Overview of Japan’s Earthquake Insurance

- Started in 1966
- Insurance coverage: Residential buildings and/or household goods
- Loss to be indemnified: Losses caused by any earthquake, volcanic eruption, or resulting tsunami
- Insurance liability is shared between private insurers and the Government (Reinsured by the Government); private insurers selling the insurance to individuals having residential properties
- An earthquake insurance is automatically attached to a fire insurance policy (unless policyholders opt out)
Data on Earthquake Insurance

- Red triangle: Proportion of households that hold an Earthquake Insurance policy
- Black square: Proportion of Earthquake Insurance policies attached to fire insurance policies

In principle, automatically attached to a fire insurance policy.

Mar. 2011
Great East Japan Earthquake

Mar. 2018
63.0%

Apr. 2016
Kumamoto Earthquake

March 2018
31.2%

Jan. 1995
Great Hanshin Awaji Earthquake

Months

March 1991
April 1996
May 2000
June 2004
July 2008
August 2012
September 2016

Jan. 1995
Great Hanshin Awaji Earthquake

March 2011
Great East Japan Earthquake

April 2016
Kumamoto Earthquake

March 2018
31.2%

Liability of Government (in excess of reserves)

Liability of Private Sector (in excess of reserves)

Reserves of Government

Reserves of Private Sector

Reserves of Private sector

Aggregate limit of indemnity
1) All the major insurers teamed up and physically collaborated.

● They were checking their clients in the disaster areas and reaching out to each of them (in shelters, etc.) for claim payments.

⇐ Many lost residences and contract documents.

● What else were they doing?
In order to calculate payment amounts, they were assessing damage.

There were working with 2 more new initiatives.
2) **They used new technology (aerial and satellite photos) to determine the “total loss areas (TLAs) (to which claims are fully paid).”**
3) **Claims were processed through streamlined procedures, without on-site surveys.** All the residents in TLAs received full claim payments. For other areas, the scale of damage was assessed only by self-declaration and/or photos.
Result: More than 90% of the total claims were paid within 3 months after the earthquake.
Solid disaster insurance scheme sustains growth.

Why does it have implications for growth?

-- 1) Lack of reserves (accumulated premiums) for the insurance would result in either of:

  · uncompensated losses of assets held by households / business adversely affect economic activities (investment and consumption);
  
  or

  · the increased fiscal deficit due to subsidized loans/grants provided to affected households is financed by issuance of more government bonds, thus leading to a rise in bond yields.

-- 2) Solid disaster insurance scheme with an appropriate coverage provides foreign investors with a good safety net and attracts foreign investment, which is crucial for sustainable growth.
SEADRIF (Southeast Asia Disaster Risk Insurance Facility)

- SEADRIF has been developed to address disaster risks of ASEAN countries.
- All ASEAN+3 members are invited to join SEADRIF. Currently Cambodia, Indonesia, Japan, Lao PDR, Myanmar and Singapore are SEADRIF members.
- A SEADRIF scheme for Cambodia, Lao PDR and Myanmar with a common risk pool is being established.
Traditional disaster insurances aim to indemnify the losses of insured properties, after assessment of actual losses incurred.
SEADRIF’s parametric insurance doesn’t cover specific properties. Payouts are made quickly upon the occurrence of predetermined triggering event without damage assessment.
This parametric approach would complement domestic insurances for reconstruction of properties.
How the SEADRIF Scheme Works (2)

〈How to Determine Payout and Premium〉

(a) Determine the frequency of disaster to be covered by the joint risk pool (e.g. 1-in-10-years for the SEADRIF scheme for LCM), to be uniformly applied to all the participating countries.

(b) Each country determines the type(s) of disaster (e.g. flood).

(c) Payout for each country is determined as defined by (a) and (b), based on the history of the disasters in the country.

[example] Assume a joint risk pool for 3 countries to insure against 1-in-30-year disaster.

<table>
<thead>
<tr>
<th>Country</th>
<th>Covered Risk</th>
<th>Necessary Payout</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Flood</td>
<td>500</td>
</tr>
<tr>
<td>B</td>
<td>Earthquake</td>
<td>300</td>
</tr>
<tr>
<td>C</td>
<td>Drought</td>
<td>100</td>
</tr>
</tbody>
</table>

(d) Given the uniform frequency, a uniform premium-to-payout ratio is determined through actuarial calculation. Given the payout amount determined by each country and the premium-to-payout ratio, premium can be calculated.