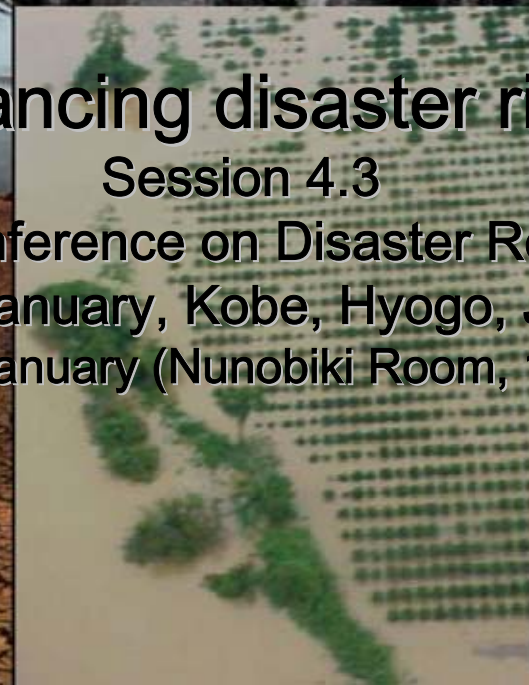


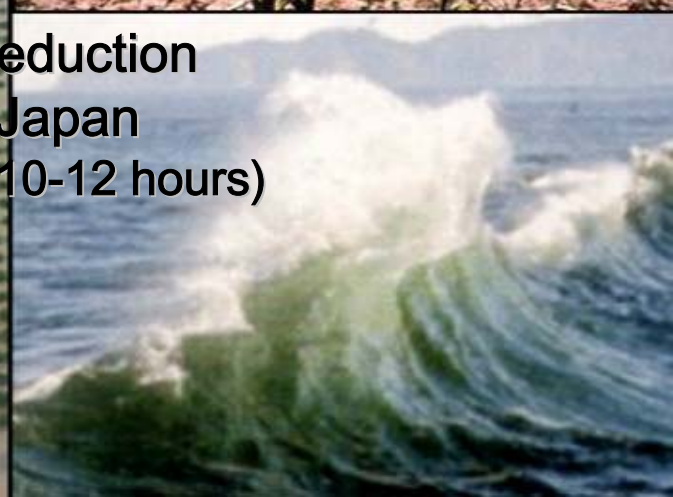


New Mechanisms for financing physical and financial protection



Financing disaster risk
Session 4.3

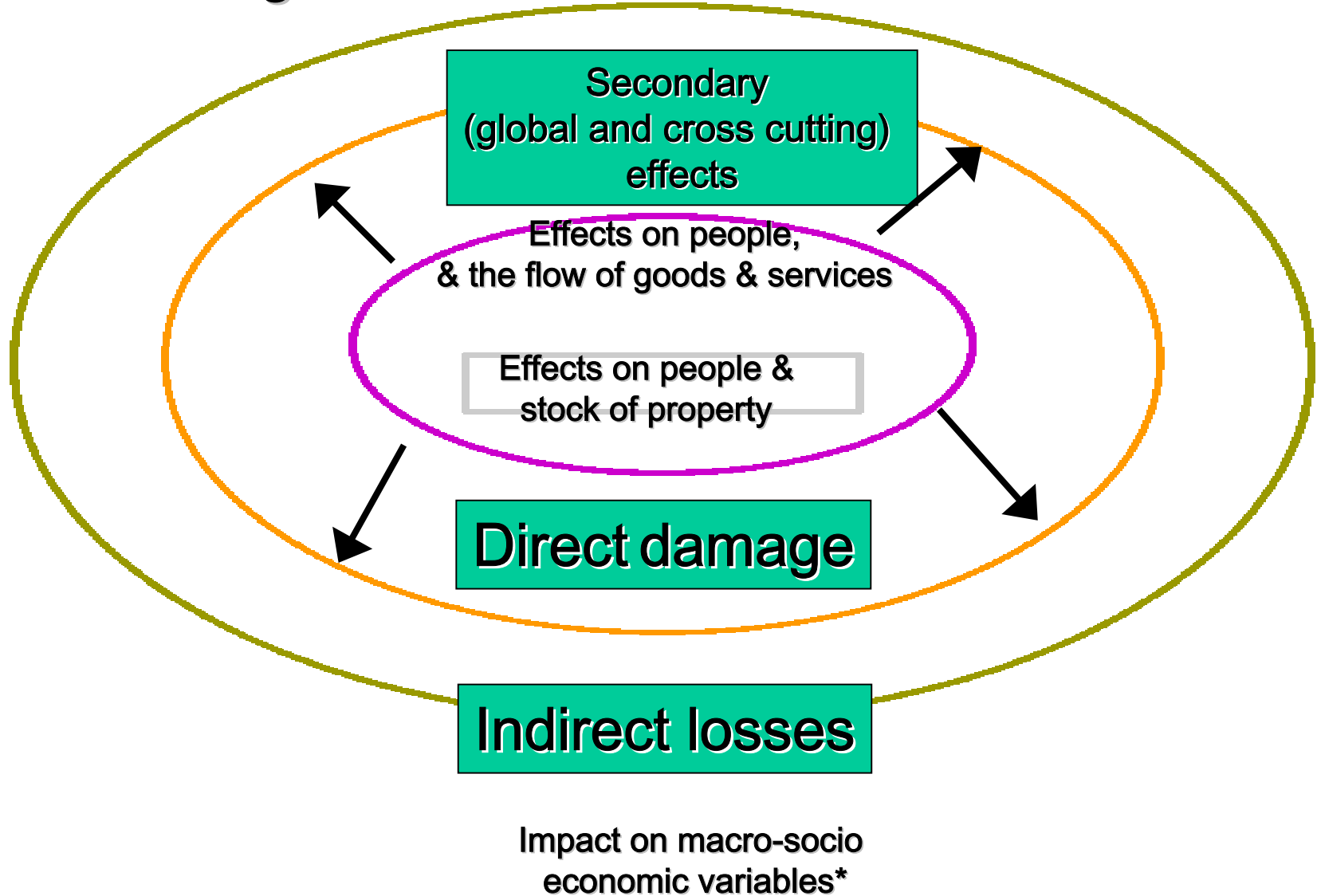
World Conference on Disaster Reduction
18-22 January, Kobe, Hyogo, Japan
Thursday 20 January (Nunobiki Room, 10-12 hours)



The need for financial protection instruments

- Insufficient use of insurance and other risk transfer instruments
 - ECLAC's observation over 30 years
 - The lessons from the 2004 Caribbean hurricane season
 - The implications from the Indian Ocean disaster

