



## CLIMATE CHANGE AND INSURANCE IN THE CARIBBEAN

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Insurance is a business which has the assessment and management of risk at its core. In all parts of the insurance industry, there is a need to price risk; insurance and reinsurance underwriters must set a price for taking on risk, and the insurance buyer (often represented by an intermediary or broker) must be able to judge whether that price is reasonable.

In the Caribbean, the general insurance business model (as opposed to the life insurance industry, which will not be further discussed here) is such that natural catastrophe hazards play a dominant part in risk assessment and management. Catastrophe hazards require particular attention because they do not follow the usual 'laws' of insurance; in particular, single events can cause losses to a large proportion of clients covered by an insurance company simultaneously, especially if that company only underwrites risk in one or a few geographically neighbouring islands (as is common in the Caribbean). The need to be able to pay lots of claims all at once requires insurers either to purchase their own insurance, called reinsurance, which is expensive, or to hold a large amount of cash reserves, which is also expensive. Thus

the cost of underwriting catastrophe risks, particularly in the Caribbean, requires particular attention to be paid to assessing that risk, both now and in the future.

Another feature of the Caribbean is the key role played by hydro-meteorological (water and weather) hazards in the cost of risk, hurricanes being the most obvious example. At all scales, from national governments to individuals, hurricanes are an immense source of both social and economic risk. However, coastal waves and storm surge, flooding and landslides triggered by heavy rainfall, and droughts caused by lack of rain, are also the source of considerable risk. Any changes to the frequency or intensity of these risky events is of great interest to insurance companies and their reinsurers, particularly on a year-to-year basis but also over longer time periods.

Even if insurers themselves do not think the assessment of changing risks in the face of climate change is important to their business, the regulators of the insurance industry are increasingly moving to risk-based metrics to judge the long-term sustainability of insurance

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companies. Although most advanced in Europe, such risk-based regulation will undoubtedly be implemented in the Caribbean before too long, and the assessment of climate change risks will become a necessary part of insurance industry operations.

In addition to the direct impacts of climate change on the Caribbean insurance industry, the tools on which the industry already relies are the same tools that are critical to successfully managing climate change risk. In the language of climate change, managing the new conditions resulting from global warming is termed ‘adaptation’, and putting a price on current and future risk is critical to successful and cost-efficient adaptation. Adaptation must involve a reduction in climate risk – if not now then going forward in terms of development planning. Climate risk is already very high in the Caribbean, and two of the major economic engines, tourism and agriculture, are both highly climate-exposed. Development needs to become more ‘climate-smart’ throughout the region, but with climate change bringing additional future climate risk, sustained growth without adaption to the future hazard landscape will not be achieved.

While reducing current and future risk must be a priority, there is a threshold at which investment in risk transfer (paying someone else to take the risk rather than bearing the cost oneself) is more cost-efficient than risk reduction. Insurance is the most common form of risk transfer, although a new suite of instruments, largely available in the capital markets and known collectively as ‘alternative risk transfer’, have been developed to complement traditional insurance. Broadening access to risk transfer is thus a necessary part of climate change adaptation.

In this context, the Caribbean has been at the forefront of developing new risk transfer tools to address climate change risk. The Caribbean Catastrophe Risk Insurance Facility (CCRIF) is a first-of-its-kind government risk-sharing platform, aimed at assisting member countries to manage part of their catastrophe risk exposure. As highlighted earlier, catastrophe risks are those which generate many losses simultaneously. For almost all governments in the Caribbean, a direct hit by a major hurricane is the largest single risk its economy, and thus its society, faces. While great strides have been made

across the region in reducing the societal impacts of hurricanes and other natural hazard events in the past several decades, the economic aspects of such catastrophes had gone largely un-managed. Reliance on post-disaster assistance from donors was the plan. With CCRIF, the governments have developed a mechanism which enables them to share their risk, with payouts available when most needed. The success of CCRIF (which recently paid out almost US\$13 million to 3 countries in the eastern Caribbean within 2 weeks of the passage of Hurricane Tomas) has catalysed other initiatives to bring innovative risk transfer solutions to other sectors of industry and the population at particular risk, for example in the agricultural sector and to support micro-finance lending.

In conclusion, the insurance industry is already playing and will continue to play a critical role in climate change adaptation across the Caribbean, bringing both the tools and expertise to assess and price climate risk and the innovative products required to assist countries, businesses and individuals to more cost-effectively manage that risk.

