

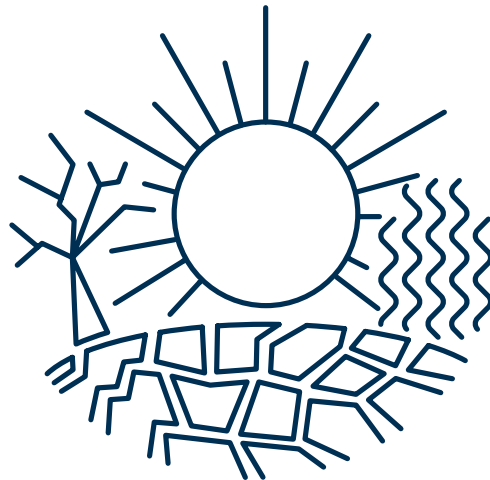


THE WORLD BANK

Treasury | IBRD • IDA

Disaster Risk Insurance Platform

Insurance Solutions for World Bank Clients



Disaster Risk Insurance Platform At a Glance

US\$5 billion*

in disaster, weather, and health
related insurance solutions
provided to clients

Innovative financial
solutions achieving
high levels of
investor demand and
competitive pricing
for clients

Financing for
disasters without
increasing
sovereign debt

Clients include
governments,
public entities and
inter-governmental
organizations

Allows clients to
leverage the World
Bank's 70+ years of
experience in
international capital
markets

End-to-end support
for product design,
preparation, and
market execution

Flexible, timely
and cost-efficient
placement of risk

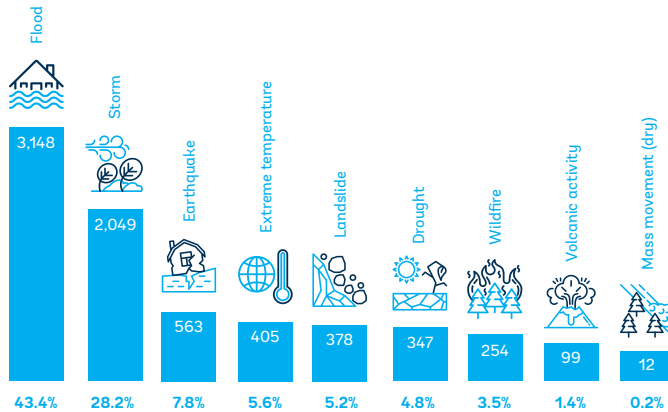
*As of March 2020

Why Do Clients Need to Manage their Disaster Risk?

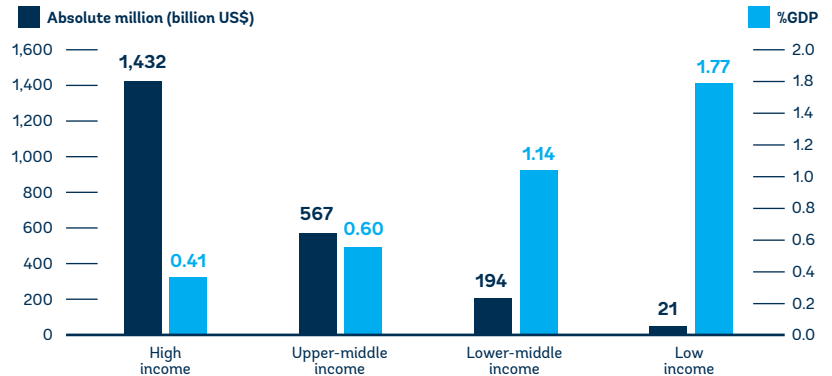
Natural disasters have considerable impact in countries around the world, putting lives at risk and threatening economic stability and growth.

Emerging markets and developing countries are significantly more vulnerable than developed markets due to weaker building codes, denser cities, and minimal insurance coverage.

Natural disasters by type 1998-2017



Recorded climate-related disaster losses per income group compared to GDP losses 1998-2017



Source: Economic Losses, Poverty & Disasters 1998-2017 Report by The Centre for Research on the Epidemiology of Disasters (CRED) and The UN Office for Disaster Risk Reduction (UNISDR)

Responding to disasters puts a significant fiscal burden on governments and creates major budget volatility. Following a disaster, economic activity decreases, resulting in lower government revenue. At the same time, governments must finance relief and recovery efforts, reallocating funds from other national priorities.

