



# Towards a Comprehensive Disaster Risk Management and Adaptation Approach in LAC: The Role of Financial Instruments

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**LSE Autumn Symposium**  
**Insurance in Emerging Markets: Determinants of Growth and  
the Case of Climate Change?**

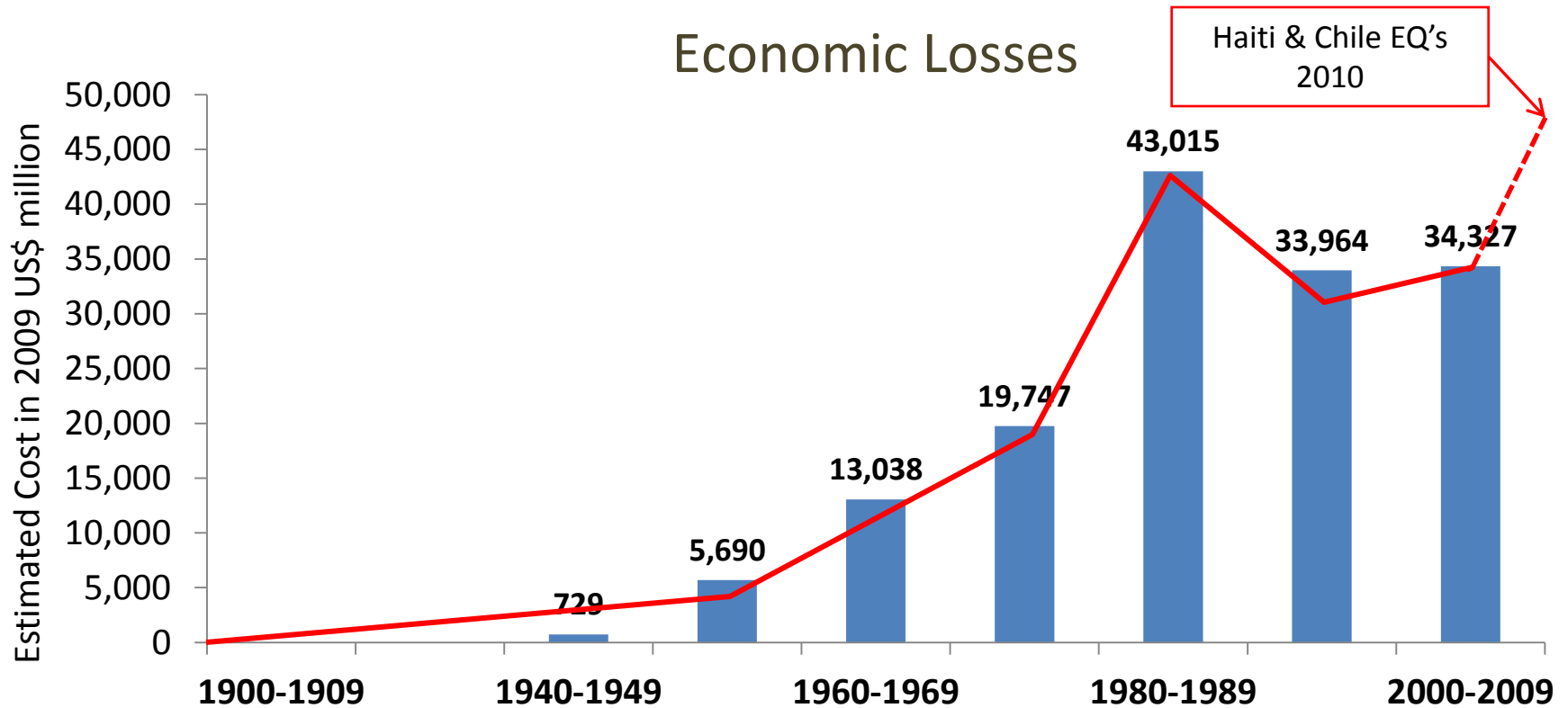
Inter-American Development Bank  
Climate Change and Sustainability Division  
Infrastructure and Environment Sector

# Content

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- Increasing losses in LAC
- A comprehensive approach to DRM and CCA
- Financial instruments for DRM
- Partnerships and innovation
- IDB's Climate Change Action Plan
- Questions/Discussion

