GREENING THE GLOBAL ECONOMY

By Michael Bennett

OPENING THE CATASTROPHE BOND MARKET TO DEVELOPING COUNTRIES

Over the past few years, a clear consensus has begun to emerge on the urgent need to green the global economy. Faced with the potentially devastating economic and social impact of rapidly rising temperatures, an increasing number of businesses and governments have begun to shift to less carbon-intensive forms of economic activity. While more investment in green technology is needed, this move toward a greener world economy is expected to accelerate in coming years.

CLIMATE CHANGE, NATURAL DISASTERS AND THEIR ECONOMIC IMPACT ON DEVELOPING COUNTRIES

Despite the green trend, certain consequences of climate change are likely irreversible and are already being felt. One such impact is the increasing frequency of extreme weather events in many parts of the world, such as powerful tropical cyclones, unprecedented flooding and severe droughts. From super-storm Sandy in the United States to typhoon Haiyan in the Philippines to flooding in the Balkans, extreme weather events are now regularly dominating world headlines. A recent report published in the New England Journal of Medicine found that since the 1970s, a clear consensus has begun to emerge on the urgent need to green the global economy. Faced with the potentially devastating economic and social impact of rapidly rising temperatures, an increasing number of businesses and governments have begun to shift to less carbon-intensive forms of economic activity. While more investment in green technology is needed, this move toward a greener world economy is expected to accelerate in coming years.

One-way governments in developing countries can respond to the significant development challenges posed by natural disasters is to make use of the rapidly developing insurance-linked capital markets to obtain protection against disaster-related fiscal losses. During the past decade, capital markets instruments, such as catastrophe (CAT) bonds and swaps, have become an increasingly important part of the global re-insurance market. These instruments now represent around 15% of the total volume of global catastrophe re-insurance. Catastrophe bonds, in particular, have grown at a rapid pace since their introduction in the 1990s. In just the first half of 2013, for example, US$5.7 billion of catastrophe bonds were issued, compared to about US$12 billion issued for all of 2005.

Catastrophe bonds allow entities that are exposed to natural disaster risk, such as insurance companies, to transfer a portion of that risk to bond investors. In a typical catastrophe-bond structure, the entity exposed to the risk (known as the sponsor of the bond) enters into an insurance contract with a special purpose vehicle (SPV) that issues the bonds to investors. The SPV invests the proceeds of the bond issuance in highly rated securities that are held in a collateral trust, and it transfers the return on this collateral, together with the insurance premiums received from the sponsor, to the investors as periodic coupons on the bonds. If a specified natural disaster occurs during the term of the bond, some or all of the assets held as collateral are liquidated and the proceeds are paid to the sponsor as a pay out under its insurance contract with the SPV. If no specified event occurs, the collateral assets are liquidated on the maturity date of the bonds and the money is paid to the investors. In other words, investors risk losing some or all of their principal if a natural disaster occurs and in exchange receive a coupon that reflects the insurance premium for such risk.

Catastrophe bonds benefit sponsors by allowing them to access a bigger pool of capital (i.e., the trillions of dollars held by bond investors) and in general longer coverage periods than conventional re-insurance. For investors, on the other hand, the attraction of these bonds is the relatively high returns and the low level of correlation with other asset classes, such as equities and conventional bonds.
The catastrophe bond market began in the 1990s with US-based insurers transferring through the capital markets a portion of the natural disaster risks to which they had the largest exposure (mainly hurricanes in the Southeastern US and earthquakes in California). These risks are known in the property insurance market as ‘peak perils,’ as they are associated with catastrophic losses that are generally priced at a significantly lower level than bonds with an equivalent level of risk. These perils are known in the property insurance market as ‘peak perils,’ as they are associated with catastrophic losses.

During the period from 1980 to 2004, only about 1% of natural disaster-related losses in developing countries were insured, compared to approximately 30% in developed countries.

The desire of investors for diversifying risks creates an obvious potential benefit to governments in developing countries. By bringing such diversifying risks to the market, developing-country governments find that they can obtain attractive pricing and a high level of demand for their transactions. In addition, governments of developing countries that demonstrate to the market that they have taken pro-active steps to protect their public finances against the impacts of natural disasters may benefit in other ways as well—e.g., investors may feel more secure setting up businesses there or may require a lower credit-risk premium to purchase their conventional sovereign bonds.