How Does the World Bank Support Clients?

The World Bank helps clients increase their financial resilience to disasters by supporting disaster risk financing programs and offering insurance solutions.



Assist clients in designing, developing and executing comprehensive disaster risk financing strategies. This includes identifying and quantifying key disaster risks and the associated contingent liabilities, and then assessing the financing gaps. A risk financing strategy helps clients determine a balance between retaining risk, for example, through emergency funds and contingent credit lines, and transferring risk to insurance or capital markets.

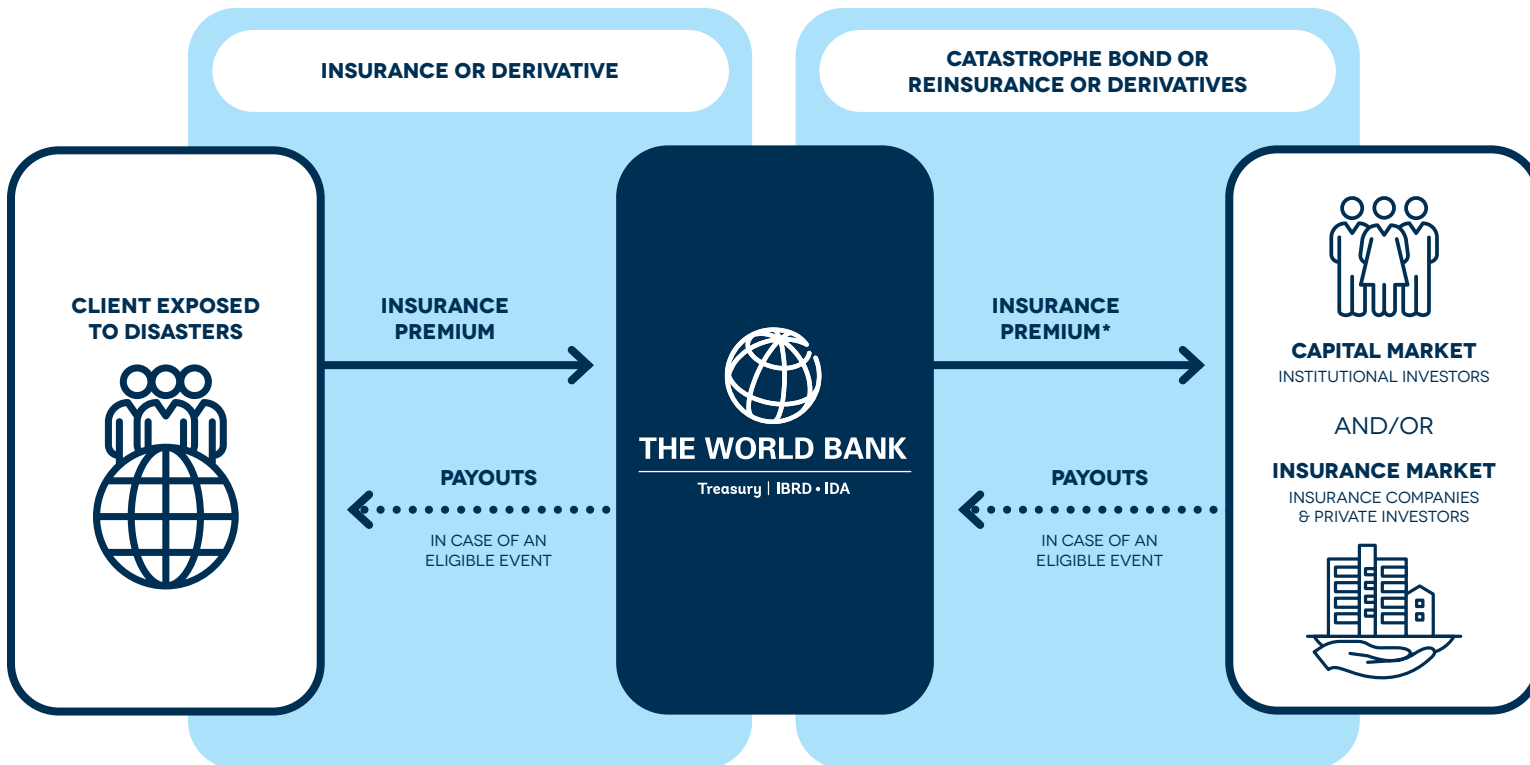


Provide clients with insurance for natural disaster and health related risks. Implementing insurance, derivative or catastrophe bond programs can present serious challenges for governments and public entities due to the complexity of the underlying statistical models, legal documentation, procurement constraints and market dynamics.



The World Bank Treasury's Disaster Risk Insurance Platform helps clients overcome these barriers by providing clients with both advisory and execution services for transferring risk to international markets. Countries around the world have partnered with the World Bank to transfer exposure to natural disasters to insurance and capital markets.

How Does the Disaster Risk Insurance Platform Work?



*Plus World Bank funding margin in the case of World Bank issued catastrophe bonds

World Bank Disaster Risk Transactions

| Client | Peril | Transaction Type | Amount to February 2020 (USD million) |