# Increasing costs

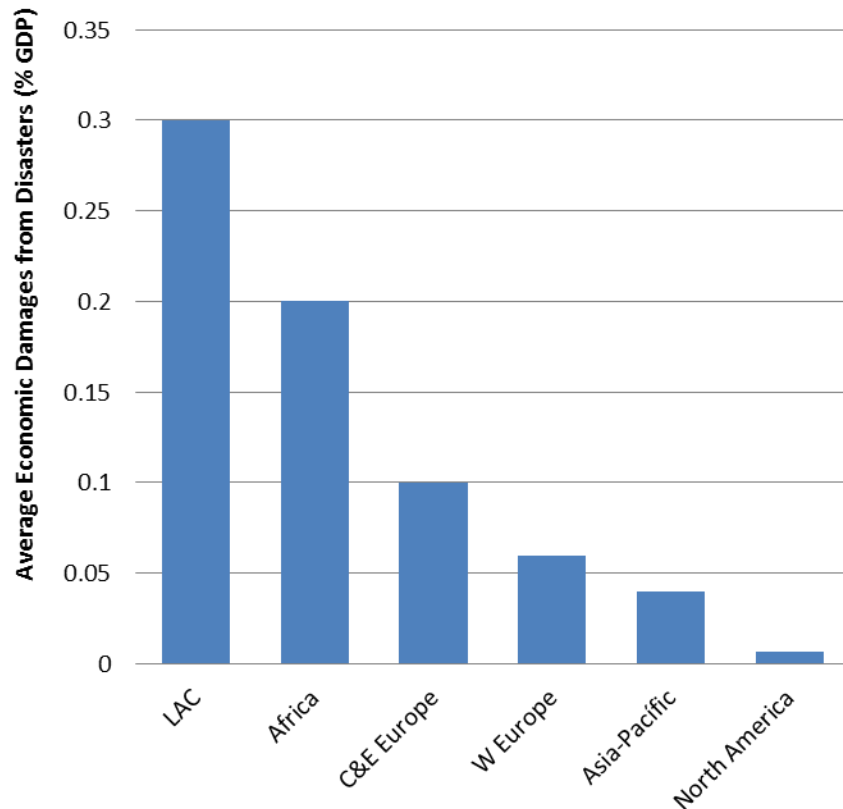


Source: EM-DAT, Bureau of Labor Statistics and IDB Staff calculations



# LAC is the most vulnerable region

**Distribution of Economic Damages  
from Disasters  
1970-2008**



- LAC has the **highest average economic damages** in the world (0.3% of GDP per event)
- 70% of countries do not have the financial capacity to recover from a catastrophic event.
- 100% of LAC countries have deficiencies in risk management.

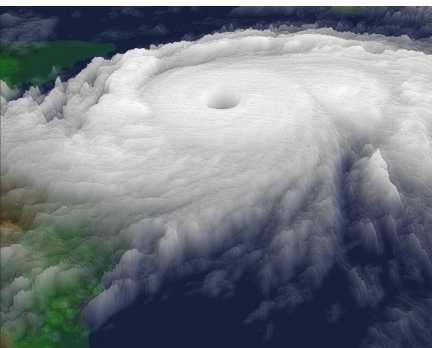
# Natural disasters in LAC

No. of Climate-Related Disasters:  
Example from Central America\*

|             | 1971-1975 | 1976-1980 | 1981-1985 | 1986-1990 | 1991-1995 | 1996-2000 | 2001-2005 | 2006-2010 |
|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Guatemala   | 1         | 0         | 1         | 5         | 3         | 6         | 12        | 10        |
| Honduras    | 4         | 3         | 3         | 5         | 7         | 8         | 14        | 7         |
| El Salvador | 0         | 0         | 2         | 3         | 4         | 7         | 8         | 7         |
| Nicaragua   | 1         | 3         | 1         | 2         | 4         | 10        | 9         | 8         |
| Costa Rica  | 3         | 2         | 0         | 2         | 6         | 7         | 10        | 6         |
| Panama      | 3         | 1         | 2         | 2         | 3         | 4         | 8         | 7         |

Source: EM-DAT (2011)

\* More than 6 events/year are indicated in red



# “Mega” disasters in the region

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Chile earthquake (Feb 2010)  
Economic loss: US\$30 billion  
Human losses: 525 death



