ASSESSING THE REAL COST OF DISASTERS

The need for better evidence

11th EU Loss Data Workshop

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Most OECD countries periodically exposed to intensive natural hazards & man-made threats

Resilience in OECD countries high, but higher income countries still experience high losses

But: disaster loss data needed to fully account for these shocks remain incomplete
OECD work on the cost of disasters: activities

Assessing the real cost of disasters

Disaster-related contingent liabilities in public finance frameworks
OECD work on assessing the real cost of disasters

→ Enhance understanding of countries’ practices in assessing the cost of disaster: policies for disaster risk management can only be effective if they are grounded in solid evidence

→ Support OECD Recommendation: “…to develop comparative analysis and standardised data for use in designing and tracking DRM policies”

→ Inform ongoing international efforts:
  - Sendai: improve monitoring of indicators to measure progress in reducing disaster impact
  - SDGs: reduce the social and economic impacts of disasters, specifically in urban areas
  - APEC Cebu Action Plan: fostering financial resilience in the APEC region
DISASTER IMPACT DATA
Assessing the real cost of disasters: The Status quo

Many OECD & partner countries collect disaster loss data …

<table>
<thead>
<tr>
<th>Country</th>
<th>Host institution</th>
<th>Hazards</th>
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</thead>
<tbody>
<tr>
<td>Australia</td>
<td>No centralized national repository, but various databases</td>
<td>Natural</td>
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<tr>
<td>Austria</td>
<td>No centralized national repository, but sectoral repositories for different ministries</td>
<td>Natural</td>
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<tr>
<td>Canada</td>
<td>Public Safety Canada</td>
<td>Natural &amp; man-made</td>
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<tr>
<td>Colombia</td>
<td>Unidad Nacional para la Gestión del Riesgo de Desastres</td>
<td>Natural</td>
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<tr>
<td>Costa Rica</td>
<td>Ministry of Economic Policy and National Planning (MIDEPLAN)</td>
<td>Natural</td>
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<tr>
<td>Finland</td>
<td>No centralized national repository, but sectoral repositories for different ministries</td>
<td>Natural &amp; man-made</td>
</tr>
<tr>
<td>France</td>
<td>Observatoire national des risques naturels</td>
<td>Natural</td>
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<tr>
<td>Japan</td>
<td>No centralized national repository, but sectoral repositories for different ministries</td>
<td>Natural</td>
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<tr>
<td>Mexico</td>
<td>National Disaster Prevention Centre (CENAPRED)</td>
<td>Natural &amp; man-made</td>
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<tr>
<td>Poland</td>
<td>Ministry of the Interior and Administration</td>
<td>Natural</td>
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<tr>
<td>Slovak Republic</td>
<td>Ministry of Interior and Ministry of the Environment</td>
<td>Natural</td>
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<tr>
<td>Slovenia</td>
<td>Administration for Civil Protection and Disaster Relief, Ministry of Defence</td>
<td>Natural</td>
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<tr>
<td>Sweden</td>
<td>Swedish Civil Contingencies</td>
<td>Natural</td>
</tr>
<tr>
<td>Switzerland</td>
<td>No centralized national repository, but sectoral repositories for different ministries</td>
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<td>Turkey</td>
<td>Disaster and Emergency Management Authority</td>
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</tr>
</tbody>
</table>

Source: Data submitted to authors as part of the 2016 OECD survey; OECD (forthcoming)
Assessing the real cost of disasters: The Status quo

... but data comparability is not a given

Thresholds for collecting disaster impact data

- 29% Yes
- 41% No
- 12% Don't know
- 29% N/A

Distinction between publicly and privately accrued damages

- 41% Don't Know
- 29% n.a.
- 18% No
- 12% Yes

Are direct and indirect losses separately accounted?

- 25% Always
- 25% Don't know
- 19% n.a.
- 19% Never
- 19% Sometimes

- Aggregated disaster loss figures may make it easy to hide who faced the brunt of disaster losses, hampering effective disaster risk reduction.

- Disaster loss data collection efforts lack common language.
Where to reinforce disaster loss data collection efforts?

Damages to infrastructure and businesses & their cascading effects

→ Critical infrastructure failure = cause of triggering cascade effects of major disasters

→ Disaster related business interruption & supply chain disruptions may resonate far beyond directly affected areas

→ Most countries report only damages, although sometimes estimations on indirect losses are made for large-scale disasters
Where to reinforce disaster loss data collection efforts?

The value of disaster loss data collected by non-government agencies

→ Data on insured losses often more comprehensive, systematically recorded
→ Can provide a basis for estimating overall economic losses
→ Public-private partnerships as an innovative pathway to improve information sharing between public authorities and private organisations

Example: National Observatory of Natural Risks (ONRN)
DISASTER EXPENDITURE DATA
Why track disaster risk management expenditure?

Governments often shoulder a significant share of the costs of disasters …

→ Public spending on the rehabilitation and recovery of public & private assets

→ Potential major fiscal impact, especially due to limited systematic quantification and disclosure of disaster-related contingent liabilities

→ Disaster loss data useful for informing in the development of *ex ante* financing tools

→ Public spending on disaster risk prevention & mitigation & disaster response

OECD/WB cross-country study on managing disaster-related contingent liabilities
Assessing the real cost of disasters: The Status quo

... but policymakers rely on an incomplete picture of their country’s spending on disaster risk management

- Available data focuses predominantly on specific spending categories & central government spending
- Multitude of stakeholders with different disaster risk management roles and responsibilities
- Disaster risk management expenditure not always earmarked in public accounts/budgets
- Embedded disaster risk management expenditure

Is information on DRR expenditure collected?

- Yes 41%
- No 12%
- N.a. 47%
Effectiveness of DRR measures depends strongly on the capacity to understand disaster risks & their impacts.

**Objective:**

- Identifying good practices in the assessment of costs and benefits of investments in *ex ante* disaster risk management.
- Analyzing their use in informing risk management policy priorities.

Upcoming OECD cross-country project on evaluating the economic efficiency of DRR investments.
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