|---|--|---|---------------------------------------|
| <u>Caribbean Catastrophe Risk Insurance Facility (CCRIF)</u> | Earthquake & Tropical Cyclone | Catastrophe Insurance and Bond (for Caribbean countries) Insurance annually, 2007 to 2013 and catastrophe bond for 3 years commencing in 2014 | 204 |
| <u>Malawi</u> | Drought & Maize Prices | Weather & Commodity Hybrid Derivative Annually, 2008 to 2011 | 19 |
| <u>Mexico</u> | Earthquake & Hurricane | Catastrophe Bond 2009, 2012, 2017, 2020 | 1,450 |
| <u>Pacific Catastrophe Risk Financing Initiative (PCRFI)</u> | Earthquake, Tsunami & Tropical Cyclone | Catastrophe Insurance (for Pacific Island Countries) Annually, 2012 to 2016 | 232 |
| <u>Uruguay</u> | Drought & Oil Prices | Weather & Commodity Hybrid Derivative 2013 | 450 |
| <u>Global</u> | Pandemic | Catastrophe Bond and Insurance (Global Risk Pool targeted to IDA countries) For 3 years commencing in 2017 | 425 |
| <u>The Philippines</u> | Earthquake & Tropical Cyclone | Catastrophe Insurance (for Philippines provinces) 2017 and 2018 | 595 |
| <u>Pacific Alliance – Chile, Colombia, Mexico and Peru</u> | Earthquake | Catastrophe Bond (joint Issuance for 4 countries) For 2 or 3 years commencing in 2018 | 1,360 |
| <u>The Philippines</u> | Earthquake & Tropical Cyclone | Catastrophe Bond For 3 years commencing in 2019 | 225 |
| <u>Jamaica</u> | Tropical Cyclone | Catastrophe Bond For 3 hurricane seasons commencing July 2021 | 185 |
| | | | 5,145 |

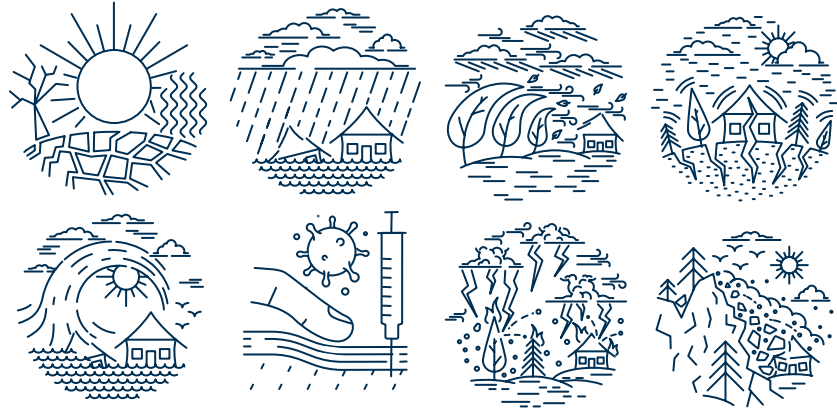
For detailed case studies on these transactions go to www.worldbank.org/disasterriskinsurance.



