DISASTER RISK FINANCING STRATEGIES
AND ITS COMPONENTS

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Disasters are a risk to financial resilience (especially in developing countries)

Broad insurance coverage reduces economic disruption...

The role of risk transfer


The left-side panels show the deviation of real economic growth from its trend due to a typical disaster event for an economy with no private insurance coverage and an economy with full insurance coverage. The right-side panels show the cumulative deviation of GDP from trend over 10 years for each type of economy.
Significant financial protection gap remains (particularly in developing countries)

Source: OECD calculations based on insured losses and total damages reported for meteorological disasters (floods, storms, hail, cold/frost and droughts/fires/heat waves) in Swiss Re sigma annual reports on natural and man-made catastrophes (2006-2014). The categorisation of countries between high-income and developing countries was undertaken based on the World Bank country classification.
The OECD has undertaken cross-country comparisons of DRF practices and developed guidance on DRF issues:

G20 Finance Ministers and Central Bank Governors invited the OECD to develop guidance to support financial resilience against disaster risks (2012)

APEC Finance Ministers asked the OECD to support an exchange of knowledge and practices on disaster risk financing issues (2013)

In 2015, the OECD built on this previous work by publishing the results of a global survey on disaster risk financing practices and challenges
More recent analysis has focused on the application of this guidance to specific perils:

In response to a request from the French Presidency of COP 21, the OECD developed an analysis of the implications of climate change for the financial management of disaster risks with some recommendations on policy options and further work to improve the capacity to manage the potential impacts of climate change (2016).

The OECD published a report (and organised a major conference) on the financial management of flood risk aimed at applying the principles of OECD guidance to the financial management to a specific peril (2016).
Implications of climate change on insurability of disaster risks

• The *insurability* of risks depends on a number of factors, including:
  
i) that a sufficiently large pool of risk can be created (mutuality);
  
ii) that the expected loss burden can be quantified;
  
iii) that the time at which the insured event occurs is not predictable (randomness); and
  
iv) that the premium cost is sufficient to cover the expected losses from disaster events and is affordable to the community of affected policyholders (economic viability).

→ Many of the factors have the potential to be affected by climate change.
Implications of climate change for insurance affordability – some examples

• Premiums for hurricane insurance in the US Atlantic basin, under a high-climate change could increase by as much as 150% over 1990 levels.

• In the Netherlands, derived risk-based premiums may need to increase on average by 93% to 102% in 2040 and 641% to 797% in 2100 in some areas in response to a 2-3 times increase in estimated flood probability between 2015 and 2040, and a 16-20 times increase in estimated flood probability by 2100.

• In the United Kingdom, in the context of a global temperature rise of 4°C, the annual average insured flood loss due to increased precipitation-based inland flooding could increase by 30%, resulting in an increase to the inland flood component of insurance premiums of approximately 21%.
Measures to increase penetration of disaster insurance

• Encouraging risk awareness, including on the need for financial protection
• Making it easier to choose to purchase insurance (e.g. default option)
• Indirect compulsion (e.g., as part of mortgage lending)
Private market capacity to insure disasters

• Government (re)insurance facilities can be established to support insurance availability or affordability…

• …but create sovereign exposures which should be managed/minimised by:
  – Limiting scope of government intervention
  – Sharing exposures with the private sector
  – Regional risk pooling
Micro-insurance offers a potential means to reach the vulnerable – but requires:

– The development of efficient distribution channels for micro-insurance products
– The use (and acceptance) of transparent and accessible parametric-based triggers
– Establishing capacity to cover excess losses (i.e. reinsurance)
Based on a recent review of implementation, the existing OECD Recommendation (Good Practices for Mitigating and Financing Catastrophic Risks (2010)) will be replaced to:

- Address lessons learned and challenging issues identified through OECD’s work for the G20 and APEC Finance Ministers;
- Complement the OECD Recommendation on the Governance of Critical Risks (2014) which provides guidance on disaster risk management frameworks more broadly; and
- Position the Recommendation as the main international guidance on the development of strategies for the financial management of disaster risks.
1. Establishing a DRF strategy

- Assigning leadership for developing and implementing a DRF strategy as part of an integrated approach to DRM
- Ensuring sufficient investment in institutional capacity, prevention and recovery while aiming to maximise the cost-effectiveness of interventions in DRM (i.e., by considering the relative costs and benefits of different approaches to prevention, protection, etc.)
- Encouraging cooperation and coordination across government and with private sector
- Assesses the appropriate level of risk retention and risk transfer, taking into account financial capacity
2. Promoting a comprehensive risk assessment process

- Promoting the development of necessary technology and expertise
- Ensuring that the data necessary for the quantification of exposures is collected and made available
- Sharing information and promoting harmonisation of this data nationally, regionally and internationally
- Taking into account both normal and extreme scenarios, as well as evolutions in the nature of risk (e.g. changing climate)
3. Supporting effective financial management across society

- Supporting public awareness of disaster risks and the need for financial protection
- Establishing an insurance regulatory and supervisory framework that ensures sufficient financial and operational capacity for the management of claims and transparency to consumers in terms of risks covered
- Addressing the challenges to the availability and affordability of financial protection, including through public intervention in disaster insurance markets (where necessary)
- Developing public compensation and financial assistance arrangements to respond to remaining financial vulnerabilities
4. Managing government exposures to disaster risks

• Evaluating the potential financial exposures of governments to disaster risks (recovery expenses, reconstruction of public assets, financial assistance, macro-economic impacts, etc.)

• Developing (and disclosing) a plan for the financial management of government exposures, taking into account the relative costs and benefits of various financing options, including investments in prevention
Developing countries face more significant risks to financial resilience:
- more limited levels of physical resilience;
- lower insurance coverage;
- more constraints on fiscal capacity.

Recommendation will be open to non-Member adherence
Supporting financial resilience in developing countries

- Case studies on Colombia and Senegal are useful in understanding the challenges to effective financial management of disaster risks in the context of climate change.
- Adoption of OECD Recommendation will provide a formal framework for assessing approaches to financial management in a holistic way – and an opportunity to build on the lessons from these case studies.
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