Investing in Disaster: Catastrophe Bonds and Risk-Linked Products

Philip Niles of Butterfield Fulcrum, discusses the effective transfer of catastrophe risk to investors.

Philip Niles
Butterfield Fulcrum

Even as these words are being written, uncertainty and chaos reign in Japan. One of the world's most industrialized and advanced societies, in the blink of an eye, has been plunged back in time. Its citizens are struggling with the basic necessities of life and the world waits in breathless anticipation of the latest nuclear update. However, beyond Japan's current predicament, natural disasters seem to be bigger and more devastating than ever before. The last few years seem to support this notion; the Christmas 2004 tsunami originating in the Indian Ocean, the Haitian earthquake of 2010, and Hurricane Katrina in 2005 are recent examples of enormously devastating natural disasters.

With all that is currently unfolding before our very eyes on the other side of the world, it seems timely to take a further look at a small, but rapidly developing area of the alternative investment sphere which will be impacted by the disaster in Japan. Specifically, this month we turn to catastrophe bonds as well as similar, risk-linked investment products. While there are many different products in this investment space, the common theme is the same: the effective transfer of catastrophe risk to investors.

The Products Defined

Catastrophe bonds are a relatively new investment product, having existed for only a few decades. Very broadly speaking, they are risk-linked securities that seek to transfer risks from a particular sponsor (for example, an insurance company) to investors. The idea is relatively simple: insurance companies, fearful of enormous calamities for which payouts would exceed premiums, transfer a portion or all of the risk associated with a particular disaster by selling bonds through an investment bank to investors. If no disaster should occur, the investors will reap a healthy return on their investment. However, should a disaster occur, the investors could lose their upfront investment and the insurance company will use the proceeds to pay their respective claimholders.

In this fashion, catastrophe bonds serve a similar function when compared to re-insurance. However, rather than the counterparty being a re-insurance organization, the other side of the transaction from the insurance company's point of view is a special purpose vehicle formed specifically to securitize these risks. While re-insurance is certainly a very different framework than catastrophe bonds, the idea is the same as stated at the outset of this discussion: the ability of an organization to shift risk to another counterparty.

Benefits of Catastrophe Bonds

For the insurance company or related party, the potential benefits are obvious. The ability to shift some or all of the risk of a natural disaster to another group is not only prudent, but essential. Say, for instance, a particular organization offers home insurance and their clients are predominantly located in Florida. It does not take a genius to see that this insurance company is extremely prone to hurricanes in the southern United States; a single, devastating hurricane in Florida could literally bankrupt the company overnight (not surprisingly, catastrophe bonds were born in the aftermath of Hurricane Andrew in 1992). By shifting some or all of the risk of these policies to investors, the insurance company can ensure that, in the event of a major disaster, the firm stays afloat. Similar situations can occur based on regional differences, with earthquakes in California or tornadoes in the midwestern United States immediately coming to mind, but the logic is fundamentally the same.

For investors, there are also some pronounced advantages. First, catastrophe bonds are uncorrelated with traditional investment products like stocks and bonds. To be sure, hurricanes, earthquakes, tsunamis, and other disasters will occur regardless of how capital markets are performing. This means that an investor can achieve diversification by including catastrophe bonds or similar risk-linked products in their portfolio. Also, given the nature of the financial risks associated with catastrophe bonds (namely the chance of an absolute loss in the case of a disaster), returns are quite favourable. Even a cursory look at these products reveals that their annual interest rates are higher than comparably-rated corporate bonds, making catastrophe bonds appealing to investors. Finally, insurance is an area in which it is difficult to invest for groups outside of major institutions; catastrophe bonds help to bridge this gap and can not only foster diversification, but augment returns.

The Catastrophe Bond Structure

The vast majority of catastrophe bonds are issued by a special purpose vehicle or company which is typically domiciled in an offshore jurisdiction such as the Cayman Islands or Bermuda. These special purpose companies will write one or more policies called “cedants”. At this stage, through the use of an investment bank, the special purpose company will sell catastrophe bonds to the investing public.

It is worth noting that, while the above represents the typical catastrophe bond example, a wide variety of similar products have been developed recently. For example, some catastrophe bonds provide for the risk that multiple losses will occur. Going even further, 2007 saw the first example of an actively managed pool of catastrophe bonds with Nephila Capital as the investment manager. As the market for catastrophe bonds matures and spreads around the globe, there is little doubt that new products will be introduced to the marketplace to meet investor demand. In addition, as the needs and wants of investors change, it is likely that new and innovative catastrophe bond structures will be developed with unique features.

The Future of Catastrophe Bonds

Without a doubt, the potential for catastrophe bonds and other risk-related products is massive. Insurance is becoming a larger business every day, with individuals and organizations paying closer attention to their risk management than ever before. Natural disasters are occurring with such frequency and severity that concerned parties are naturally seeking to unload some of their risk. In addition, with traditional stock and bond returns being wildly unpredictable in recent years and largely disappointing over the previous decade, investors have turned to more exotic products in search of outsized risk-adjusted returns.

All of this means that the appetite for investment products such as catastrophe bonds should continue to grow. With the costs of natural disasters rising rapidly, parties that ultimately have to bear the cost of the natural disasters will seek financial protection. It is worth noting that it is not just insurance companies that bear this cost; governments of impacted areas are also faced with enormous economic burdens. And while a nation such as Japan has relatively large financial resources to draw from, impoverish nations have little to start; they have zero capacity to recover from major natural disasters. In theory, capital markets can help to fill this void.

One item that the industry must enhance and more clearly define surrounds the notion of collateral. For effectively as long as catastrophe bonds have existed, American and international banks have been used as counterparties in the transactions for their perceived safety and steadiness. However, the collapse of Lehman Brothers in 2008 threw this notion out the door and, ever since, a go-forward collateral alternative has been sought. In all likelihood, and from recent trends, it would appear as though US Treasury money market funds are the way of the future, which should increase stability in the market and, by extension, attract more investors. Also, repurchase agreements (repos) have been proposed for collateral as well as AAA-rated government backed assets. Regardless of the source used, of paramount importance is that the industry demonstrates a commitment to safety and stability.

Another item that will require addressing is transparency. Indeed, this is perhaps the most important item for investors in the current, post-Madoff marketplace and participants must be prepared to meet investor demand. For a catastrophe bond to be palatable, as much disclosure as possible, as frequently as possible, is required at the outset and for the duration of the investment. Investors more than ever are demanding to know where and how the collateral investments are held, the maturity terms, rate of return, and a host of other factors. Third-party service providers can help to fill this reporting void, provided they have experience in the catastrophe bond and re-insurance marketplace.

Conclusion

The dire situation in Japan has again brought natural disasters to the forefront. From an investment perspective, this will likely encourage further interest in catastrophe bonds and other risk-linked products. Though relatively small in terms of absolute dollar value compared with traditional capital markets, catastrophe bonds are slowly gathering investor attention due to their diversification potential and return profile. Structured through a special purpose company and distributed through investment banks, the future for these products appears particularly bright for a variety of reasons. While the market certainly still requires some maturation and development, particularly with respect to collateral management and transparency, issuers seem committed to making the requisite changes to bring catastrophe bonds closer to the mainstream. *