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CASE STUDY

The Philippines: Transferring the Cost of Severe Natural Disasters to Capital Markets

OVERVIEW

The World Bank Treasury issued a catastrophe bond (cat bond) to insure the Philippines against earthquakes and tropical cyclones for three years.

Background

The Philippines is one of the most disaster-prone countries in the world, with high exposure to tropical cyclones, earthquakes, and other natural hazards. Typhoon Yolanda (also known as Typhoon Haiyan) resulted in the loss of 6,300 lives and an estimated US$12.9 billion in damages (equivalent to about 4.7% of the country's GDP) in 2013.

The World Bank has been working with the Philippines for the last nine years to strengthen its resilience to natural disasters (see figure 3). In 2017 and 2018, the Philippines obtained catastrophe risk insurance through the World Bank that provided coverage against severe earthquakes to national government agencies and tropical cyclones to 25 individual provinces. Building on the lessons learned from the insurance transaction, the Philippines requested support from the World Bank for the issuance of a cat bond.

Financial and Project Objectives

- Protect against losses from earthquakes and tropical cyclones, including excess rainfall without increasing sovereign debt
- Gain access to fast-disbursing and cost-effective insurance
- Reduce uncertainty of cost over time

Evacuation center. Philippines. Photo: Jerome Ascano / World Bank

Financial Solution

In November 2019, the World Bank issued to capital market investors two tranches of cat bonds that provide the Philippines with insurance coverage of a maximum of US$225 million (US$75 million for earthquakes and US$150 million for tropical cyclones) for three years.

The type of events that will trigger a payout are pre-defined based on the requirements of the Philippines. If and when a qualifying event occurs, the Philippines will issue a notice to an independent calculation agent to determine the insurance payouts.

The World Bank will transfer the payouts to the Philippines as soon as a calculation report is available, within approximately one month for earthquake and five months for tropical cyclone events, without the need to assess real losses incurred by the country.

The Philippines pays an insurance premium for the coverage, which the World Bank transfers to the cat bond investors. The premium is fixed during the life of the bond, removing the uncertainty of the cost.

Transaction Structure and Summary

The World Bank issued the cat bonds under its Capital-at-Risk Program and collected the proceeds from the investors. The World Bank has a swap agreement with the Philippines, which allows the Bank to transfer the insurance premium from the Philippines to the investor and in case of an eligible event, transfer the payout proceeds to the Philippines.

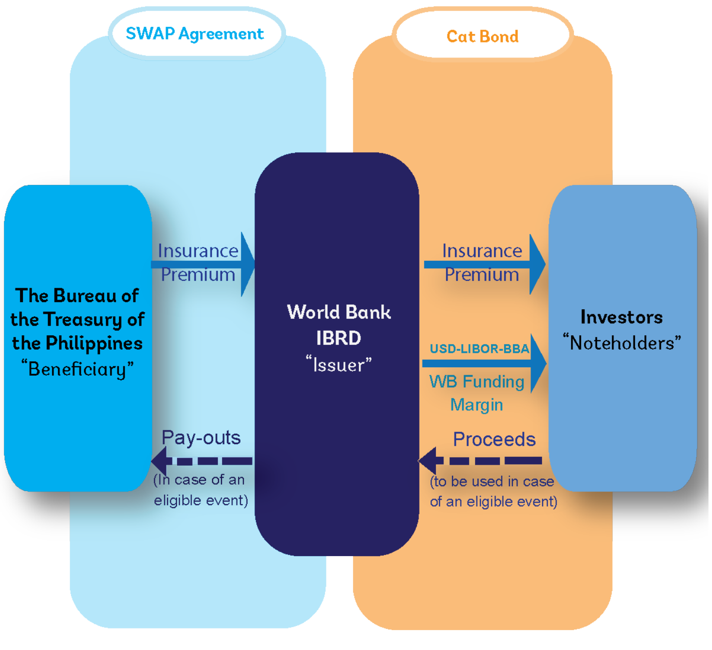

Figure 1

Currency	US$
Notional	Class A: US$ 75 million Class B: US$ 150 million
Class	Class A: Earthquake Class B: Tropical Cyclone & Excess Rainfall
Tenor (Term)	3 years
Insurance Premium	Earthquake: 5.50% Tropical Cyclone: 5.65%
Expected Loss	Earthquake: 3.00% Tropical Cyclone: 3.00%
Attachment Probability (i.e., probability of at least a minimum pay-out)	Earthquake: 5.30% Tropical Cyclone: 5.30%
Geographic Coverage	National
Trigger Type	Modeled Loss
Payout Structure	Stepped Payout Structure of 0%, 35%, 70% and 100% based on modeled loss
Maximum Payout	Earthquake: US$ 75 million Tropical Cyclone: US$ 150 million

Figure 2

Outcome

The cat bond attracted 24 investors globally, ranging from asset management companies, dedicated cat bond funds, pension funds and insurance and reinsurance companies. It is the first cat bond sponsored by an Asian sovereign and listed on an Asian exchange. It is also the first World Bank bond to be listed on the Singapore Exchange. This transaction exemplifies the World Bank's ability to help member countries access insurance through the capital markets.

The cat bond is the latest step in the World Bank's programmatic, multi-year approach to support disaster risk management in the Philippines:

*The Development Policy Loan with a Catastrophe Deferred Drawdown Option (CAT DDO) is the World Bank's contingent financing product for disasters.

Figure 3

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