



**Asia-Pacific  
Economic Cooperation**

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Session: 5

## **Overview of Disaster Risk Financing in APEC Economies**

Submitted by: OECD



**APEC**  
PHILIPPINES  
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**Seminar on Disaster Risk Finance – APEC  
Roadmap for Resilient Economies  
Bacolod, Philippines  
29-30 April 2015**



# DISASTER RISK FINANCING IN APEC ECONOMIES

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APEC Seminar on Disaster Risk Finance  
29-30 April 2015



# Disaster Risk in APEC Economies

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- APEC economies are particularly prone to natural disasters

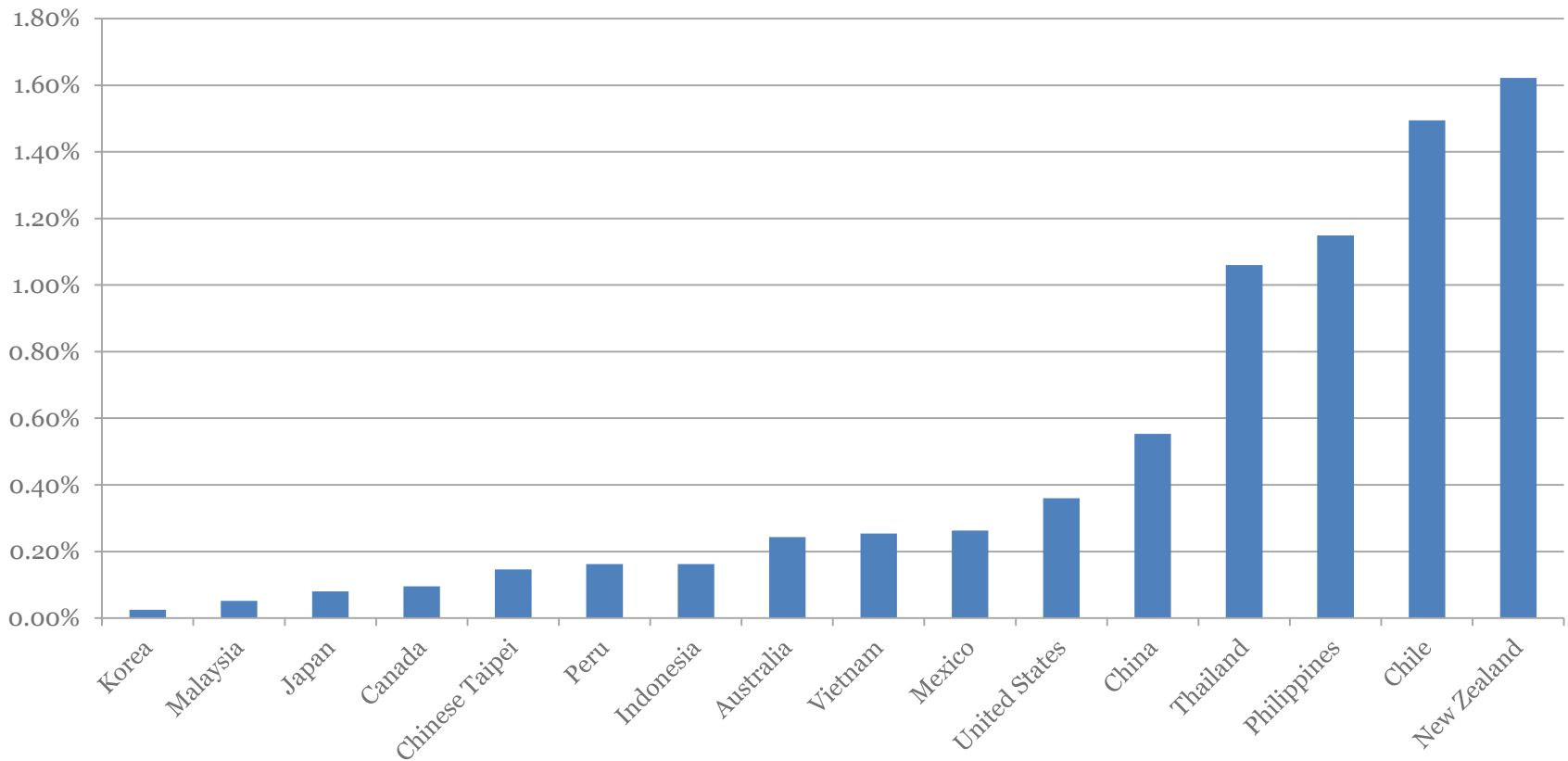
*55% of significant\* natural disaster events between 2005 and 2015 occurred in APEC economies causing average annual economic losses of USD 114 billion across APEC economies*

