

MANAGING EXTREMES

Willis Re

ROLES FOR PUBLIC AND PRIVATE SECTOR IN RISK SHARING, POOLING & TRANSFER

Manuel F. Almenara

Willis Re

Chairman

Latin America & Caribbean Group

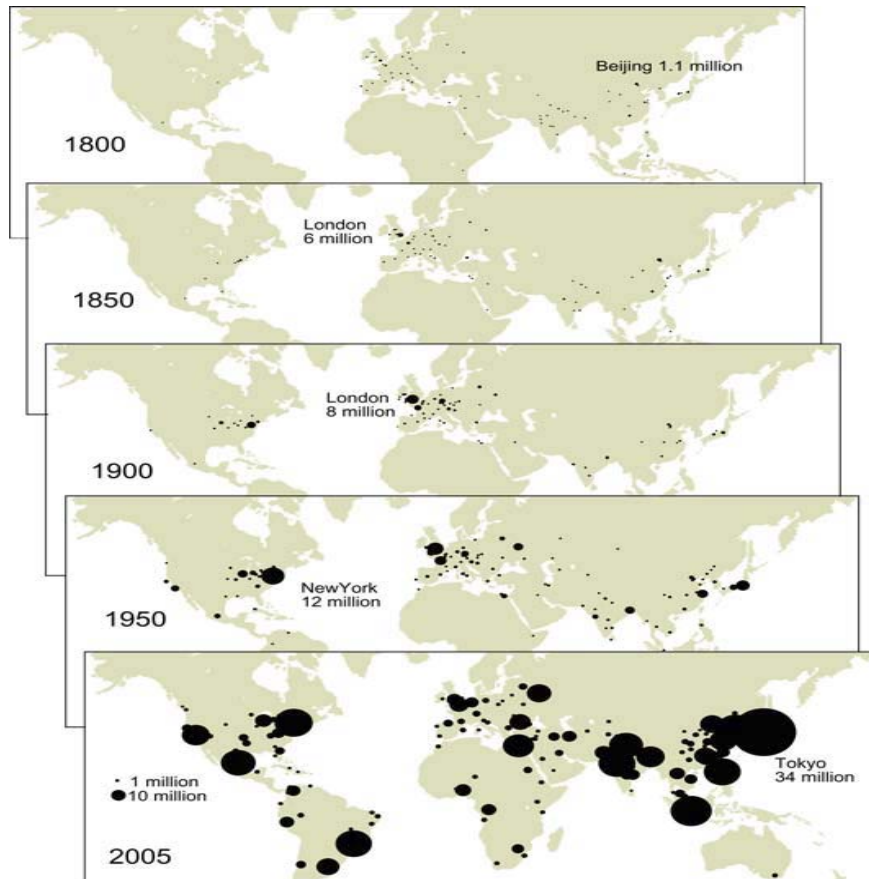
Tuesday, 11 October , 2011



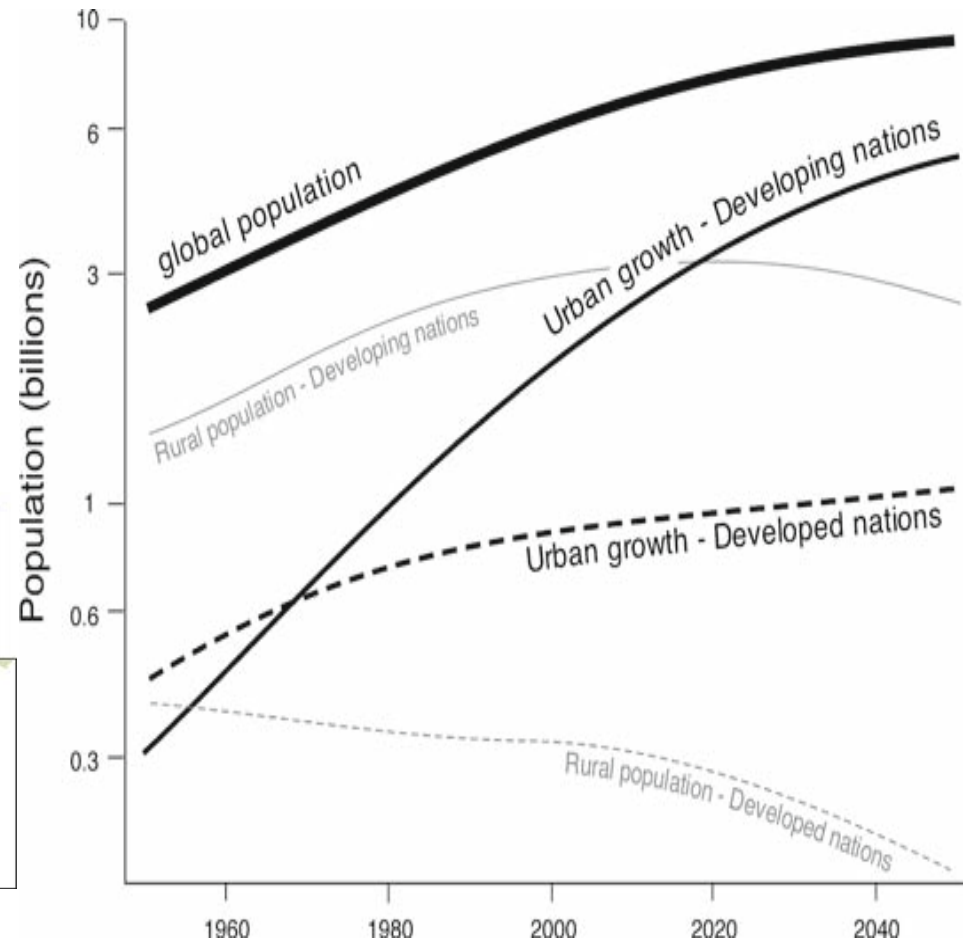
Management of Catastrophic Risks

- Awareness or recognition of the social and economic impact of exposure to natural disasters through identification of the:
 - Perils and hazards.
 - Serious damage to National Treasuries by unforeseen disasters.
 - Methods to ensure the functioning of critical infrastructure.