Haiti earthquake (Jan 2010)  
Economic loss: US\$7.8 billion  
Human losses: 316,000 death



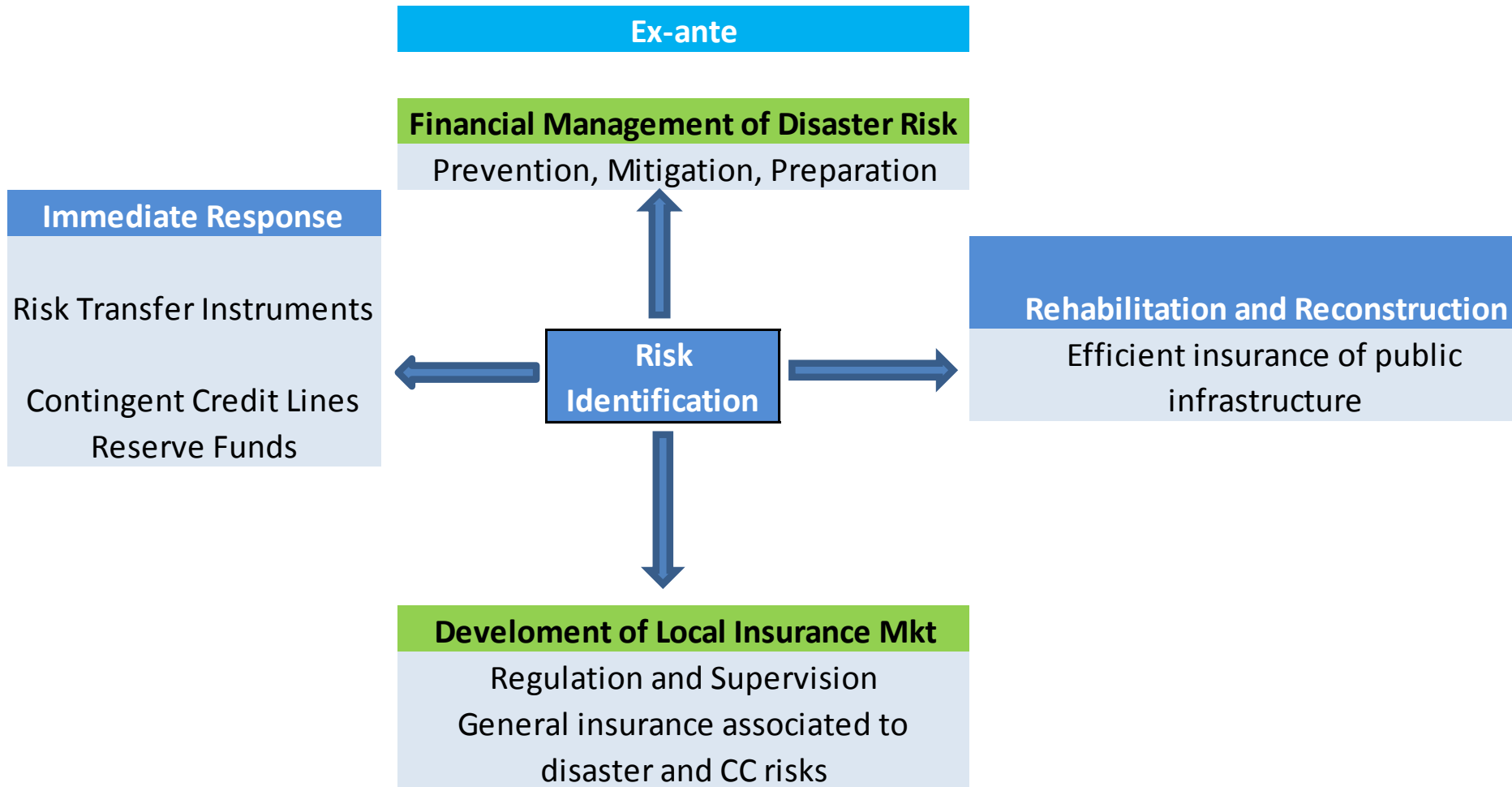
Colombia Floods (Nov-Dec 2010)  
Economic loss: US\$5.0 billion  
Human losses: 389 death