\* Based on natural catastrophes reported in Swiss Re annual *sigma* reports.



# Economic costs are significant in many APEC economies

Annual average economic losses\* from natural catastrophes as a share of GDP (2005-2014)

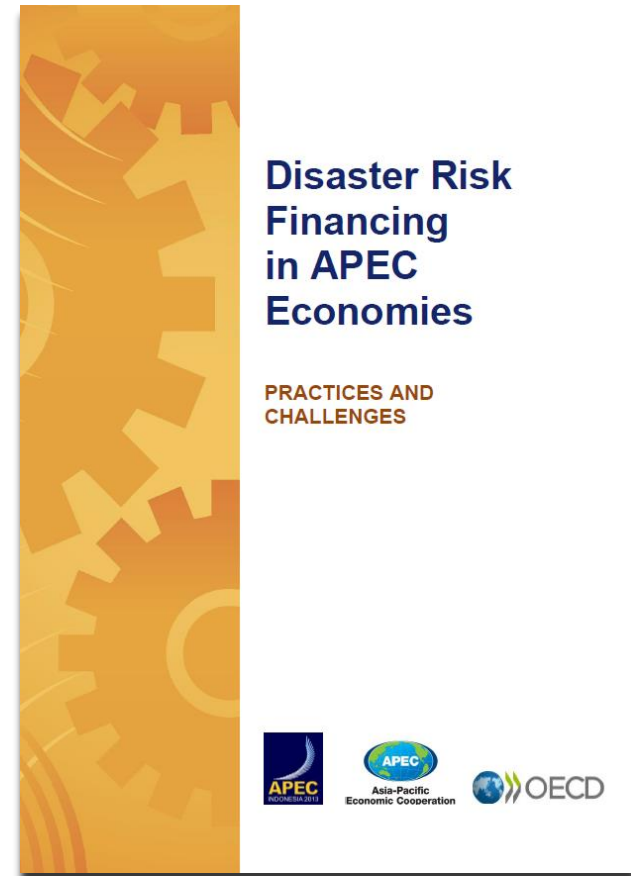


