limited to their place of origin. Time is a crucial factor in fighting pandemics, particularly since air transportation is a major vehicle for a rapid worldwide spread. Scientists believe that an outbreak like the Spanish flu of 1918 today would claim more than 33 million lives in just nine months. The

costs are estimated at nearly five percent of the worldwide BIP. According to the head of the World Bank, this would be equivalent to more than USD 3.6 trillion. However, it does not have to be a pandemic of this proportion. The Ebola outbreak in West Africa in 2014 revealed major shortcomings of the crisis management system. The economic losses have been estimated at USD 10 billion.

The International Bank for Reconstruction and Development (IBRD), a development bank administered by the World Bank, issued the Mexico MultiCat Bond and subsequently the "Fonden 2017 CAT Bond" with an issue volume of USD 290 million for the insurance of natural disasters in Mexico. The premiums were paid by the government of Mexico. This CAT bond was issued in August 2017 and only a month later, the event occurred. The funds were paid within a short time.

Conclusion

Those who perceive catastrophe bonds only as an investment instrument fail to see the special features of this form of investment, i. e. their function as a facilitator for taking social responsibility and their stabilizing effect on the existing reinsurance system.

The question is not whether it is the role of investors to take on reinsurance risks, but how we collectively confront the increasing losses, which are more and more often caused by natural disaster events, and the resulting challenges.

Anyone willing to take social responsibility places emphasis either on the impact an investment in catastrophe bonds makes or on the challenge involved. Taken from this perspective, capital optimization in the insurance industry by transferring risks to the capital market is just a means to a good end.