CASE STUDY

Helping Small Island States Cope in the Aftermath of Natural Disasters

OVERVIEW

Marshall Islands, Tonga, Solomon Islands, Samoa, and Vanuatu are among the top 30 countries most vulnerable to natural disasters. Access to liquidity in the aftermath of a disaster is essential for these governments to respond to emergencies. A new pilot catastrophe risk insurance program provides the governments with immediate funding if a major natural disaster occurs. Pooling risks helped these countries achieve better terms with regards to the cost of the premium and the speed with which they will receive payment in the event of a natural disaster.

Background

Every year on average, natural disasters cause damages worth an estimated US$284 million in the Pacific Island Countries (PICs). Vanuatu and Tonga, for example, experience annual losses estimated at 6.6 and 4.4 percent of their national GDP, respectively. Over any 50 year period, there is a 50 percent chance that the region will suffer losses in excess of US$1.3 billion, or 8 percent of the regional GDP.

Financing Objectives

In the aftermath of a natural disaster, governments need cash immediately to start recovery efforts while maintaining essential public services. Traditionally, Pacific Island countries have relied on donor assistance to meet such needs. But the disbursement of donor assistance is more suitable for medium-term reconstruction rather than immediate liquidity. Furthermore, it has been difficult for countries to access catastrophe insurance individually because coverage levels are small. As a result, governments of these countries often face serious liquidity shortages after a disaster, which has reduced their capacity to respond quickly to emergencies.

Financial Solution

Working together since 2007, the Secretariat of the Pacific Community, the Government of Japan, the Asian Development Bank, the Global Facility for

Disaster Reduction and Recovery, and the World Bank are helping the Pacific Island countries increase financial resilience to natural and climate-related disasters through the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) and the Pacific Disaster Risk Financing and Insurance Program (PDRFI). A key component of the program is a catastrophe risk insurance pilot operation that is designed to cover a portion of each participating country's fiscal exposure by providing the country with immediate liquidity in the event of a major natural catastrophe.

Marshall Islands, Tonga, Solomon Islands, Samoa, and Vanuatu are participating in the 2012-2014 pilot program. The World Bank provided technical assistance to the countries to help develop the disaster risk insurance policies, acted as an intermediary between the Pacific Island Countries and four reinsurance companies, and placed the country-specific catastrophe risk policies on the international reinsurance market as a single, well diversified portfolio. The Government of Japan financed the premium.

The Program provides an aggregate cover of a maximum of US$45 million to the participating countries. Payouts will be triggered by the impact of an earthquake, tropical cyclone or tsunami (estimated by an independent model) after the occurrence of any such event. The affected country or countries will receive funds within two to three weeks.

Outcome

This is the first-ever capital markets insurance transaction covering tsunamis. Consolidating the individual country risks and presenting a diversified pool of risks to the market helped the countries achieve better terms with regards to the cost of the premium and the speed with which the affected countries will receive payment in the event of a natural disaster. In facing the World Bank, rather than the private sector, the countries involved reduced counterparty credit risk. The pilot has also helped build capacity in the countries to eventually enter into financial contracts for catastrophe risk transfer on their own.

How does the Pacific Catastrophe Risk Insurance Pilot work?

1. Each government signs a derivative contract with the World Bank based on the ISDA framework.
2. Premiums are paid periodically to the World Bank.
3. The World Bank enters into a mirroring agreement with market counterparties, paying periodic premiums.
4. In case of a natural disaster, the claim can be initiated in two ways: a) the affected government sends a notification to the World Bank; b) the Bank by itself notifies/sends a request to the calculation agent to produce a calculation report.
5. The calculation agent delivers a calculation report to all actors, specifying whether the event has triggered a payout and the amount of the payout, which is based on the severity of the event.
6. The market counterparties deliver the payout to the World Bank based on the calculation report.
7. The World Bank delivers the payout to the affected government.

See Figure 1 for more details.

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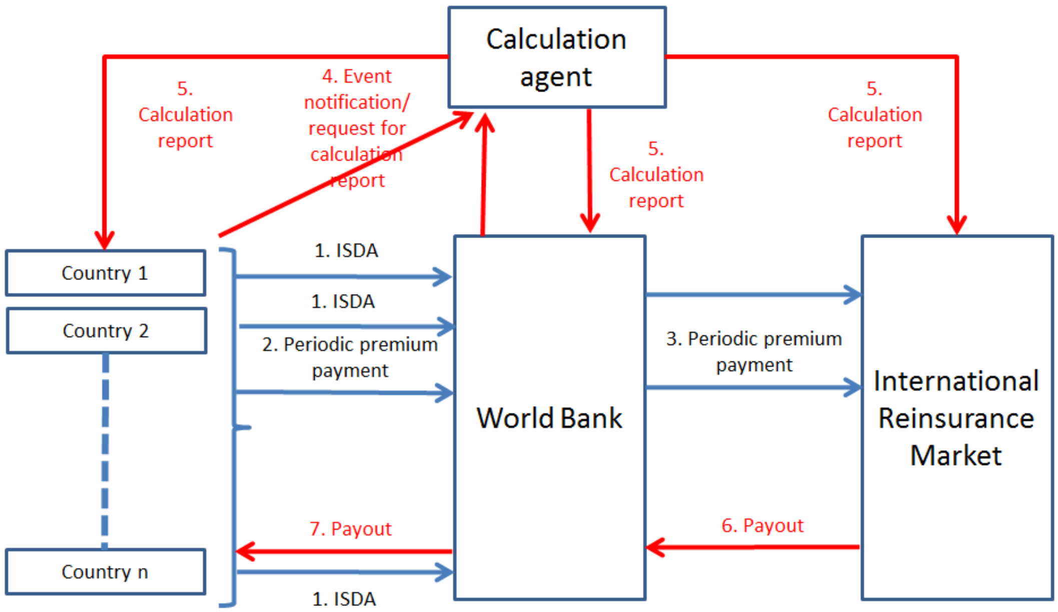
Front: Tom Perry / World Bank

Figure 1: Pacific Catastrophe Risk Insurance Pilot



➔ Red arrows are triggered when at least one of the governments is impacted by a natural disaster.

Main Terms: 2012-2014 Pacific Catastrophe Risk Insurance Pilot	
Type of Transaction	Catastrophe swap
Effective Date	January 17, 2013
Termination Date of 1st Year Pilot	Oct. 31, 2013 2nd year pilot will run from Nov. 1 -Oct. 31, 2014
Settlement Index	Modeled emergency loss for each country
Perils	Earthquake (including ground-shaking and tsunami) and tropical cyclone (including wind, sea surge and rainfall)

The World Bank can intermediate these types of transactions for both IDA- and IBRD-eligible countries, as well as sub-nationals. Each transaction can be customized to meet client needs.

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