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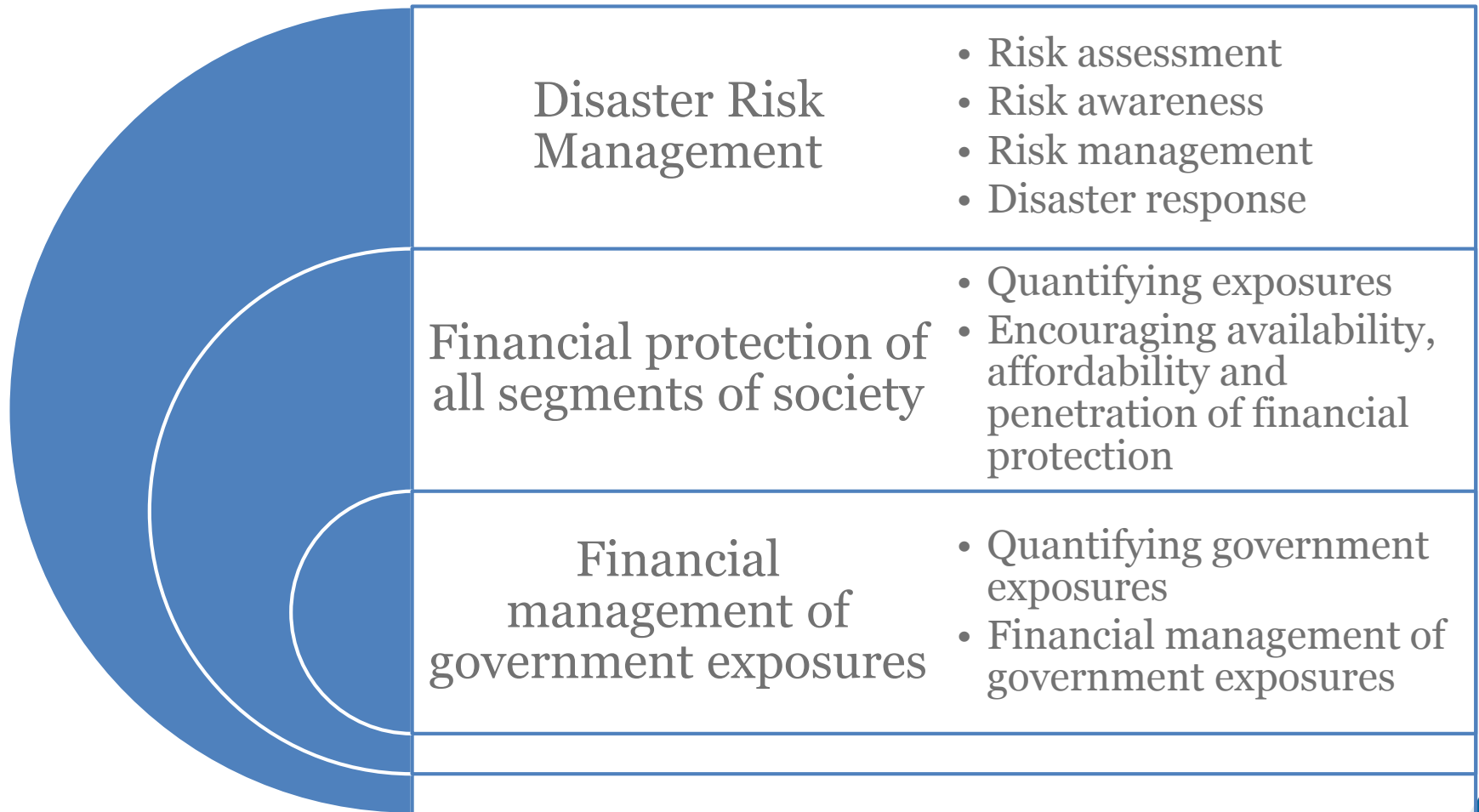
# APEC Finance Minister DRF initiative

- Based on a survey circulated to APEC economies, the OECD prepared a report on practices and challenges in disaster risk financing (delivered to APEC Finance Ministers in September 2013)