# IDB: Comprehensive Approach

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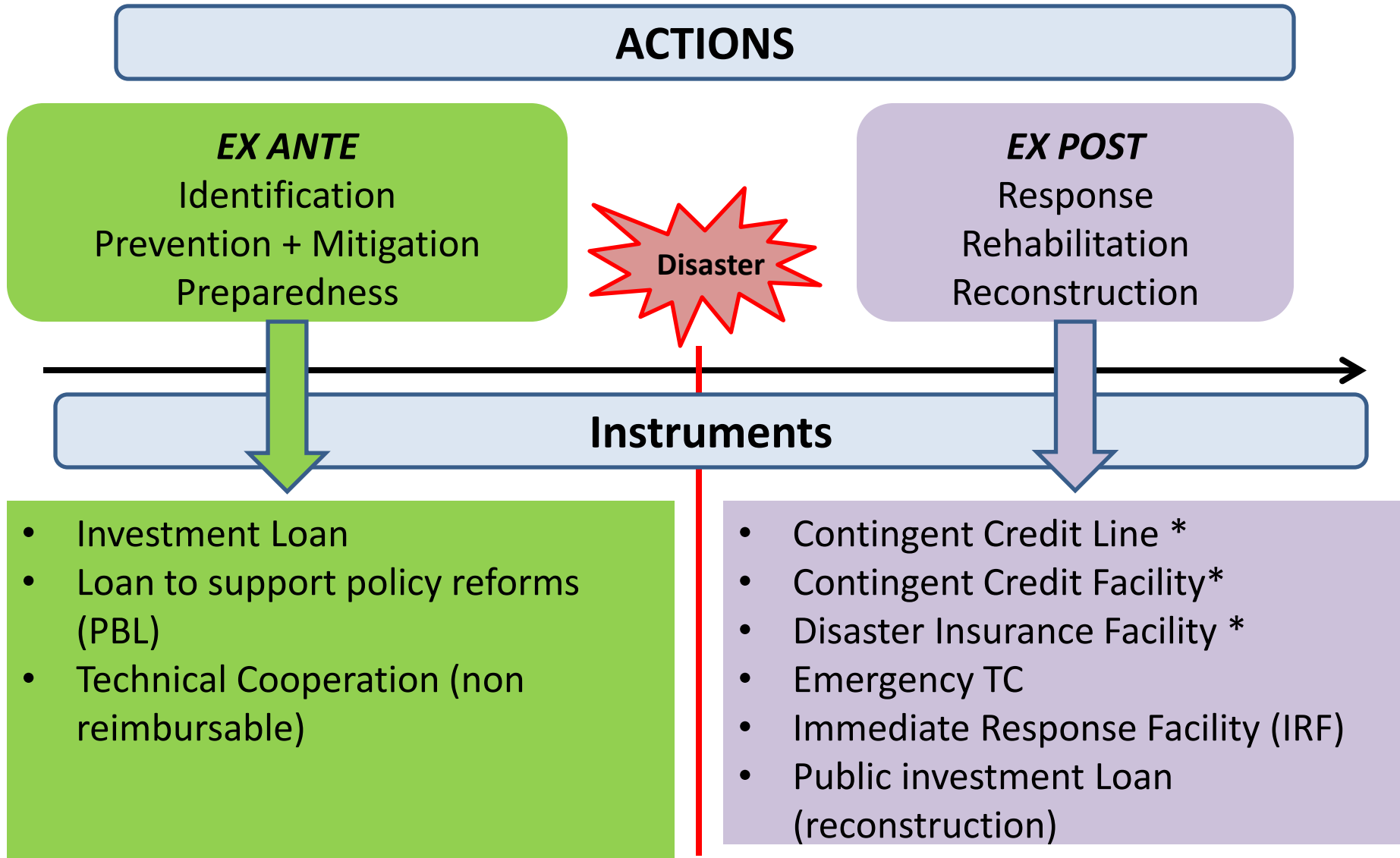
- Comprehensive disaster risk management and finance approach: integrates risk assessment, risk reduction and management, and **risk transfer** *[climate change adds a new layer]*
- Through institutional capacity building, knowledge transfer, product design and financing.
- The private sector is a key player