Disaster Risk Insurance Platform

The World Bank Treasury's Disaster Risk Insurance Platform provides:

1. **Advisory services** to build client's capacity to understand risk transfer products and options, and transfer risk to international markets.
2. **Execution services** to transfer client's risk to insurance and capital markets.



Under the Platform, the World Bank Treasury provides clients with advisory support and insurance solutions that offer financial protection against a wide range of shocks: climate (droughts, floods and tropical cyclone), geological (earthquake, tsunami), health (pandemic) and other types of insurable perils.

1 Advisory Services

Advisory services provided by World Bank Treasury to help governments build capacity for implementing disaster risk financing solutions. Services are often provided in collaboration with the Disaster Risk Financing and Insurance Program (Finance Competitiveness and Innovation Global Practice), Disaster Risk Management group (Social, Urban, Rural and Resilience Global Practice), and other Bank experts.

Advisory services are provided by both in-house experts and external service providers, such as catastrophe risk modeling agencies, legal counsel and structuring agents. Services can be financed through trust funds, Reimbursable Advisory Service (RAS), lending operations, or the government's own funds among other sources.

World Bank Treasury helps clients understand different risk transfer options and engage with relevant counterparties:

- **Training on risk transfer options** including traditional insurance, derivatives, and catastrophe bonds.
- **Evaluating risk transfer options** relative to a client's limitations or preference from a legal, regulatory or budget perspective.
- **Procuring catastrophe risk modeling services** to develop amongst others a (i) credible and transparent view of the underlying risk, (ii) sample risk transfer structures, and (iii) evaluation of the costs of risk transfer products.
- **Procuring external service providers** to support structuring of risk transfer execution.
- **Preparing and supporting clients with the key decisions** regarding the legal, technical and financial requirements of a transaction.

2 Execution Services

The World Bank Treasury provides market-based insurance solutions to clients. It provides clients with liquidity after a pre-defined disaster event without increasing a client's debt. A client's only counterparty is the World Bank, which stands between clients and the markets. Any credit risk from market counterparties is retained and managed by the World Bank.

The World Bank enters into an insurance or derivative agreement with clients, providing financial protection that fits within their legal and regulatory framework. The agreement guarantees clients a pay-out upon the occurrence of a pre-defined event. In exchange, clients agree to make insurance premium payments to the World Bank.

The World Bank simultaneously transfers clients' risk to insurance and capital markets through reinsurance, derivative or catastrophe bond solutions, providing efficient and cost-effective coverage to clients. The World Bank agrees to make premium payments to the insurance or capital markets in line with the insurance premium payments under the client's contract. Upon the occurrence of a pre-defined event, the World Bank receives payouts from market counterparties in line with those due to the client under the client's contract.

The World Bank Treasury handles, in consultation with the client, the selection, structuring, and all documentation issues with the markets. For catastrophe bonds, the World Bank Treasury uses its **Capital at Risk program** to issue bonds sponsored by clients, without impacting the client's own debt levels, and eliminating the need to set up a special purpose vehicle (SPV).

Advantages of Using the World Bank's Platform

- **Customized solution** as the platform is highly adaptable to the needs of each client.
- **Responsive to market conditions** and able to reach a wide range of investors to get competitive pricing while reducing legal, modeling, brokerage and issuance costs.
- **Quality and robustness** in legal documentation through the services of specialized and experienced legal counsel.
- **High levels of demand and competitive pricing:** strong track record of leveraging market presence, reputation, and structuring expertise, as well as brokers and lead managers, to execute very successful and innovative transactions in an open and transparent manner.
- **Enhanced counterparty credit risk protection:** while the underlying risk is fully passed to the market, the counterparty credit risk is retained and managed by the World Bank such that clients directly face the World Bank availing of insurance cover from a AAA rated counterparty.
- **Stream-lined and cost-efficient** catastrophe bond issuance process that eliminates the complexity, time and costs of setting up and managing a special purpose vehicle (SPV) (typically set up in offshore jurisdictions).
- **Facilitates joint issuance by countries/entities:** collaboration offers benefits and savings on the transaction's fixed costs and greater volume can help in negotiations for better premium pricing.



