CASE STUDY

Super-sized Catastrophe Bond for Earthquake Risk in Latin America

OVERVIEW

The World Bank helped the countries of the Pacific Alliance—Colombia, Chile, Mexico, and Peru—insure themselves against earthquake risk.

Understanding the significant financial implications that earthquakes can have for a country's economy, the finance ministers of the four countries set the ambitious goal of working together to address this risk, increase countries' resilience to natural disasters, and expand their disaster financing options—all without increasing sovereign debt.

Once the Pacific Alliance countries decided to transfer catastrophe risk to the capital markets, they requested support from the World Bank, the leading provider of natural disaster risk insurance for emerging and developing countries. The World Bank delivered end-to-end support for the complex process, offering specialized technical assistance and facilitating the execution of capital market transactions.


Earthquake recovery. Photo credit: Thinkstock.

Background

The Pacific Alliance is a regional initiative that promotes the economic integration of Chile, Colombia, Mexico, and Peru in order to drive members' mutual growth and development. The four countries are situated along the western part of the seismically active Pacific Rim and are prone to earthquakes, along with other natural disasters.

By incorporating disaster risk management into development planning, the Pacific Alliance countries aim to build the foundations that will support long-term recovery and sustainable development.

Financial and Project Objectives

In 2016, the Pacific Alliance countries decided to explore the use of catastrophe bonds (cat bonds) to achieve several shared financial objectives:

- Expand financing options for earthquake risk beyond the scope of budget funds and without increasing sovereign debt
- Gain access to fast-disbursing and cost-effective financing from the international capital markets
- Build governments' technical capacity to make use of market-based risk transfer instruments

Financial Solution

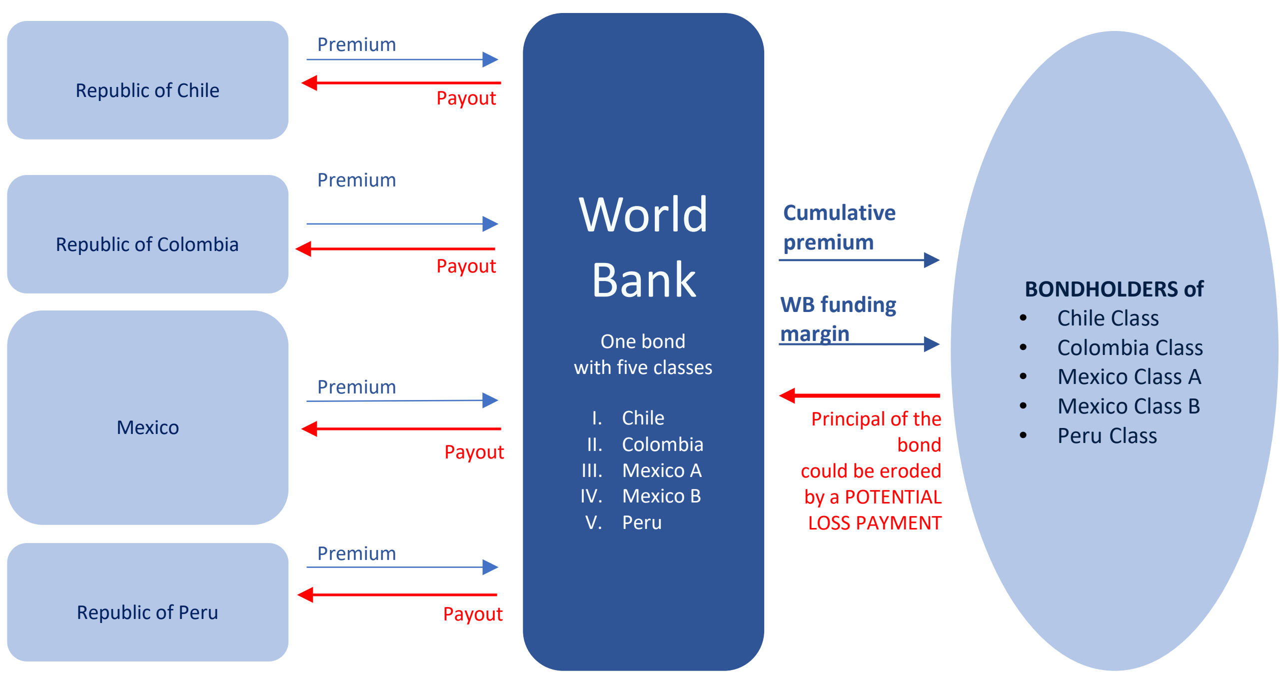
The Pacific Alliance countries requested support from the World Bank in transferring earthquake risk to the capital markets through a cat bond. In February 2018, the World Bank issued cat bonds that provided Chile, Colombia, Mexico, and Peru a total of US$1.36 billion in earthquake cover. Because the bonds are issued by the World Bank, they do not contribute to countries' debt.

Transaction Structure

The World Bank worked with each government to accommodate its legal and regulatory framework and to customize documentation of agreements between the country and the World Bank. Five classes were issued, resulting in more competitive pricing and greater investor appetite. The structure of the transaction is shown below.