 - Prevention and control activities that can be implemented.
 - Action plan of each government agency and its relationship with other agencies.
 - Partnerships that need to be established with private sector bodies - better equipped to absorb the financial impact of a catastrophic event.

Demographics



Source: City populations 1800–2000 with scale shown in the 2005 map. Bilham, R. The Seismic Future of Cities - 2009



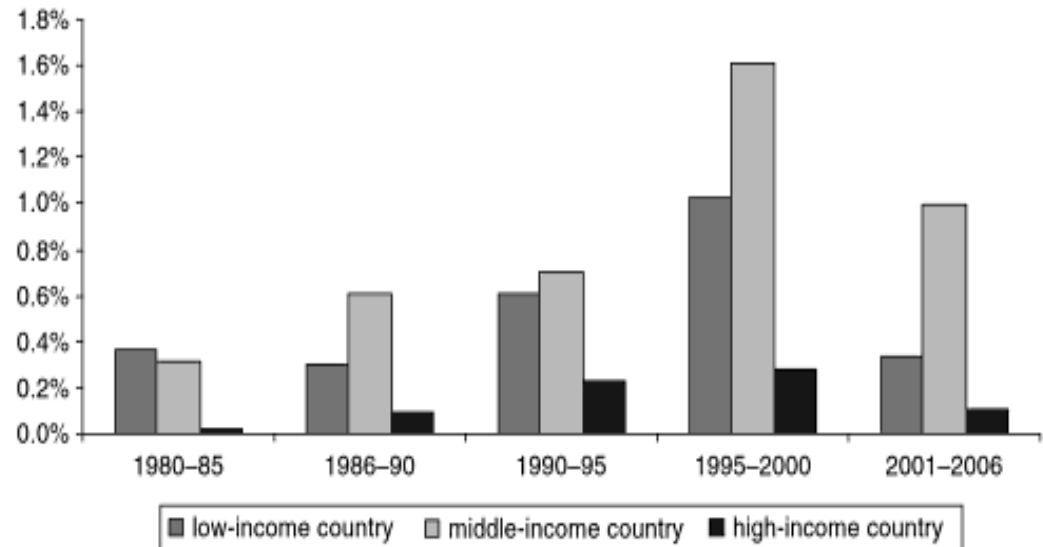
Source: Urban and rural populations in the developing and industrial nations 1950 projected to 2050 (United Nations 1999). Bilham, R. The Seismic Future of Cities - 2009