# Disaster Risk Financing Strategy



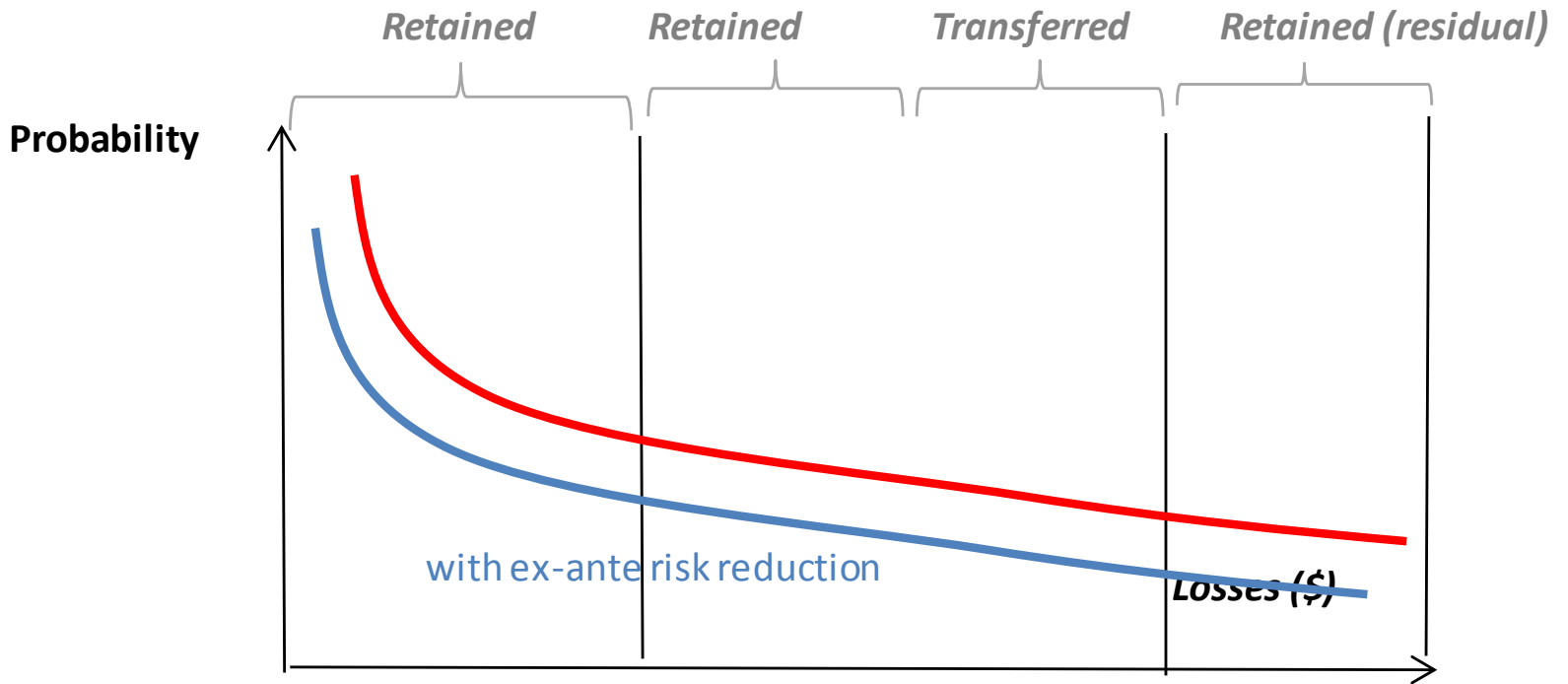


# DRM Instruments



\* Designed and approved *ex ante*

# Instruments

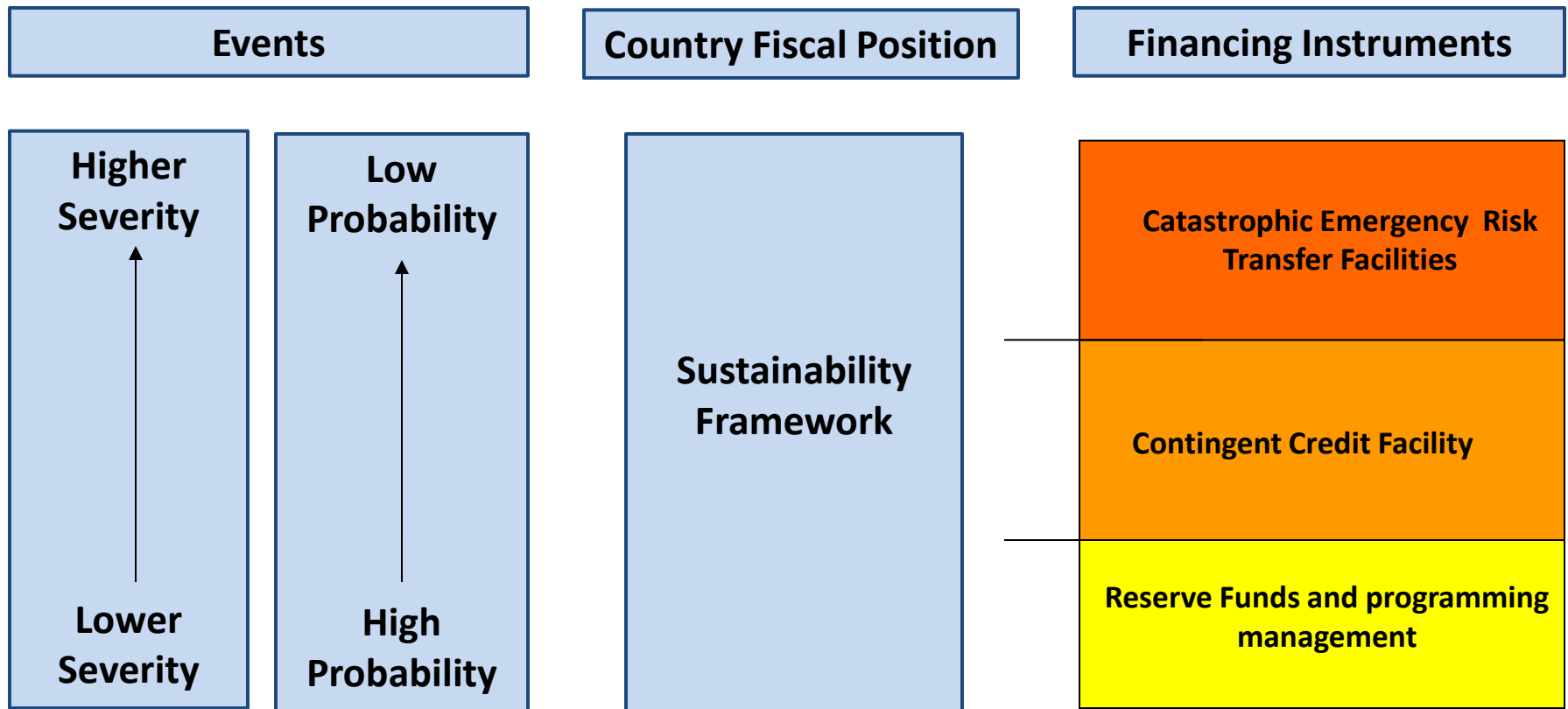


Instruments

|                                    |                           |                        |                      |
|------------------------------------|---------------------------|------------------------|----------------------|
| Budget Provision<br>(reserve fund) | Contingent<br>Credit Line | Insurance and<br>Bonds | Ex-post<br>financing |
|------------------------------------|---------------------------|------------------------|----------------------|

Investment in Risk ID, Prevention, Mitigation, Preparedness

# IDB Financial protection structure for natural disasters emergencies



# Financial Programming & Budgetary/Reserve Funds



## **Objective**

- Institutional strengthening of the ND fiscal programming function, in particular the structuring and operation of budgetary/reserve funds for financing extraordinary emergency public expenditures caused by frequent & low impact natural disasters.

## **IDB intervention focuses**

- Fiscal Sustainability Studies on public expenditure financing during ND emergencies.
- Development of governmental institutional capacity for financial management of ND contingent liabilities.
- Development of ND emergency financing mechanisms for high recurrence low impact events (budgetary reallocations, reserve funds, etc.)
- Development of systems and procedures for improved assessment and control of values at risk of ND, and their efficient financial coverage

## **Main Achievements**

- Fiscal Sustainability Studies on public expenditure financing during ND emergencies and recommendations for design and or creation of reserve funds done in 6 COSEFIN countries. ATNs. in DR to Improve mayor public infrastructure assets valuation systems

# Contingent Credit Facility (CCF)

## Objective

- Complement countries availability of liquid financial resources to timely cover extraordinary public expenditures during emergencies resulting from severe or catastrophic ND events.

