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# Survey of the field

Strategic Country Risk Management

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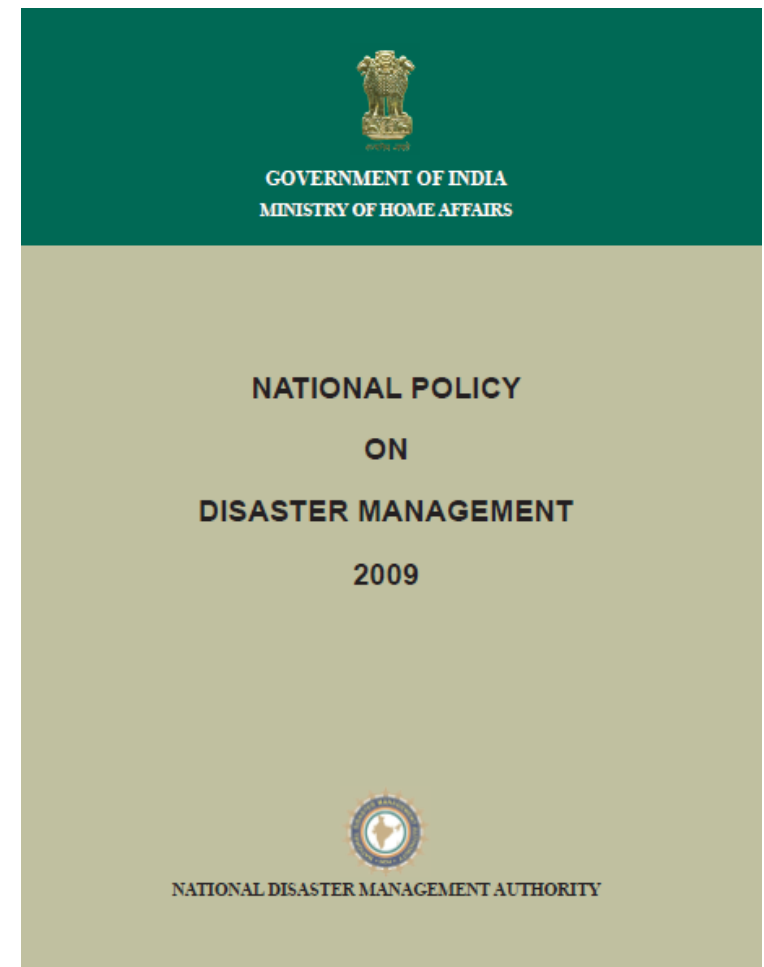
## Who get the bill?

- Low insurance penetration in emerging countries means that a large portion of the financial loss ends up with the government
- Governments have several options to manage the fiscal exposure arising from natural disasters, including:
  - Prevention and mitigation
  - Changes in legislations (incl. mandatory systems, incentives, subsidies)
  - Transfer of risk
- More and more governments use these options to manage their exposures before events occur (pre-event)
- As a side benefit, risk transfer sets a price tag for risk and with that an incentive to reduce risk

## India's policy on disaster management:

### Financial arrangements (section 4)

"Considering that the assistance provided by the Government for rescue, relief, rehabilitation and reconstruction needs cannot compensate for massive losses on account of disasters, **new financial tools such as catastrophe risk financing, risk insurance, catastrophe bonds, micro-finance and insurance etc., will be promoted** with innovative fiscal incentives to cover such losses of individuals, communities and the corporate sector."



# Case study Mexico: MultiCat - Funding for immediate relief efforts after disasters

## Solution features

- Insured peril: Earthquake and Hurricane
- Payments to be used for immediate emergency relief after disaster
- Parametric cat bond: USD 290 million
- Trigger type: Index
  - Earthquake: physical trigger (quake magnitude)
  - Hurricane: physical trigger (barometric pressure)
- Time horizon: October 2009 – October 2012
- 1st cat bond launched through the World Bank's new MultiCat facility and second cat bond for Mexico

## Involved parties

- Insured: Fund for Natural Disasters (FONDEN) of Mexico
- Arranger: World Bank Treasury
- Swiss Re: Co-lead manager and joint bookrunner

