Regional Risk Pooling Mechanisms for Managing Catastrophic Risks

Submitted by: World Bank
REGIONAL RISK POOLING MECHANISMS FOR MANAGING CATASTROPHIC RISKS

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Financial protection against climate risk matters

- The financial impact from disaster and climate risks are rapidly increasing.

- The World Bank Group and GFDRR are partnering with over 40 countries on Disaster Risk Finance initiatives to help governments, businesses, and households manage the financial impacts of disaster and climate risks.
Financial protection is a key component of DRM

Pillar 1: Risk Identification
- Risk assessment and risk communication

Pillar 2: Risk Reduction
- Structural and non-structural measures; infrastructure, land-use planning, regulation

Pillar 3: Preparedness
- Early warning systems; support of emergency measures; contingency planning

Pillar 4: Financial Protection
- Assessing and reducing contingent liabilities; budget appropriation and execution; ex-ante and ex-post financing instruments

Pillar 5: Resilient Recovery
- Resilient recovery and reconstruction policies; ex-ante design of institutional structures
Multi-country risk pooling

Individual country risk

Pooled risk

Individual country risk
What are the potential benefits of risk pooling?

- **Technical Insurance Premium**
  - Before risk pooling
  - Weak risk information

- **Technical Insurance Premium**
  - After risk pooling
  - Improved risk information

1. Lower reinsurance costs due to better structured and diversified portfolio
2. Joint reserves to retain the first aggregate loss

Economics of scale in operating costs (e.g., fixed costs)

Underlying risk is unchanged
Disaster Risk Finance around the world

- **Caribbean Catastrophe Risk Insurance Facility**
- **African Union, African Risk Capacity**
- **Ethiopia**: Exploring sovereign EQ risk transfer
- **Indian Ocean Islands**: Exploring regional riskpooling initiative
- **Philippines**: DRFI Strategy, Climate and Disaster Resilience Fund, sovereign risk transfer
- **Mexico**: FONDEN fund, catastrophe bond
- **Colombia**: DRFT strategy, insurance of public assets and concessions
- **Malawi**: Drought risk management
- **Uruguay**: Insurance for the impact of drought/oil prices on hydropower
- **Kenya**: Agricultural insurance
- **Seychelles**: Contingent credit (Cat DDO)
- **Pacific Catastrophe Risk Assessment and Financing Initiative**

Caribbean Catastrophe Risk Insurance Facility

Development Challenge

• Small economies are highly exposed to natural disasters and suffer large shocks as a % of GDP

DRF Solution

• CCRIF was the world’s first multi-country risk pool, offering unique hurricane and earthquake coverage to 16 participating governments in the Caribbean Region.

• Rapid payouts linked to impact of a hurricane or earthquake. CCRIF also introduced an excess rainfall product in 2014.

• 12 payouts to date totaling $34m to 8 member governments

• CCRIF has recently been expanded to include central American countries, with Nicaragua this first new member
Development Challenge

• Small economies are highly exposed to natural disasters and suffer large shocks as a % of GDP

DRF Solution

• Pacific Catastrophe Risk Insurance Pilot (2012) pooled risk approach provides coverage for up to a maximum of $45m
• Rapid payouts linked to impact of a tropical cyclone, tsunami or earthquake
• Country-specific catastrophe risk policies taken to the market as single, well-diversified portfolio
• 2 payouts to date: Tonga received $1.27m following Cyclone Ian (2014) and Vanuatu received $1.97m following Cyclone Pam (2015)
Philippines LGU pool

Development Challenge

- Local governments in the Philippines have limited financing for funding post-disaster relief and recovery

DRF Solution

- The World Bank is helping to create a parametric insurance pool for provinces within the Philippines
- Rapid payouts linked to impact of a typhoon or earthquake
- Facilitates access to international reinsurance markets
- Expected launch 1 July 2015 with 5 – 10 provinces, insured through the Government Service Insurance System (GSIS)

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Reinsurance

(Purchased on international financial markets)

Growth

Reserves

Insurance Premium

Insurance Payout

Payout
Data collection is a prerequisite for a risk pool

- Collection and management of data is a significant challenge that must be overcome to establish a risk pool.

- This may be easier if jointly managed between pool members.

Pacific Risk Information System
http://pacris.sopac.org
BUT Catastrophe risk pooling is just one step towards financial resilience...

...Shifting from financial products to financial strategies
A risk layering approach to financial protection

Risk Transfer
- Risk transfer for assets (e.g., indemnity insurance for public and private property)
- Risk transfer for budget management (e.g., parametric insurance, cat swap)

Post-disaster credit

Contingent credit (Cat DDO)

Fund for Disaster Risk Management/Budget reallocation
Lessons learned

• Risk pooling can be effective to achieve more cost-effective risk transfer, but risk pools are not always possible or appropriate.

• There are many prerequisites for establishing risk pools: countries or provinces have to work together for mutual gain and the development of data is key.

• Risk pools work well when members have clear mutual interests.

• Risk pooling doesn’t necessarily need to be at the sovereign level, it can be useful for provincial or local governments managing their liability to disasters.

• Risk transfer may form part of a broader strategy for protection against disasters, but it is not the only component.
The way forward

• Shift from financial products to comprehensive DRFI strategies

• Standardization of data and policy terms across different countries is key when considering the establishment of a risk pool

• What you can measure, you can manage. Data collection is key in understanding the risks faced

• In addition to providing budget support, risk pools can also be relevant for insurance of public assets

• Establishing a platform which counties / provinces can progressively join is critical to the success of a risk pool
Further information

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Mexico FONDEN program

Development Challenge

- Mexico is highly exposed to earthquake and hurricane risks
- Cost of recovery and reconstruction can be high and funds are needed quickly after a catastrophic event
- Need for accountable and predictable post disaster funding for reconstruction

DRF Solution

- A sovereign fund to finance reconstruction of public infrastructure
- Annual budget allocation, anchors DRF strategy
- Rules based, disciplined institutional framework
Panama DRF program

Development Challenge

• Following large disaster losses Panama began to develop strategies to become more resilient and protect economic development.

DRF Solution

• In 2010 Panama put in place a $66 million contingent line of credit to provide immediate liquidity in case of a disaster.

• A dedicated unit was established within the Ministry of Economy and Finance to inform public policies on disaster risk management and engage relevant stakeholders.

• In 2014 Panama adopted a National Strategic Framework for Disaster Risk Financing and Insurance through an Executive Decree, becoming the first country in the world to adopt such a framework by law.