Objectives for the Management of Catastrophic Risk

- Formalization of a risk management process supposes the need to establish clear guidelines and standards for the identification, evaluation and quantification of risk in order to establish the:
 - Timely availability of funds needed for recovery, reconstruction and compensation of victims.
 - Reduction of volatility in the national budget.
 - Liquidity for individuals during times of economic crisis caused by a natural disaster.
 - Reduction of reliance on foreign / external aid.

The Impact of Catastrophic Events

- Financial Impact of Catastrophic Events on public budgets.
 - Emergency and Reconstruction Costs.
 - Public infrastructure often not insured.
 - Undeveloped insurance markets
- Annual direct losses from natural disasters vs GDP - Emerging Economies.



Natural disasters are: drought, volcanoes, waves or surge, earthquake, flood, extreme temperature, windstorm, based on CRED EM-DAT classification. World Bank country classification (2006). See Annex 1.

Source: Authors from CRED EM-DAT database, Swiss Re (2007d), World Bank (2005b).

Public Private Partnerships

Catastrophe risk management requires large capital and administrative efforts. Partnerships between public and private sectors are critical to the success of the management of these events.

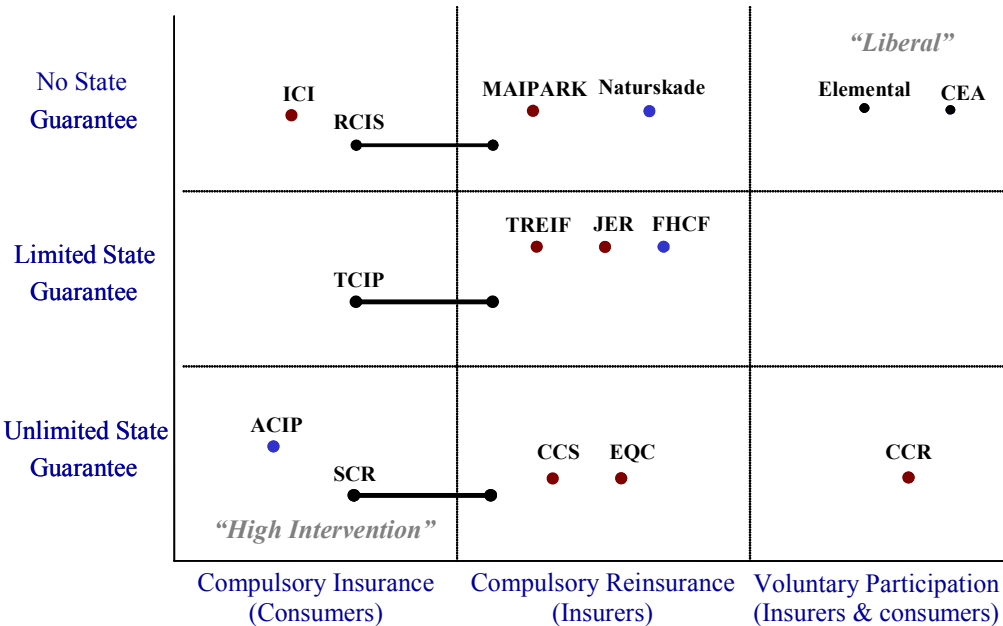
- The public sector has the legal power to regulate and establish frameworks / policy response for catastrophic events.
 - Prevention and Control Activities.
- The private sector has the necessary financial resources to absorb the financial impact.
 - Geographic diversification is generally not available to the Public Sector.
- The basic conditions for the development of a dynamic and efficient insurance market must be promoted in order to efficiently provide the necessary liquidity to individuals and small businesses in times of economic crisis arising from a catastrophe.