## Parametric covers

Parametric or index covers enable governments to transfer some of their natural catastrophe exposure to the international insurance and capital markets:

- Tailor-made approach to deal with the economic costs of disasters
- The received funds can be used by the government to provide relief to the affected population and/or to rebuild infrastructure and to protect its revenue gap and thus ensures budget certainty
- This protection pays out a pre-determined amount in case of a natural disaster exceeding certain thresholds (e.g. magnitude of earthquake or windspeed)
- Trigger mechanism can be defined as a function of population affected by disaster
- Claims are paid shortly after the event, once official parameters of the event (e.g. magnitude, windspeed) are available
- Unlike insurance/reinsurance, there is no need to evidence claims or prove losses
- Innovative instrument sends positive signal to the stakeholders of a specific country

# Case study Caribbean: Caribbean Catastrophe Risk Insurance Facility (CCRIF)

## Solution features

- The CCRIF offers parametric hurricane and earthquake insurance policies to 16 CARICOM governments
- The policies provide immediate liquidity to participating governments
- Member governments choose how much coverage they need up to an aggregate limit of USD 100 million
- The mechanism will be triggered by the intensity of the event (e.g. winds exceeding a certain speed).
- The facility responded to events and made payments:
  - Dominica & St. Lucia after earthquake (2007)
  - Turks & Caicos after Hurricane Ike (2008)
  - Haiti , Barbados, St. Lucia, Anguilla and St. Vincent (2010)

## Involved parties

- Reinsurers: Swiss Re and other overseas reinsurers
- Reinsurance program placed by Aon Benfield Ltd.
- Derivative placed by World Bank Treasury

## Case study United States: Alabama – First parametric cover for a government in an industrialized country

### **Solution features**

- Insured peril: Hurricane
- Payments to offset economic costs of hurricanes
- Parametric insurance
- Trigger type: Disaster occurring within a defined geographic area ("box") along coast ("cat-in-the-box")
  - Trigger based on wind speed of hurricane eye as it passes through pre-determined box
  - Payout in as little as two weeks
- Time horizon: July 2010 – July 2013
- 1st parametric catastrophe risk transfer for a government in an industrialized country

### **Involved parties**

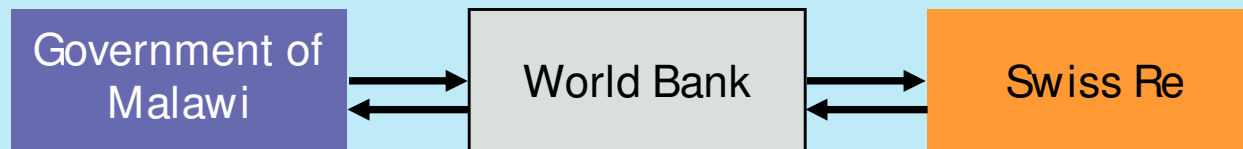
- Insured: State Insurance Fund of Alabama
- Swiss Re: Lead structurer and sole underwriter

# Case study Malawi: Weather derivative covering drought- related shortfalls in maize production

## Solution features

- Malawi suffers from recurring droughts
- Under the contract, the Government of Malawi will receive up to USD 5 million through the World Bank in case of extreme drought affecting maize production
- The contract is structured as an option on a rainfall index. If the maize production falls 10% below the historical average due to shortfalls in rainfall, the Government of Malawi will receive the payout

## Involved parties



- The UK Department of International Development (DfID) provided financial support to pay the initial premium

