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Financing catastrophe risk in emerging and developing countries: Challenges and Perspectives

Reinhard Mechler (IIASA)

Powerpoint presentation

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For further information on this conference, please contact Cécile Vignial, Financial Markets Division (Cecile.Vignial@oecd.org), or Yosuke Kawakami or Morven Alexander, Outreach Unit for Financial Sector Reform (Yosuke.Kawakami@oecd.org or Morven.Alexander@oecd.org)
Financing catastrophe risk in emerging and developing countries: Challenges and Perspectives

Reinhard Mechler
IIASA

OECD Conference on Catastrophic Risks and Insurance
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Loss sharing and risk financing

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Loss and risk financing in developing and emerging countries

**Insurer of last resort**

- **Public sector**
  - Infrastructure, buildings etc.
- **Private Sector**
  - Housing, machinery etc.

**Reinsurer of last resort**

- **MFIs**
  - Lending Portfolio

**Support**

- **Contingent credit**

**Risk financing instruments**

**PPP** support

**Kinship arrangements**
Some criteria for evaluation

• Costs
  - Transaction costs
  - „Premium“
• Speed of payouts
• Basis risk
• Incentives
Private sector:
Weather derivatives in India

- Existing public crop insurance program for drought and flooding highly deficitary: premium income 1/6 of payouts:
- Substantial time lags associated with indemnity payments
- Index-based weather derivatives introduced
- Low transaction costs: rural credit channels used
Private sector:
Weather derivatives in India

• Farmers aware of associated basis risk
• Rate on-line around 15 percent
• But: farmers appreciate quick payout of rainfall policies: 2 weeks after trigger
• Incentives for mitigation provided
Public infrastructure losses

- Can be a significant proportion of losses
- Without timely reconstruction can cause long-term reductions in economic growth
- Need improved financial planning for assuring post-event funds

Source: EQE 2000
Public sector financing issues

Financing gaps after Gujarat earthquake

Financing gaps post-disaster to be expected in some Latin American countries
Public sector risk financing

Upper layer: government

Middle layer(s): risk financing

Lower layer: Self-retained

(Re-)Insurance
Reserve Funds
Contingent credit
Cat bonds

Government buildings and other assets
Public hospitals and schools
Critical infrastructure: “lifelines”: electricity, water, sewage
Cat bond: Mexico

- Resources proposed for funding tend to be stripped in Congress
- Fonden resources have been reduced since 2001, spending for natural disasters is highly unpredictable
- Cat bond would provide financial security
- Avoidance of reinsurance cycle
- Model for other countries in Latin America?
Contingent credit: Colombia

- Difficult situation regarding the public financing of disaster losses: in past losses of up to 3 billion USD
- At the same time, fiscal policy heavily constrained by high external debt levels and debt service payments.
- Currently discussed: Contingent credit facility of a total amount of 150 million USD by MFI
- Benefit: quick availability of funds, but debt has to be paid back
- To be offered by financial market?

Scenario: 100 year earthquake event in 2005
Conclusions

- A number of efforts underway related to natural disaster risk financing in developing and emerging economies
- Financial market instruments can be helpful for providing quick and low-cost financing post-event
- Instruments can be used by private and public sector
- Basis risk one issue
- Incentives for mitigation can be built in