Why Choose the World Bank Treasury for Disaster Risk Insurance?

Leveraging its 70+ years of experience in the international markets, the World Bank has executed highly successful risk transfer transactions for clients.



1 PREPARATION & COORDINATION

- Delivery of customized advisory services to prepare and support clients with key decisions.
- Coordination of all service providers, supervision of all activities, monitoring of budget and pricing.

2 STRUCTURING & EXECUTION

- Competitive selection by the World Bank of all service providers required including risk modelling firms, legal teams, brokers, structuring agents, bookrunner agents, escrow agents, and other necessary services.
- When executing in insurance or derivative format, the selection and allocation of coverage to market counterparties and the determination of price follows a competitive and transparent process.
- When issuing catastrophe bonds, the coverage to investors is allocated through a transparent book-building process which ensures competitive pricing.

3 OPERATION

- Assisting clients throughout the life of a transaction, including monitoring events, issuing notices and other communication to investors and insurers.
- In the case of a payout, the Bank assures full, timely payment to clients, regardless of delays or default/nonpayment from the market.



In focus: *catastrophe (CAT) bond*

What are catastrophe bonds?

Catastrophe bonds allow entities exposed to natural disaster risk, to transfer a portion of that risk to bond investors. Catastrophe bonds work in a similar manner to insurance, paying out when a disaster event meets certain pre-defined criteria (e.g., a specified earthquake magnitude).

In a typical catastrophe bond structure, the entity exposed to the risk (known as the “sponsor”) enters into an insurance contract with a 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 that money is 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.

World Bank issued catastrophe bonds do not require an SPV. Instead, the sponsor (or World Bank client) enters into an insurance or derivative contract with the World Bank. The World Bank issues the bonds to investors, invests the proceeds, and manages payments to the sponsor and investors.

What is the main difference between catastrophe bonds and insurance?

Catastrophe bonds allow clients to access a much larger pool of capital (i.e., the trillions of dollars held by bond investors), and in general, longer coverage periods than conventional insurance.

Catastrophe bonds are fully funded transactions (i.e., investors put up all their money upfront by purchasing the bonds) and therefore there is no risk to the sponsor of default by the investors. In contrast, insurance products involve no upfront payments by the insurer. Rather, the insurer only makes payments if and when a triggering event occurs. Therefore, the client is exposed to the potential default of the insurance provider*.