# Enhancing financial resilience: the role of disaster risk financing strategies





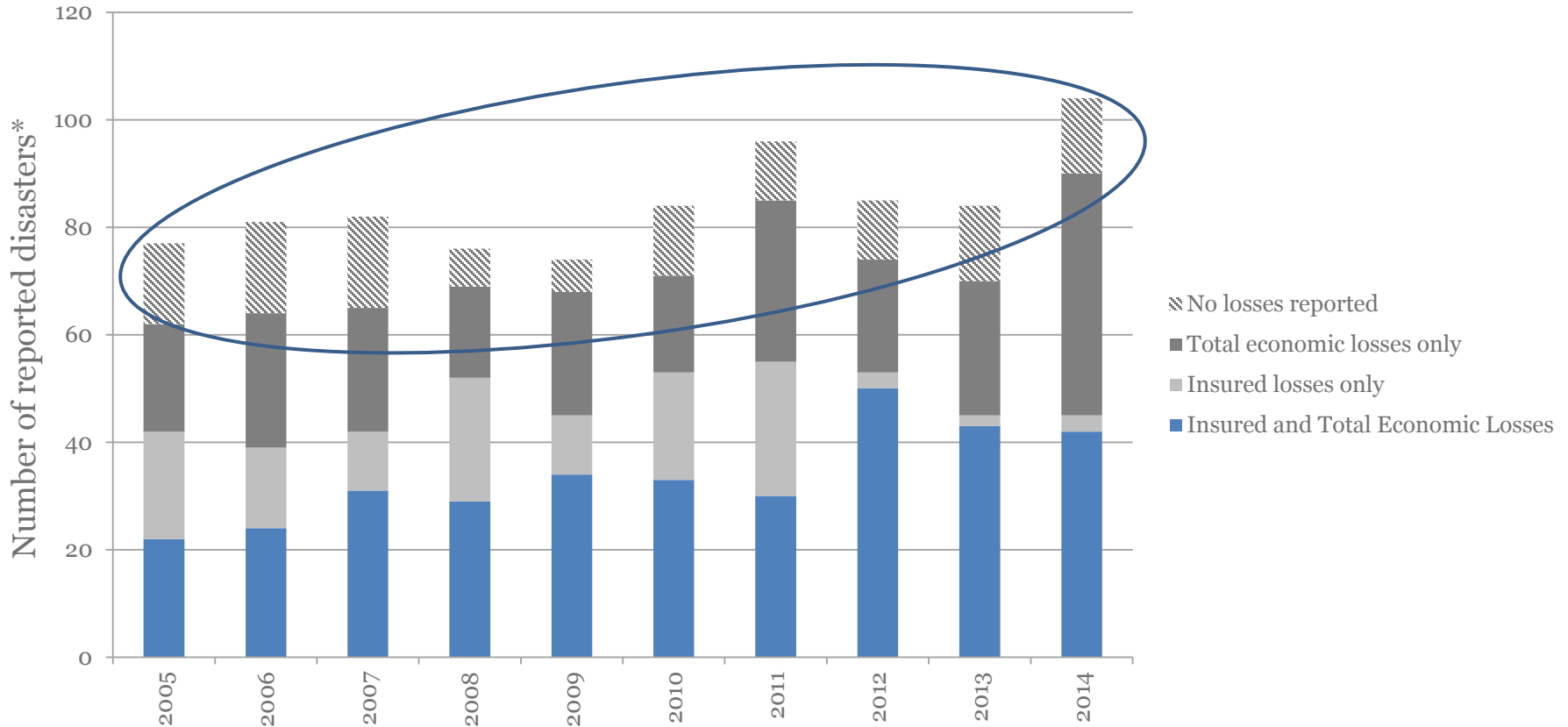
# DRF Practices in APEC: Quantifying exposures

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- APEC economies are assessing risks based on:
  - Scenario development
    - Canada's All Hazards Risk Assessment
    - Japan's analysis of potential major events such as Tokyo Inland Earthquake
  - Modelling potential damage and losses
    - Mexico's MultiCat program
    - Estimates of PML in Indonesia, Peru
    - Modelling of risks to public assets in the Philippines
    - US SAFRR models



# Comprehensive loss data for quantifying exposures is not always readily available



*Both insured and total economic losses available for only 40% of all natural disasters in APEC economies while no data is available for 15% of all disasters*

\*Based on natural catastrophes reported in Swiss Re annual *sigma* reports.