## The instrument

- US\$ 600 million Facility to grant contingent loans of up to US\$ 100 million, with disbursements contingent to the occurrence of an event with location, type and magnitude previously agreed with the Bank. The line has been expanded recently, with no global limit and up to 300 million per operation.
- Allows Provision of customized ND coverage to countries: The instrument is adaptable to cover different types of natural disasters depending on countries needs.

## Main Achievements

- The Facility was approved by the Executive Directory in February of 2009 The first Loan has been approved for Dominican Republic in November 2009. Currently there are three additional operations approved, Honduras, Ecuador, Panama and other three are being negotiated with Costa Rica, Peru and Nicaragua.

# Main advantages of the CCF-Contingent Loans

- There is no cost in the determination of the damage (loses) because the compensation for an event with determined characteristics is defined previous to the occurrence of the event.
- Rapid disbursement upon verification of occurrence of an eligible event.
- Clear mechanism to identify if the triggers (that give access to the disbursement under the CCF Loans) have been activated or not.
- Flexibility to chose between using the resources under the CCF Loan itself or using ULB from a list of previously approved IIDB Loans, contractually agreed by the country and the Bank.
- Efficient complement of other contingent credit arrangements (CAF or World Bank Cat-DDO; etc.)

# The IDB ND Catastrophic Emergencies Insurance Facility (CEIF) Program



## **Objective**

- To complement the Institutional capacity for ND financial risk Management by enabling the development of efficient coverage for extraordinary expenses during catastrophic emergencies by transferring the risk to the international markets, through a captive insurance platform.