Role of Governments

- Political and Administrative unity of purpose needed.
- Clarity as early as possible on key points:
 - What is the purpose of the scheme and the PPP?
 - What is the role of Third Parties e.g. World Bank, EU, OECD etc, which are accessible only by Government?
 - Can the political element of Government provide the administrative element with clarity of purpose and legislative authority as needed?
 - Is the project given a National Priority status obtaining political support that transcends cross-party-politics and therefore is given long term backing?
 - What is the capability of Government to provide support at local levels?
 - What is the capability of Government to provide sustainable risk assessment/management support?
 - What is the capacity of the Government to set the basic conditions for the development of a dynamic and efficient insurance market?

Role of Governments

- Significant earthquake and flood national schemes



ACIP	Algerian Catastrophe Insurance Pool (Algeria)
CCR	Caisse Centrale de Réassurance (France)
CCS	Consortio de Compensación de Seguros (Spain)
CEA	California Earthquake Authority (USA)
Elemental	Elementarskadepool (Switzerland)
EQC	Earthquake Commission (New Zealand)
FHCF	Florida Hurricane Catastrophe Fund (USA)
ICI	Iceland Catastrophe Insurance (Iceland)
JER	Japan Earthquake Reinsurance Co (Japan)
MAIPARK	PT. Asuransi MAIPARK (Indonesia)
Naturskade	Norsk Naturskedepool (Norway)
RCIS	Romanian Catastrophe Insurance Scheme (Romania)
SCR	Société Centrale de Réassurance (Morocco)
TCIP	Turkish Catastrophe Insurance Pool (Turkey)
TREIF	Taiwan Residential Earthquake Fund (Taiwan)

Role of Private Organizations

- National or Regional Catastrophe Schemes are both an opportunity and a threat to Private Organizations.
- The opportunity is to achieve wider market penetration through statutory requirements versus cannibalising through existing or regular sales methods.
- The following are criteria that will need to be established:
 - the appropriate risk/reward for services provided by private organisations.
 - What role can private organisations play in the governance and management of a national or regional scheme.
 - Above all, the commercial interest of private organizations needs to be recognised.

Role of Private Organizations

What are the available resources from Private organizations?

- Local Insurance Companies.
 - Provision of distribution, administration, loss adjusting, claims payment and reinsurance.
- Local Insurance infrastructure.
 - Loss adjusters, distributors, banks, academic/research institutions.
- Reinsurers.
 - Local administration of scheme, capital support, risk management advice.
- Brokers/advisers.
 - Risk analysis, risk structuring, execution of risk transfer, administration of risk transfer structures.
- Catastrophe Modelling companies.
 - Risk analysis and technical risk pricing.

Pre and Post Event Financing

- Post-event Financing Effects.
 - Opportunity costs.
 - Higher than expected costs f reconstruction (“demand surge” effect)
 - Higher Cost of Credit.
 - The impact of higher taxes in economies already battered by disasters and demotivational consequences on foreign investment.
 - International aid usually does not arrive on time.
- Therefore, it is eminently sensible to evaluate funding strategies prior to the occurrence of catastrophic events, and to establish strategic alliances with private sector organizations.

Pre and Post Event Financing Instruments

Pre-event measures	Advantages	Disadvantages
Indemnity insurance	Low basis risk for insured	Needs loss assessment
Parametric insurance	Quick disbursement low administrative cost	Basis risk of insured
Contingent financing	Small payment upfront guaranteed access and pre-defined pricing	Repayable and costs interest
Reserve funds	National measure, does not impact financial strength	Costly, may divert resources

Post-event Instruments	Advantages	Disadvantages
Budget	National source of funding	Limited, diverts resources
Raising taxes	National measure	Limited, politically sensitive, may dampen economic recovery
Debt	Standard instrument, proven	Potentially slow and costly
Donor aid	Inexpensive	Can be slow, and amounts are uncertain