Estimating the socio-economic effects of disasters

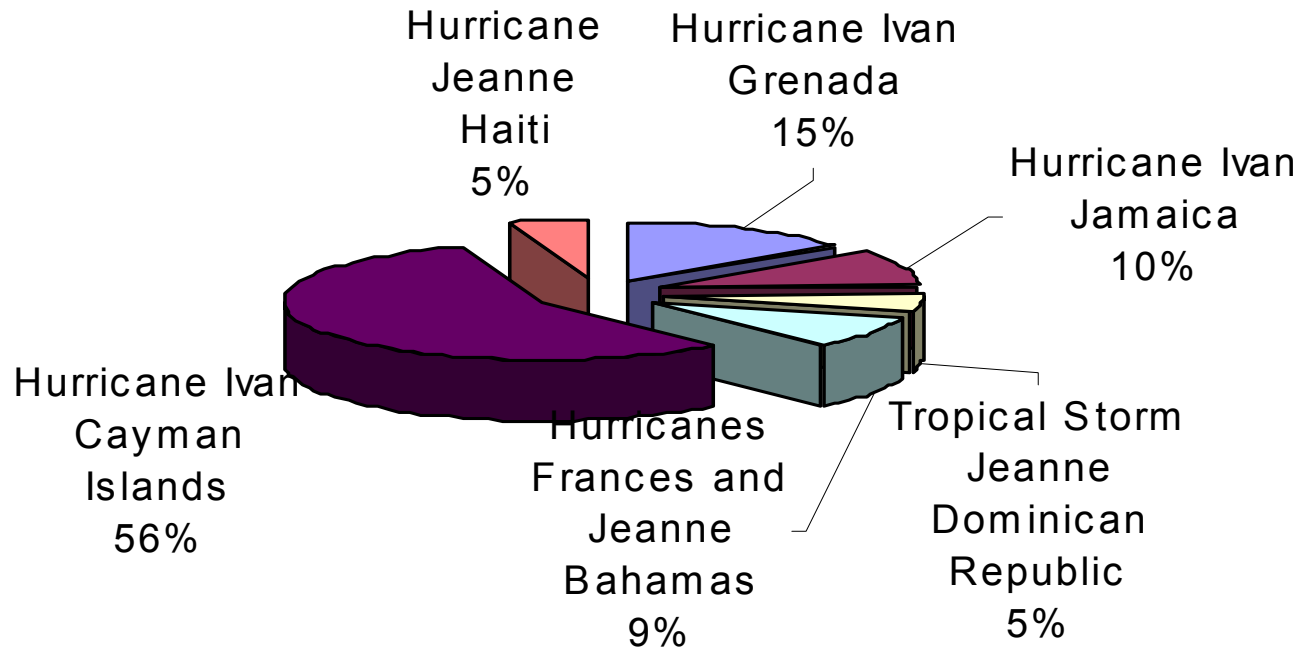


Physical and financial protection

- Save livelihoods and protecting infrastructure
- Profiles of human toll, damage and losses point to need for new, diverse forms of financing disaster risk
- Face vulnerability of small, less diversified economies

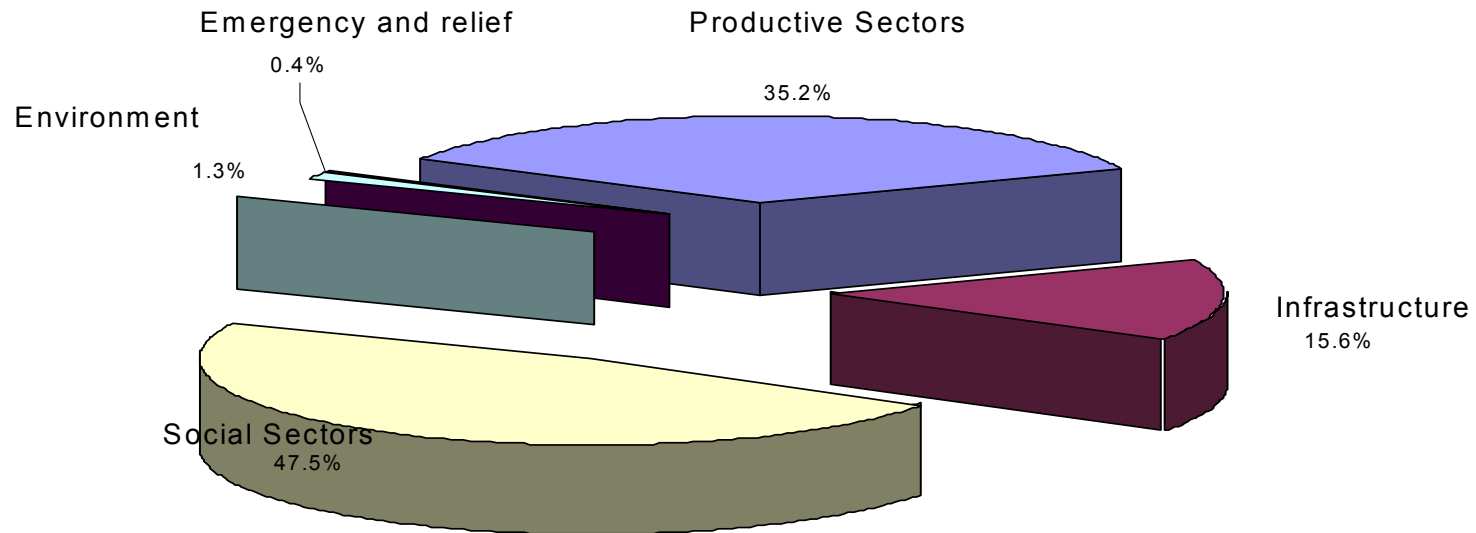
Impact of 2005 Hurricane season in the Caribbean