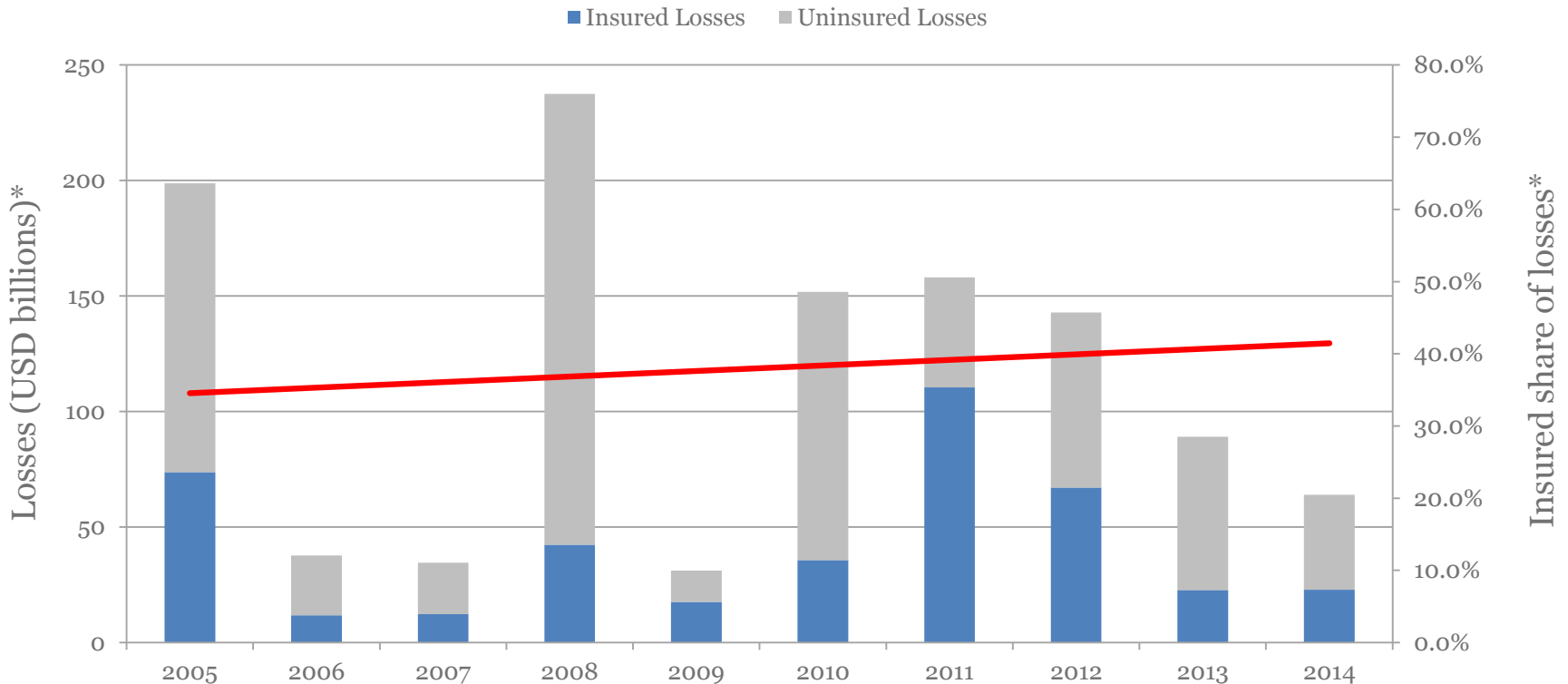
# DRF Practices in APEC: Encouraging financial protection

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- APEC economies are encouraging the availability, affordability and penetration of financial protection:
  - Supporting private insurance capacity for high-risk/high-frequency risks (e.g. public (re)insurance schemes (such as JER, NCIP, TREIF, NFIP, EQC) or insurance sector risk pools (such as PT Asuransi MAIPARK))
  - Investing in risk mitigation to support insurability/affordability (e.g. Australia)
  - Enhancing risk awareness and tailoring products to support insurance penetration (e.g. micro-insurance initiatives in Peru (EENIP))



# Significant losses remain uninsured



*While the share of insured losses is increasing...approximately 63% of reported total economic losses in the APEC region were uninsured.*

\*Based on natural catastrophes reported in Swiss Re annual *sigma* reports.



# Government exposures to disaster risks

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- Governments are exposed to disaster risks as a result of:
  - Costs of relief, recovery, and reconstruction of public infrastructure
  - Payments under public compensation and financial assistance arrangements to individuals, business and/or other levels of government
  - Where applicable, exposures to insured losses as a result of public (re)insurance or guarantees
  - Potential residual exposures as a result of unanticipated financial assistance (e.g. unplanned assistance as a result of insufficient financial capacity among other levels of government, financial institutions or particular segments of society)
  - The potential impact of a deterioration in macro-economic conditions



# DRF Practices in APEC: Management of government exposures

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- A number of economies have entered into arrangements to manage fiscal exposures:
  - Insurance of public assets in some economies
  - Establishment of reserves and access to financing through contingent credit facilities (e.g. Philippines, Peru)
  - Risk transfer arrangements covering fiscal costs in a few economies:
    - Mexico's cat bond and reinsurance arrangements
    - Pacific catastrophe risk insurance pilot



