# Parametric Insurance

Parametric insurance products make payments based on the intensity of an event (for example, wind speed, earthquake magnitude, volume of rainfall) and/or the amount of loss calculated in a pre-agreed model. Unlike traditional indemnity settlements that require an on the ground assessment of individual losses, parametric insurance relies on triggering mechanism using a predefined methodology that is based on variables that are exogenous to both the individual policyholder and the insurer.

Parametric insurance helps limit the financial impact of devastating events such as tropical cyclones, earthquakes and extreme rainfall. In addition, they offer rapid disbursements when a triggering event occurs and a policy is activated.

Parametric insurance coverage can be provided through an insurance or reinsurance contract, as well as through the issuance of a catastrophe bond.

## Characteristics

Governments **do not need to provide a detailed listing of assets** and other information before the insurance takes effect. They should only sign one form throughout the claim process.

**Compensation calculation is objective**, based on the selection of simple parameters that are widely publicized in the public domain. These parameters are taken from specialized agencies worldwide, as well as a set of formulas that are part of the policy.

Payments are not explicitly linked to damages, there is a risk that there may be no payment if triggering conditions are not met.


They are generally **cheaper than traditional equivalent insurance**.

Payout is calculated and **paid more quickly** because payouts do not depend on post-loss appraisals, a process that could take months or years.

**Policy premiums have a cost**. Policy premiums follow risk-based pricing criteria and are therefore determined by the desired level of coverage in terms of the likelihood of a triggering event. For example, it is more expense per dollar of coverage to buy insurance for frequent events compared to rarer events.

### A parametric insurance option for Central America and the Caribbean

For Central America and the Caribbean countries, a parametric product that is successful and available is the Caribbean Catastrophe Risk Insurance Facility (CCRIF), a multi-country risk pool, that offers earthquake, tropical cyclone and excess rainfall policies to Caribbean and Central American governments.

CCRIF helps to mitigate the short-term cash flow problems small developing economies suffer after major disasters caused by natural hazards. CCRIF's parametric insurance mechanism allows it to provide rapid payouts to help members finance their initial disaster response and maintain basic government functions after a catastrophic event.

Since the inception of CCRIF in 2007, the facility has made payouts for hurricanes, earthquakes and excess rainfall to 12 member governments totalling over US$120 million.

| Payouts | Caribbean Country Affected |
|---|---|
| US$ 1,917,506 | Barbados - Excess Rainfall policy |
| US$ 19,294,800 | Dominica - Tropical Cyclone |
| US$ 1,054,022 | Dominica - Excess Rainfall policy |
| US$ 671,013 | St. Lucia - Excess Rainfall policy |
| US$ 247,257 | St. Vincent - Excess Rainfall policy |
| US$ 419,372 | Turks & Caicos Islands -Tropical Cyclone |

**2017 Event**

Tropical Cyclone **IRMA** September 2017

Tropical Cyclone **MARIA** September 2017

| Caribbean Country Affected | Payouts |
|---|---|
| Anguilla | US$ 6,529,100 |
| Anguilla - Excess Rainfall policy | US$ 158,823 |
| Antigua & Barbuda | US$ 6,794,875 |
| St. Kitts and Nevis | US$ 2,294,603 |
| Turks & Caicos Islands | US$ 13,631,865 |
| Turks & Caicos Islands - Excess Rainfall policy | US$ 1,232,767 |
| The Bahamas | US$ 234,000 |

## THE ROLE OF THE WORLD BANK GROUP

Over the past decade, the World Bank has emerged as the global leader in disaster risk management (DRM), supporting client countries to assess exposure to hazards and address disaster risks. It provides technical and financial support for risk assessments, risk reduction, preparedness, financial protection, and resilient recovery and reconstruction.

The DRM portfolio has increased by nearly 50% in the past five years, from $3.7 billion in FY12 to $5.5 billion in FY16. In providing support for DRM, the WBG promotes a comprehensive, multi-sectoral approach to managing disaster risk.

**The Social, Urban, Rural and Resilience Global Practice (GSURR)** houses the World Bank's core DRM specialists and leads engagement with client countries on disaster risk and resilience.

**The Global Facility for Disaster Reduction and Recovery (GFDRR)** in the Climate Change CCS can provide grants and seed financing to enable the engagement with clients and the technical studies and knowledge solutions to help define a disaster risk management framework.

**The Disaster Risk Financing and Insurance Program (DRFIP)** in Finance and Markets leads the disaster risk finance and insurance dialogue with clients regarding the financial impact of natural disaster risks, based on strong analytical advisory services, and helps countries design and implement disaster risk finance strategies, policies and instruments.

**WB Treasury(TRE)** leads the customization of financing terms for CAT DDOs, and structuring and execution of risk transfer products (cat swaps, weather derivatives, natural catastrophe and pandemic bonds).

The World Bank supports multi-country risk pooling mechanisms. Specifically, the Central America and Caribbean Catastrophe Risk Insurance Program was created to improve affordability of high quality sovereign catastrophe risk transfer associated with geophysical and climate related events for COSEFIN and CARICOM member countries, and to enhance the capacity of Ministries of Finance for developing and implementing disaster risk financing and insurance strategies.

Disaster Risk Financing & Insurance Program

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