Hurricane season 2004. Damage distribution by country

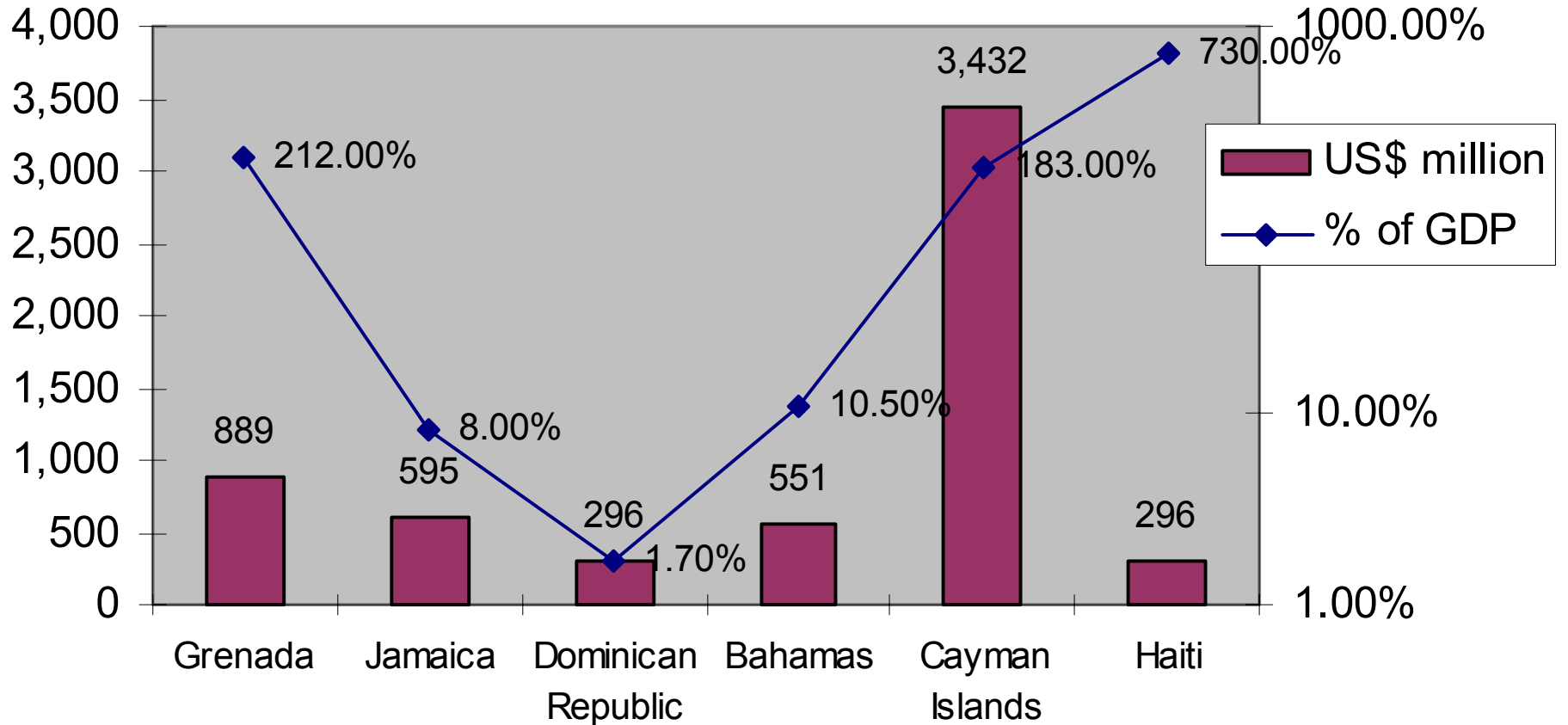


Damage profile in the Caribbean Hurricane 2004 season

Composition of damage and losses



Relative and absolute level of disaster damage



Impact on GDP expected performance (2004-2005)

MINUS 1.4%	Grenada
MINUS 0.7%	Jamaica
MINIMAL IMPACT	Dominican Republic
MINUS 1.7%	Bahamas
MINUS 1.9%	Cayman Islands
NEGLIGIBLE	Haiti

As affected in Banda Aceh (Indonesia, Dec. 26, 2004)