Transaction Summary	
Nominal Amount	US$1.36 billion
Classes	Chile—US$500 million Colombia—US$400 million Mexico (a)—US$160 million Mexico (b)—US$100 million Peru—US$200 million
Tenor	3 years for Chile, Colombia, and Peru; 2 years for Mexico
Risk Premium*	Chile—2.50 percent Colombia—3.00 percent Mexico (a)—2.50 percent Mexico (b)—8.25 percent Peru—6.00 percent

*The risk premium is linked to coverage parameters that each country defined based on their individual priorities.



For information, contact:
Miguel Navarro-Martin, Manager, Banking Products
mnavarromartin@worldbank.org, +1 (202) 458 4722

World Bank's Role

The World Bank provided the Pacific Alliance countries with end-to-end support, from specialized technical assistance to the execution of the capital market transactions.

Technical assistance. The World Bank helped first-time cat bond issuers Chile, Colombia, and Peru prepare for the key decision related to the legal, technical, and financial requirements of the transaction. The preparatory work included

- Mobilization and supervision of the catastrophe risk modeling firm that developed the risk profiles and the preliminary trigger design options
- Analytical work, such as analysis of financing gaps from existing sources of risk financing and evaluation of risk transfer options
- Review of legal documentation options between the World Bank and the individual country to accommodate different legal and regulatory environments

Execution of capital market transactions. The World Bank was involved in the key steps for this process:

- Managed procurement of all transaction agents (structuring, legal, modeling)
- Worked with individual governments to customize the World Bank–country documentation in order to accommodate individual legal and regulatory frameworks
- Standardized the documentation to reduce legal and modeling costs
- Solicited a wide network of global investors, which led to more competitive pricing

Outcome

The 2018 Pacific Alliance cat bond was the first simultaneous issuance for four sovereign entities, as well as the largest earthquake cat bond ever issued. Offering a combined US$1.36 billion in earthquake cover, it marks the World Bank's largest cat bond transaction to date and brings to nearly US$4 billion the total amount of risk transactions facilitated by the World Bank. The transaction exemplifies the World Bank's ability to help member countries access insurance through the capital markets and has established the World Bank as a leader in this role.

The cat bond attracted more than 45 investors globally, ranging from dedicated insurance-linked securities funds to pension funds to reinsurance companies, and it resulted in approximately US$2.5 billion in investor orders. The high demand resulted in lower premium rates.

Providing end-to-end support for natural disaster risk insurance is one of the many ways that the World Bank helps member countries build resilience against economic and natural disaster risks. IBRD's AAA credit rating, market presence, and convening power allow the World Bank Treasury Financial Products team to develop innovative products that help clients maximize financing and mitigate risk.

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Further Examples of Catastrophe Risk Coverage around the World

Mexico issued a multi-peril cat bond using the World Bank's MultiCat Program, which helps sovereign and subsovereign entities pool multiple perils in multiple regions in order to reduce insurance costs. When Mexico was hit by Hurricane Patricia, the second-most intense tropical cyclone on record worldwide, it received a US$50 million payout. Mexico has additional protection against earthquakes and named storms in the form of a World Bank–issued US$360 million cat bond; following an 8.2 magnitude earthquake in southern Mexico in September 2017, the country received a US$150 million payout.

In Uruguay, the World Bank executed a US$450 million weather and oil price insurance transaction for Uruguay's state-owned electricity company UTE. This transaction insured the energy company for 18 months against drought and high oil prices.

The World Bank helped Pacific Island countries develop their disaster risk insurance policies, not only providing technical assistance but also acting as an intermediary to place the country-specific catastrophe risk policies on the international reinsurance market as a single, well-diversified portfolio. Cyclone Ian (2014) in Tonga resulted in a payout of US$1.27 million, and Cyclone Pam (2015) in Vanuatu led to a payout of US$1.9 million.

In the Caribbean, the World Bank provided cat swap coverage from 2007 to 2014; in 2014, it issued a three-year cat bond linked to hurricane and earthquake risk in the Caribbean Catastrophe Risk Insurance Facility (CCRIF) member countries. Throughout the life of the coverage, 10 member governments received 21 payouts totaling approximately US$68 million.

What Is a Cat Bond?

- A cat bond is a financial instrument that provides insurance against the losses caused by natural disasters.
- A cat bond transfers natural disaster risks to the capital markets and thus helps governments manage fiscal volatility, stabilizes budgets, and eases the need to build up large budget reserves.
- The bond works in a similar manner to insurance, paying out when a disaster event meets a certain threshold (e.g., a specified earthquake magnitude). Because it does not depend on a loss assessment, which takes time to carry out, a cat bond provides governments with rapid post-disaster liquidity and can thus support emergency response and maintain essential services until additional resources become available.
- Cat bonds should be considered important complements to emergency funds, budget reserves, contingent credit lines, and other financial instruments governments use in the aftermath of natural disasters.

Key Benefits of World Bank–Issued Cat Bonds

- Offer rapid disbursement after an event
- Offer financing without creating new debt
- World Bank platform offers flexibility in structuring, procedural, and documentation needs
- World Bank is responsible for managing documentation with markets
- Availability of end-to-end support from technical assistance to market execution

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