

Caribbean Catastrophe Risk Insurance Facility (CCRIF)



Pooling Risk to Protect Against Natural Disasters

DISASTER RISK FINANCING & INSURANCE CASE STUDY

Background

On average, one to three Caribbean countries are affected by a hurricane or an earthquake each year, although during severe hurricane seasons this number can climb much higher. In 2004, the region suffered a disastrous hurricane season, with 15 named storms. Hurricane Ivan, the strongest storm of the season, wrought devastation on the Cayman Islands, Grenada, and Jamaica. In Grenada, 89% of the country's housing stock and more than 80% of its public and commercial building structures sustained damage. The damage was estimated at over US\$800 million, or approximately 200% of Grenada's GDP. The Heads of Government of the Caribbean Common Market and Community (CARICOM) were compelled by their experiences during this catastrophic season to ask for World Bank assistance in improving access to catastrophe risk insurance.

Objectives

For a number of reasons, small island states have difficulty absorbing the financial impacts of disasters: (i) limited budgetary capacity prevents them from establishing sufficient financial reserves; (ii) cross-regional subsidization of recovery efforts is generally impossible due to their limited size and economic diversification; (iii) high debt levels limit their access to credit after disasters; and (iv) they have limited access to catastrophe insurance due to the high transaction costs resulting from the relatively small level of business brought into these markets.

The main objective of the Caribbean Catastrophe Risk Insurance Facility (CCRIF) is to provide its members with access to affordable and effective coverage against natural disasters.

CCRIF enables countries to pool their individual risks into a single, better diversified joint reserve mechanism. Through risk pooling, CCRIF provides coverage to countries at a significantly lower cost than individual governments would incur if they had to maintain their own reserves or if they were to independently purchase insurance in the open market.

Structure and Description

The CCRIF functions as a mutual insurance company controlled by participating governments. It was initially capitalized by the participating countries, with support

Highlights

- CCRIF allows member countries to purchase liquidity coverage that provides immediate budget support after a major earthquake or hurricane, giving them time to mobilize additional resources for longer-term reconstruction activities.
- The Facility acts as a joint reserve mechanism backed by the international reinsurance markets
- The Facility provides coverage at a significantly lower cost than Caribbean governments could obtain individually from the insurance market.

from donor partners. CCRIF helps Caribbean countries lower the cost of insurance by pooling risks. A portion of the pooled risks is retained through reserves, which helps to reduce the cost of insurance premiums. The CCRIF transfers the risks it cannot retain by purchasing reinsurance and catastrophe swaps.

The coverage provided by the Facility is "parametric" in nature. Unlike traditional insurance settlements that require an assessment of individual losses on the ground, parametric insurance relies on a payout disbursement contingent on the intensity of an event (e.g., wind speed, ground acceleration). In the case of CCRIF, payouts are proportional to the estimated impact of an event on each country's budget. The estimated impact is derived from a probabilistic catastrophe risk model developed specifically for the Facility.

Insured countries pay an annual premium commensurate with their own specific risk exposure and receive compensation based on the level of coverage agreed upon in the insurance contract upon the occurrence of a triggering event.

Outcome

CCRIF is the first-ever multi-country risk pool. Sixteen Caribbean countries joined in 2007 and have renewed their policies each year since. Seven payouts have been made to date (see back for CCRIF members and payouts). The CCRIF has been well received by the reinsurance market, which has provided capacity at a low rate to the Facility. A US\$20 million cat swap between IBRD and CCRIF was the first derivative transaction to enable emerging countries to access the capital market to insure against natural disasters.

Lessons Learned

1. The CCRIF addresses one disaster risk financing need of small island states: Access to immediate liquidity in the aftermath of a disaster. The CCRIF does not cover all losses that a country may incur; it covers estimated liquidity needs for the first three to six months after a major catastrophe. When designing a disaster risk financing strategy, it is important to understand that each country requires a tailored combination of disaster risk financing tools. There is neither a “one size fits all” strategy nor a “silver bullet” disaster risk financing tool.

2. A critical mass of country participation in CCRIF is required for the Facility to benefit from risk pooling and diversification. In order for Caribbean countries to benefit from diversification through risk pooling (e.g., joint reserves and improved reinsurance rates), enough countries must participate in the Facility. Furthermore, the CCRIF carries administrative costs that are shared by participants; a significant number of participants are required to maintain an affordable average administrative cost per country.

3. Dialogue on risk financing can enhance discussions with decision makers on more comprehensive disaster risk management. Risk modeling developed for risk financing products can provide useful information on the risk exposure of the analyzed economy. This information and related dialogue on financial protection can help sensitize decision makers to the need for more comprehensive strategies to deal with increasing losses from adverse natural events, including actions to try to avoid the creation of new risks (e.g., territorial planning, building standards) and to reduce existing risks (e.g., protective measures, strengthening of infrastructure).

Glossary

Catastrophe swap: Contract used by market participants to exchange (swap) a fixed payment for a certain portion of the difference between insurance premiums and claims.

Reinsurance: When the total exposure of a risk or group of risks presents the potential for losses beyond the limit that is prudent for an insurance company to carry, the insurer may purchase insurance from another insurance company (the reinsurer) for the purpose of spreading risk and reducing the insurer’s losses from catastrophic events.

CCRIF Member Countries

- Anguilla
- Antigua & Barbuda
- Bahamas
- Barbados
- Belize
- Bermuda
- Cayman Islands
- Dominica
- Grenada
- Haiti
- Jamaica
- St. Kitts & Nevis
- St. Lucia
- St. Vincent & the Grenadines
- Trinidad & Tobago
- Turks & Caicos Islands

Payouts to Date

- US\$8.5 million to Barbados (2010);
- US\$3.2 million to Saint Lucia (2010);
- US\$1.1 million to St. Vincent & the Grenadines (2010);
- US\$4.2 million to Anguilla (2010);
- US\$7.75 million to Haiti (2010);
- US\$6.3 million to the Turks and Caicos Islands (2008);
- US\$1 million to Dominica and St. Lucia (2007)

Risk pooling: The aggregation of individual risks to manage the consequences of independent risks.

Further Reading

Caribbean Catastrophe Risk Insurance Facility:
www.ccrif.org

World Bank. (2008). The Caribbean Catastrophe Risk Insurance Facility: Providing Immediate Funding After Natural Disasters. *Operational Innovations in Latin America and the Caribbean*, 2 (1), 1-23.

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