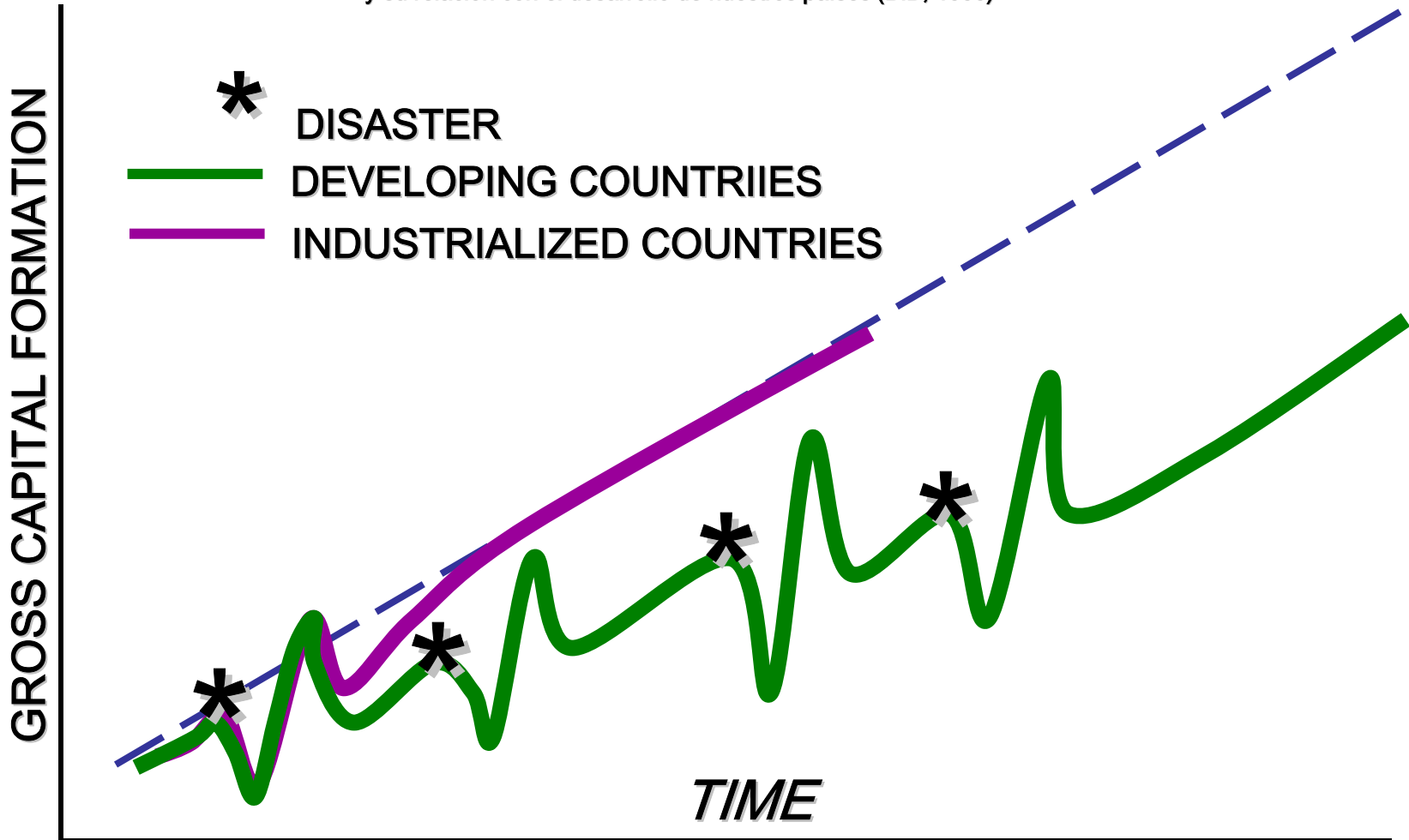


The “double whammies” of Indonesia

- The “double whammies” of Indonesia (as different from other Indian Ocean affected countries):
 - Earthquake (9.5 Richter scale) and Tsunami (with 15 min. warning and three waves within a two hour period)
 - A disaster on top of a conflict (as also in Sri Lanka)
 - Vulnerability exposed by human intervention in the way the city and Aceh and North Sumatra villages and towns developed (on floodplains, on beaches not protected by mangroves and other vegetation) and hazard related to geology (shallowness of epicenter of original earthquake, expansion and fracture of fault near the Sumatra coast causing slope collapses undersea increasing the force of water pressure and wave force)

THE EFFECT OF SUCCESSIVE DISASTERS ON CAPITAL FORMATION

Adapted from Mora, "El impacto de los desastres, aspectos sociales, políticos económicos, ambientales y su relación con el desarrollo de nuestros países (BID, 1999)



The use of actuarial, economic and statistical tools to determine risk

- Value of assets as a means to determine insurance costs (considering reconstruction costs are always higher than replacement prices or book value)