# Key priorities

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- APEC economies identified a set of key priorities for strengthening financial resilience:
  - Improving the availability and quality of data on hazards, exposures, vulnerabilities and losses
  - Enhancing technical and institutional capacities in disaster management, disaster risk assessment and risk financing
  - Enhancing coordination among stakeholders at the national level and risk assessment at the regional and international levels
  - Improving the resilience of the financial sector to disaster events
  - Promoting awareness of the financial impacts of disasters and the need for financial protection
  - Securing fair, timely and efficient disbursement of funds
  - Fostering the development of DRF markets including insurance, reinsurance and micro-insurance markets
- APEC economies have also stressed the value of strengthened cooperation and knowledge/information exchange among APEC economies on DRF strategies



## OECD INSTRUMENTS AND GUIDANCE

*OECD COUNCIL RECOMMENDATION ON THE GOVERNANCE OF CRITICAL RISKS*

*G20/OECD METHODOLOGICAL FRAMEWORK FOR DISASTER RISK ASSESSMENT AND RISK FINANCING (2012)*

*OECD COUNCIL RECOMMENDATION ON GOOD PRACTICES FOR MITIGATING AND FINANCING CATASTROPHIC RISKS (2010)*

*OECD POLICY HANDBOOK ON NATURAL HAZARD AWARENESS AND DISASTER RISK REDUCTION EDUCATION (2009)*



## SELECTED OECD REPORTS

*Disaster Risk Financing in APEC Economies: Practices and Challenges (2013)*

*Catastrophe Financing for Governments, Learning from the 2009-2012 MultiCat Program in Mexico (2011)*

*Designing Optimal Risk Mitigation and Risk Transfer Mechanisms to Improve the Management of Earthquake Risk in Chile (2011)*

*Risk Awareness, Capital Markets and Catastrophic Risks (2011)*

*Financial Management of Large-Scale Catastrophes (2008)*

*Catastrophic Risks and Insurance (2005)*

*Large-Scale Disasters: Lessons Learned (2004)*



## Ongoing OECD Support for APEC

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- Publication of global survey report on DRF practices and challenges
- Update of OECD guidance on disaster risk financing (*OECD Recommendation on Good Practices for Mitigating and Financing Catastrophic Risks*)
- Developing effective approaches
- Report on quantifying catastrophe losses and risk exposures (proposed)





# *Disaster Risk Financing: A Global Survey of Practices and Challenges*

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- OECD is building on the report provided to APEC Finance Ministers to publish a global survey of DRF practices and challenges, covering:
  - Assessment of disaster risks, financial vulnerabilities and the impact of disasters (scenario-based assessment and modelling of disaster exposures)
  - Private disaster risk financing tools and markets and the need for financial preparedness (measures to support disaster insurance demand and supply, including public-private partnerships and approaches targeted to vulnerable populations such as small enterprises and farmers)
  - Government compensation, financial assistance arrangements and sovereign risk financing strategies (funding to assist vulnerable populations and sub-national governments and options for managing government exposures)



## Update to *Good Practices for Mitigating and Financing Catastrophic Risks*

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- Revised Recommendation likely to focus on two main components of DRF strategies:
  - Effective financial protection of all segments of society
  - Effective financial management of government exposures
- Supported by overarching principles for effective financial management of disaster risks (e.g. integrated DRM framework, attention to incentives)



# Development of effective approaches

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- APEC Finance Ministers asked IOs to *“continue working with APEC member economies in providing capacity building, introducing good practices and identifying effective approaches that will help address key APEC priorities related to DRF.”\**
- OECD plans to organise a seminar in the fall (October) in Asia to support the development of effective approaches to:
  - managing fiscal risks;
  - supporting the development of disaster insurance markets

\*21st APEC Finance Ministers’ Meeting: Joint Ministerial Statement (2014)



## Quantifying catastrophe losses and risk exposure (proposal)

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- Guidance and case studies on quantifying losses and risk exposures and using this information to support risk transfer
- The completion of this work would require contributions from APEC economies:
  - Completion of a short questionnaire
  - Support for the development of case studies



Thank you

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