As part of its work in the area of disaster-risk management, the World Bank is focused on making the catastrophe-bond market more accessible to its clients. While the high demand for diversifying risks creates an incentive for developing-country governments to obtain natural disaster insurance protection through the catastrophe-bond market, there remain significant barriers to entry into this market for governments. These barriers include a lack of familiarity among many government officials with re-insurance in general and the catastrophe bond market in particular; limited or non-existent modelling of the natural disaster risk exposure of many countries; potential political risks of purchasing insurance protection when the pay-out is uncertain; and discomfort of many government officials with the complex legal documentation and relatively high transaction costs required for these kinds of transactions.

Helping clients overcome these kinds of barriers is one of the objectives of the World Bank’s work in this area. The World Bank’s first entry into the catastrophe bond sector was in 2009 when it created the MultiCat programme. This programme, for which the World Bank acts as arranger, allows clients to sponsor catastrophe bonds using a common documentation platform that makes underwriting more efficient, in terms of both time and cost, than doing a stand-alone transaction. Under the MultiCat programme, the client sponsoring the transaction establishes an SPV to act as issuer of the bonds and then enters into an insurance contract or other risk-transfer arrangement with the SPV. The Government of Mexico chose to use the MultiCat programme to sponsor catastrophe bonds covering both earthquake and hurricane risk in 2009, and again in 2012. More recently, the World Bank expanded its range of catastrophe-bond services for clients by creating the Capital-at-Risk Notes programme. This programme eliminates the need for an SPV or for the collateral arrangements that are required in a conventional catastrophe-bond structure. Instead, the World Bank issues the bond supported by the strength of its own balance sheet and hedges itself through a swap or similar contract with a client. By eliminating the need for an SPV and a collateral trust, the programme allows the World Bank to transfer risks from its clients to the capital markets in an efficient way with minimal transaction costs.

The World Bank issued the first catastrophe bond off its Capital-at-Risk Notes programme in June 2014. The transaction was a three-year issue linked to hurricane and earthquake risk in 16 Caribbean countries. To hedge its obligations under the bond, the World Bank entered into a catastrophe swap with the Caribbean Catastrophe Risk Insurance Facility (CCrIF) (a risk-pooling facility for the 16 countries) that mirrors the economic terms of the bonds. If the bond is triggered by a referenced natural disaster of sufficient intensity, the principal amount of the bond will be reduced and an equivalent amount will be paid to CCrIF under the swap.
CONCLUSION:
Despite the efforts being made to green the global economy and mitigate the impacts of climate change, rising temperatures are already leading to more frequent and extreme weather events in many parts of the world. These natural disasters can strain the resources of governments, particularly in developing countries where private insurance is limited and governments bear the primary financial burden of dealing with disasters. In the case of truly catastrophic events, the resulting fiscal strain can delay or set back a country’s economic development to a significant degree.

Catastrophe bonds are one tool that developing-country governments can use to protect their public finances against the impact of natural disasters. The catastrophe-bond market has attracted large amounts of new capital in recent years, as investors look to this market as a potential source of attractive, uncorrelated returns in what is otherwise a low yielding/high correlation investment universe. This influx of new capital has pushed down pricing and created a favourable environment for sponsors. Developing-country governments can benefit from this surge in demand for catastrophe bonds, particularly since they are bringing attractive diversifying rules to the market. The World Bank is working with its clients to facilitate this process and make the catastrophe-bond market an efficient source of risk transfer for developing countries.

GREEN SHIFT IN THE FINANCE SECTOR

HE ESSA KAZIM ON HOW TO FINANCE GREEN ECONOMY

The creation of a more sustainable future or a new green economy that is resource efficient, which reduces carbon emissions and prevents further loss of ecosystems, will not be cheap. Financing challenges must be overcome immediately as substantial financial resources will be required, given that infrastructure, materials and technologies present such large upfront costs. Therefore, it is increasingly important that we look at ways of raising capital and directing investment away from natural resources and carbon intensive investments.

Governments and the private sector need to work together to facilitate capital raising or re-channeling trillions of dollars from existing assets to finance a more sustainable economy with a greener future. Policymakers around the world must also work together to provide sufficient regulatory and financial incentives for increased consumption and production of renewable energy.

In a region where energy subsidies are already high, this will require significant commitment from all stakeholders to encourage the widespread use of renewable sources of energy. The DIFC is playing a leading role by actively encouraging corporations to adopt more sustainable practices and meet the financing needs of a green economy. Our clients are also on board through investments in the development of sustainable projects across the MEASA region and...