- Value of economic costs (beyond loss of business, incorporating increased costs and social impact)
- Return period or statistical probability for parametric insurance (scientific information, prediction models of probability as criteria)

Free riding in risk transfer

- The public / private level of internalising risk and transferring its costs (as materialized in disasters)
- The national / international level
- The need for cost-sharing of public goods price

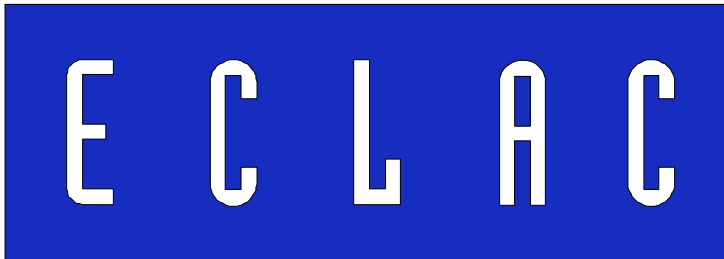
What instruments are available

- CAT bonds
- Disaster contingency funds
- Insurance and reinsurance
- Possible levels of coverage (geographical, regional, national)
 - Pooling of community resources for microfinancing and micro insurance (raise leverage to enter formal insurance market)
 - Public support mechanisms for insurance protection (guarantee mechanisms for lack of property rights or tenure in informal, SMEs)
 - Pooling of national resources at national level to reduce cost of insurance and share risk

Thank you



UNITED NATIONS



www.eclac.cl
www.eclac.cl/mexico
www.cepal.org
ricardo.zapata@cepal.org