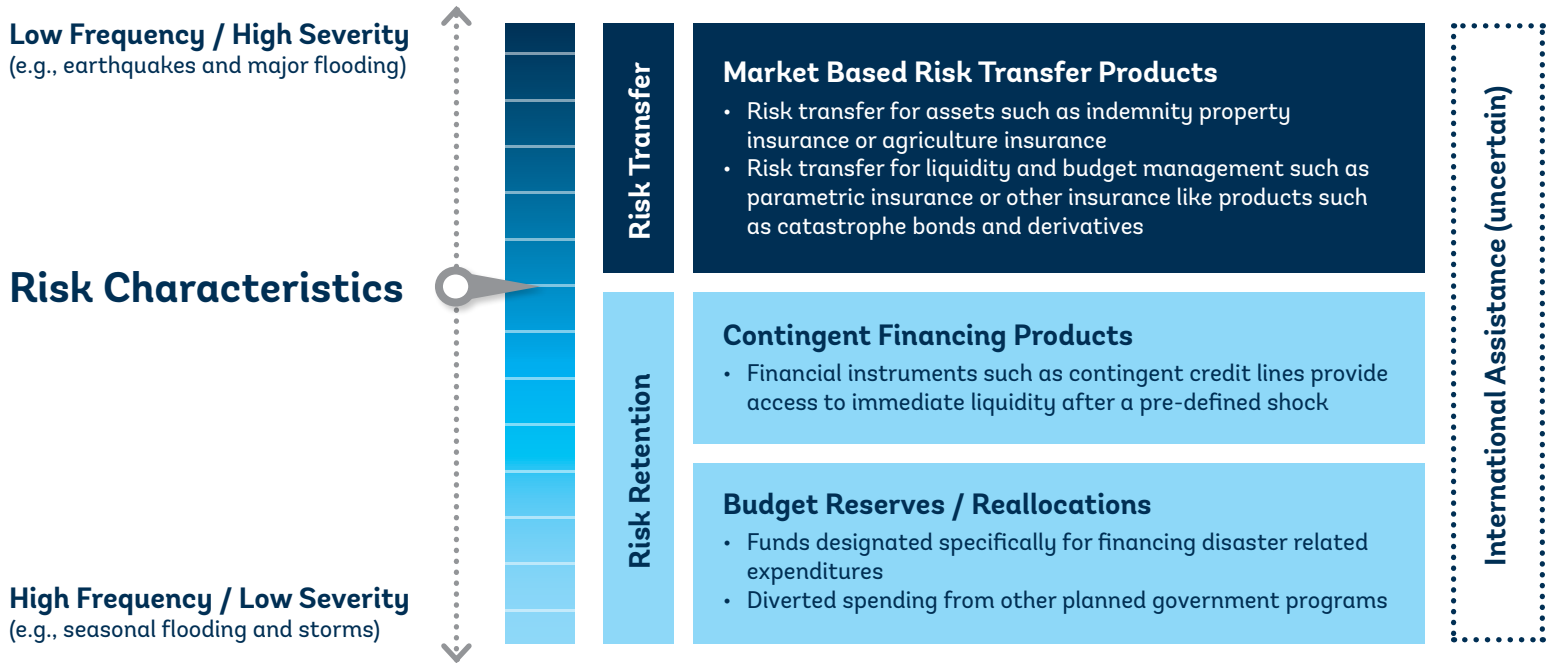
What factors impact the choice of financial solution?

- **Term:** the required length of cover (e.g., one year or three years)
- **Timing:** the time required to design and execute a transaction
- **Market and legal requirements:** information, models, procedures, documentation required for market-based transactions
- **Market appetite:** attractiveness of the transaction and insurance or capital market demand
- **Costs and transaction size:** the expected price for transferring the risk to the market and the transaction expenses
- **Counterparty risk appetite:** credit risk from the transaction counterparties*

* For insurance provided by the World Bank, clients face the World Bank only and have no exposure to market counterparties. In non-World Bank transactions, the counterparty is the provider of the insurance.

Disaster Risk Insurance as Part of a Broader Disaster Risk Financing Strategy

A range of financial products can be used to address the financial risks of natural disasters and the optimum mix of approaches depends on the types of risks faced by a client and the frequency and severity of disaster events.



World Bank Resources on Disaster Risk Financing



Global Facility for Disaster Reduction and Recovery (GFDRR) can provide grant financing for technical studies and knowledge solutions that help clients define and implement a disaster risk management framework.



Disaster Risk Management (DRM) Urban, Rural, and Resilience global practice (GPURL) assists city and national clients in collaboration with sector specialists to assess and manage disaster risk, and to define and implement disaster risk management programs and policies.



The Disaster Risk Financing and Insurance Program (DRFIP) in the Finance, Competitiveness and Innovations global practice provides clients with analytical, advisory and financial services to develop and implement climate and disaster risk finance strategies as well as design, structuring and placement of disaster risk financing and insurance instruments.



Treasury (TRE) leads the dialogue with clients and international markets on the World Bank's disaster risk insurance products, and structures and executes insurance, derivative and catastrophe bond transactions for clients.

Expertise on disaster risk financing is shared across the institution via strong partnerships and close collaboration to provide clients with **one World Bank Group solution** against natural disasters.

The **Global Risk Financing Facility (GRiF)**, jointly managed by GFDRR and DRFIP, can provide grants and technical expertise to help countries pilot new and scale up existing disaster risk financing and insurance policies and instruments against climate shocks, disasters, and crises. Grants can co-finance World Bank investments to: (i) establish risk financing mechanisms; (ii) share the cost of risk financing mechanisms (e.g., co-payment of insurance premiums); and (iii) provide technical and financial resources to support the implementation of financial instruments.



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