Source: Swiss Re

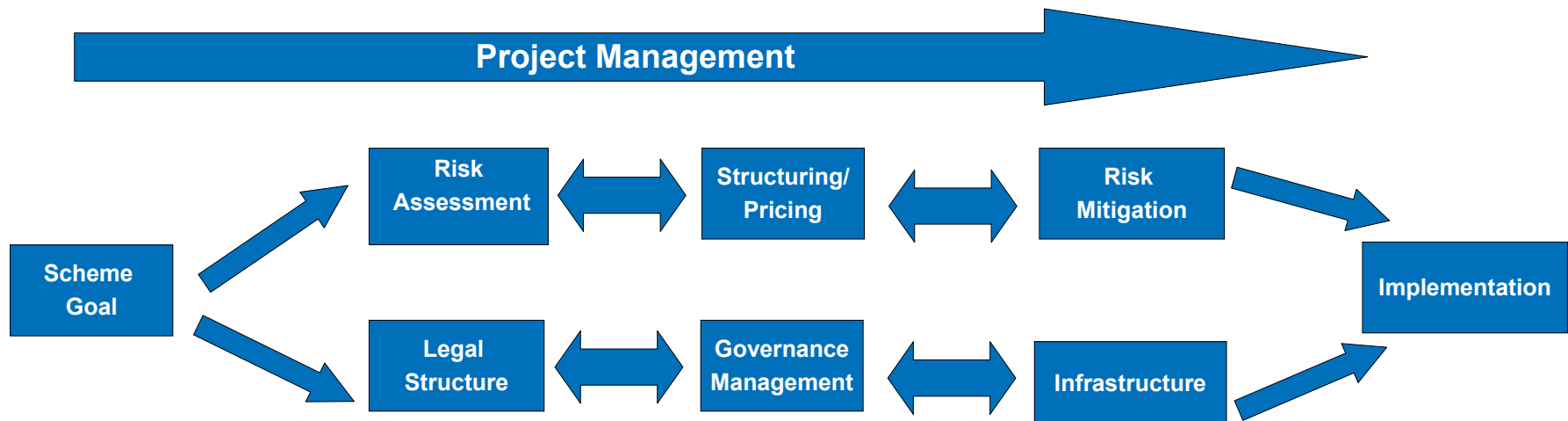
Risk Transfer Product Ideas

The following would give some ideas for risk transfer product considerations.

- Parametric vs Indemnity Covers
- Hybrid Covers
- Parametric Rainfall Covers
- Aggregate vs Event Covers
- Event XL Reinstatements
- Single year vs Multi-year Covers
- Single peril vs Multi-peril Covers
- Traditional vs Capital Market
 - This is an illustrative rather than exhaustive list.
 - All are possible, some will be harder to execute upon than others.
 - Some will have higher data requirements than others.
 - Some will need academic work to develop a workable solution.
 - As always, a balance between suitability, price and speed of delivery is required.

The Process

With possibly many different interests to reconcile during the process of evaluating and structuring Regional and National Natural Catastrophe Schemes, a rigorous process has proved to be the key to a successful implementation.



Conclusions

- In today's business environment, the technical aspects for assessing and structuring a PPP for any Natural Catastrophe Program are no longer obstacles given time and access to underlying data.
- Data collection for the determination of aggregate risk and exposures is indispensable.
- The provision of insufficient underlying data can lead to delays and, even worse: incorrect assumptions.
- Early and open engagement with private organisations allowing their involvement in governance/management is beneficial to the PPP.
- Mechanisms to allow appropriate sharing of risk and reward between all parties must be agreed.
- The public organization requires the political will and tenacity to drive the project forward over many years to its conclusion, with the continuity required from the private organizations providing the required capacity support.

Conclusions

Successful schemes demonstrate the following characteristics:

- Strong leadership from the administrative element of the sponsoring entity.
- Detailed economic, financial and technical risk analysis to ensure long term financial viability of the scheme.
- Clear terms of reference, governance/management structures and recruitment policies for the scheme.
- Appropriate recognition of all parties' interests in the governance and management structures.
- Clarity over the provision of services by the private organisations.
- Recognition that each scheme represents a unique blend of political, social, economic and risk profile. In other words: there are no “off-the-shelf”, “ready-made” products or template answers.

ROLES FOR PUBLIC AND PRIVATE SECTOR IN RISK SHARING, POOLING & TRANSFER

Willis Re

MANAGING EXTREMES

Manuel F. Almenara
Willis Re
Chairman
Latin America & Caribbean Group
Tuesday, 11 October, 2011