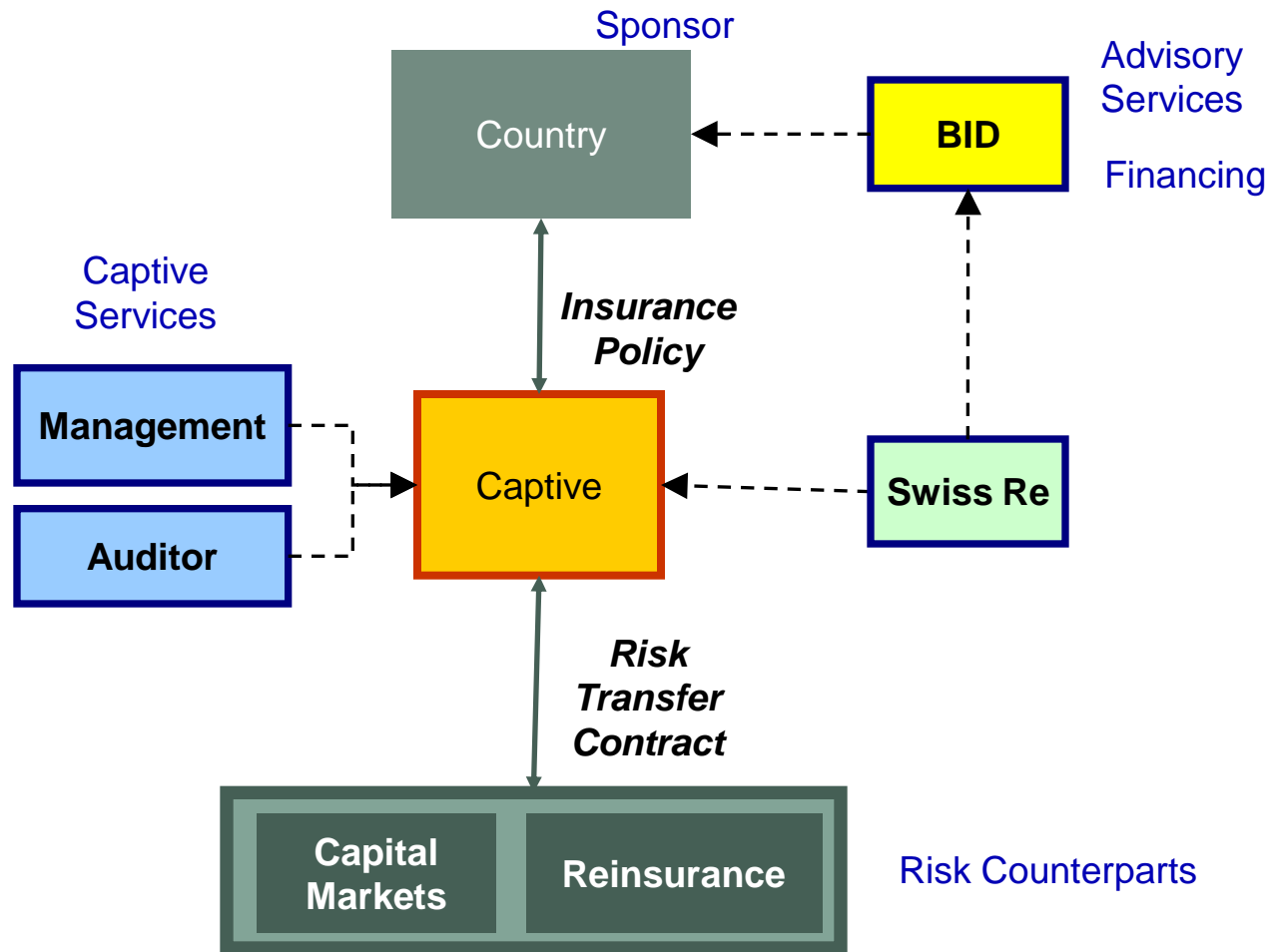
## **IDB intervention focus**

- Technical assistance To design and structure the institutional Platform and the initial parametric coverage for natural disasters.
- Financing the platform operational costs during the take off period.

## **Main Achievements**

- Regional TA for designing and structuring of two facilities in member countries. Insurance facility designed and began to be structured in one country (DR). Design in a second country (HO), about to begin.
- Loan approved (24 Million) to support financing launching of Insurance facility in the DR.

# CEIF-An Operational Example: The Dominican Republic



Regional  
Integration



# CEIF - Main advantages

- Allows broad and efficient high rated access to the international risk and capital markets.
- Constitutes an institutional platform for efficient public financial risk management that in time could be used to transfer other type of public financial risks (i.e. climate change impacts, agricultural and food security risks, etc).
- Promotes expansion of international private insurance sector participation in domestic risk coverage, thus furthering the deepening and broadening of the market.
- Through the launching of new insurance lines, provides opportunities for domestic insurers development and growth.
- Complements and build up upon other similar multilateral initiatives in the region, like the World Bank CCRIF.



## THE NEW IDB INSURANCE FACILITY

Natural Disasters Insurance Facility  
for Central America and the Caribbean



Huracán Mitch (1998), Tegucigalpa, Honduras

**LA NUEVA FACILIDAD DE  
CREDITO CONTINGENTE DEL BID**

Facilidad de Crédito Contingente para Atención de Emergencias por Desastres Naturales

# Partnerships and innovation

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- **Costa Rica:** technical assistance to strengthen supervision and regulation of insurance market
- **Bolivia:** *Centro de Estudios Economicos, Universidad Privada Boliviana (Cochabamba)* → to develop policy indexed to climatic indices (potatoes, wheat, corn)
- **Peru:** Lima, Ministry of Housing (EQ). SISMIC (*Centro Sismologico Peruano-Japones*)
- **Haiti:** micro-insurance, FONCOSE (ONG)
- **San Juan, Argentina:** (hail , or *granizo*, affects grapes, integral approach)

# Climate Change Action Plan

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Support LAC countries in reducing their vulnerability to climate change as well as contributing to low carbon development in the region

- ✓ Mobilize a range of financial and nonfinancial instruments for institutional, technical, and financial capacity building
- ✓ Provide guidance for the Bank's dialogue with governments, civil society and the private sector
- ✓ Integrate public and private financing and capacity building into a single framework for climate action.

The Action Plan details operational priorities, activities and timeframe required, and monitors output contributions as required in the General Capital Increase (GCI-9)

# One of the Strategic Activities:

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- Scaling-up investments and leveraging private sector funds.
  - Use of fast start resources in the region
  - Deploy adaptation funds
  - Promote use of REDD, FIP and FCPF resources
  - **Develop Innovative funding mechanisms to attract private sector investments**

# Questions/Discussion

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- Is insurance effective for climate adaptation?
- **What can we do together?** (Academic institutions, insurance and re-insurance industries, MDBs, etc.)
- Commercially viable?
- Politically desirable?
- Who pays?
- Who benefits?
- Expectations of policy makers ?



# Thank you

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