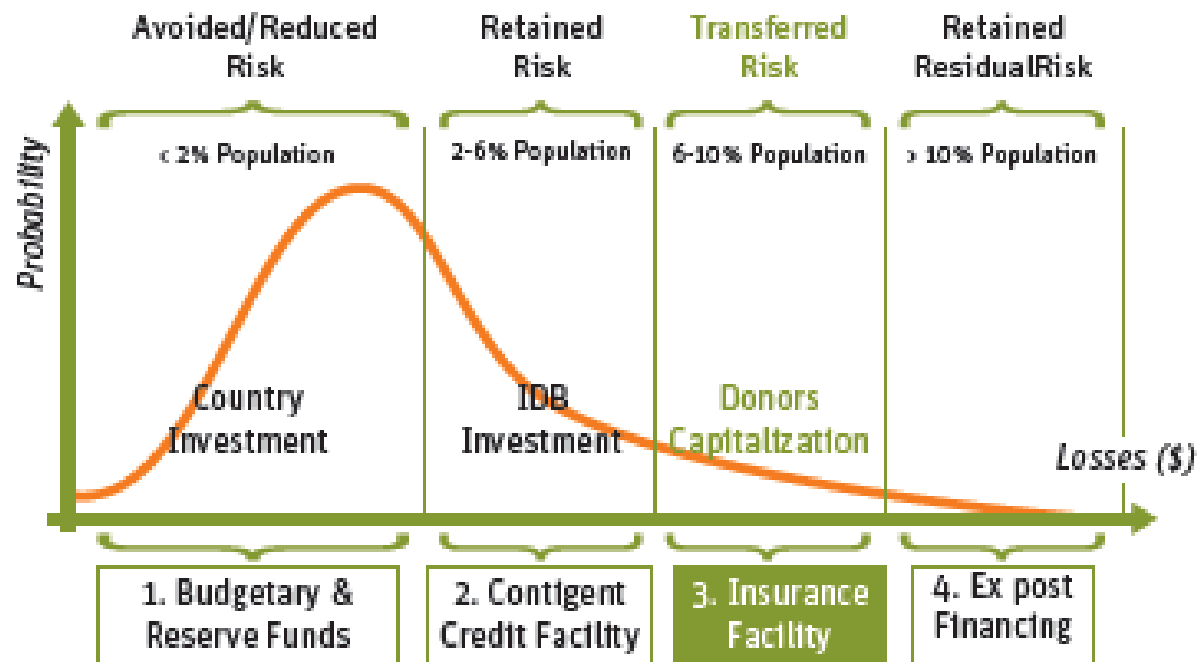


## Case study Central America: Regional Insurance Facility

- The Inter-American Development Bank (IDB) and Swiss Re have developed an integrated disaster risk management approach comprising the following four components:
  1. National Risk Evaluation
  2. Prevention and mitigation measures
  3. National and local institutional strengthening
  4. Risk retention and risk transfer financing mechanisms
  
- Key benefits for participating countries:
  - Mitigate the financial impact of natural disaster events
  - Strengthen growth stability in their economies by transferring the risk to the international insurance and capital markets
  - Obtain efficient financial coverage of extraordinary public expenditures during emergencies immediately after a catastrophic disaster

## Case study Central America: Regional Insurance Facility (continued)

- To develop a panoramic view on dealing with natural disasters, the IDB began by developing country financial strategies to improve the financial planning and management of natural disasters.
- In addition, a range of financial options to cover the initial phase after natural disasters are being offered. These options include the following instruments:





## Case study Turkey: Earthquake pool for residential dwellings

### Solution features

- Insured Peril: Earthquake
- Insured assets: Private residential dwellings
- Significantly increased penetration of earthquake coverage in Turkey
- Limit of policy coverage: TLY 140 000; Additional cover can be bought from private insurers.
- Inception: in 2000
- Funding: Compulsory premiums paid by homeowners

### Involved parties

- Insurance supplier: TCIP/ DASK, a legal public entity
- Operational manager: Eureko Sigorta
- Distributors: 30 local insurance companies and their agencies on behalf of TCIP/ DASK
- Reinsurers: Swiss Re and other overseas reinsurers



## Advantages of risk transfer solutions

- Efficient way to cope with the financial consequences of natural catastrophes
- Guaranteed access to required funds for recovery, up to agreed cover limits
- Speedy delivery, especially with innovative instruments such as parametric solutions
- Pre-determined premium allows for budgeting certainty, particularly in multi-year contracts
- No payback obligation (in contrast to loans)
- Reduction of a country's contingent liabilities to acceptable levels (positive implications on sovereign rating and currency)
- Limits the pressure to diversify own funds from other projects to affected areas

## Conclusions

- Damages from natural disasters are rising and put an increasing strain on societies
- Governments are increasingly managing risks in a pro-active and integrated way
- Innovative risk transfer instruments help to better absorb the financial consequences of natural disasters

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Thank you



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