Catalyzing the APEC Market for Catastrophe Bonds
Cat bonds: A way for capital market investors to contribute to DRFI

Structure of a cat bond transaction

Sponsor (Sovereign or ceding insurer) → SPV

Premiums → Collateral Account

Investment return → Liquidation proceeds

Investment

Principal (at maturity) → Investors

Note proceeds → Coupon

(Source: RMS, WBG, AHL)
Cat bonds are very attractive to investors

- Cat bonds have not posted a negative annual return since the Swiss Re Cat Bond Total Return Index began in 2003. (Bloomberg)

- Cat bonds: a niche asset class representing a small fraction of disaster capital, which stands at approx. $350B.
The Pacific Alliance Cat Bond

The World Bank issued bonds that collectively provide US$ 1.36 billion in earthquake protection to Chile, Colombia, Mexico and Peru.

Jointly led by Swiss Re, Aon and Citi, and modeled by AIR Worldwide, the Pacific Alliance Cat Bonds are notable for:
- the largest sovereign risk insurance transaction ever,
- the second largest issuance of in the history of the cat bond market,
- the first time for Chile, Colombia and Peru to access the capital markets to obtain insurance for natural disasters,
- received strong demand from the market with over 45 investors from around the world, and almost US$ 2.5 billion of investor orders.

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<thead>
<tr>
<th></th>
<th>Chile</th>
<th>Colombia</th>
<th>Mexico A</th>
<th>Mexico B</th>
<th>Peru</th>
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<tbody>
<tr>
<td>Issuer</td>
<td>International Bank for Reconstruction and Development (IBRD)</td>
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<tr>
<td>Issue Size</td>
<td>$ 500M</td>
<td>$ 400M</td>
<td>$ 160M</td>
<td>$ 100M</td>
<td>$ 200M</td>
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<td>Settlement</td>
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<td>7 Feb. 2018</td>
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<td>Maturity Date</td>
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<td>Bond Coupon</td>
<td>3-month USD LIBOR + Funding Margin(-0.20 per cent per annum) + Risk Margin (per annum)</td>
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<tr>
<td>Risk Margin</td>
<td>+2.50 per cent</td>
<td>+3.00 per cent</td>
<td>+2.50 per cent</td>
<td>+8.25 per cent</td>
<td>+6.00 per cent</td>
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<td>(per annum)</td>
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<td>Covered Peril</td>
<td>Earthquake Event</td>
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Example of steps toward a regional cat bond

- Organise a team of finance ministry officials from potential sponsor economies.
- Deepen understanding on holistic national disaster risk reduction framework per relevant economy.
- Types of notorious peril in the APEC region includes: windstorm, flood, landslide, earthquake, tsunami, volcanic eruption, and wildfire.
- Independent risk modeling agent (cat modeling firm)
- Legal counsel (regulatory compliance for a securities offering)
- Structuring agent (investment bank, capital market player)

- Run cat models to project the relevant risks.
- Probability of attachment, probability of exhaustion, expected loss, loss distribution, historical simulations, among others.
- Some jurisdictions are developing infrastructure to facilitate the organization of SPVs.

(Compiled from various sources, including RMS, AIR Worldwide)
ABAC’s work on catalyzing the APEC cat bond market

- 3 March ABAC Meeting (Atlanta)
  ABAC Strategic Discussions on Cat Bonds

- 7-8 March FCBDM (Santiago)
  WG on DRFI Solutions meeting

- 21 June Insurance Development Forum (Singapore)
  Open dialogue on cat bonds with disaster risk experts issuers and market regulators

- 11 July ILS Asia 2019 (Singapore)
  Open dialogue on cat bonds with potential investors

- 25 July ABAC Meeting (Hangzhou)
  Finalization of ABAC’s recommendation on catalyzing the APEC cat bond market

- 14-15 Oct. AFMM (Santiago)
  ABAC presentation at the APEC DRFI Conference
Proposed themes of June 21 and July 11 sessions

June 21 IDF session

- Focus: Catbond role in DRFI strategy in Asia
- Target outcome: to confirm the need and readiness of Asia to start tapping the catbond market
- Moderator: JC Parrenas
- Presentation on DRFI in Asia and role of Catbond (including how it could relate to SEADRIF): Masaaki Nagamura
- Presentation on prospects for Asian cat bond issuance (including Singapore’s plan to promote catbond issuance in its market): MAS
- Presentation on the Philippine case - rationale for issuing catbond and its role in DRFI strategy: Philippine Official
- Presentation on the use of catbonds in the US from hurricanes: Morgan Stanley
- Presentation on the case of the Pacific Alliance cat bond as a model for Asia: Citi

July 11 ILS session

- Focus: Investors’ views
- Target outcome: to confirm the interest of major investors in investing in Asian catbonds
- Moderator: To be provided by Artemis
- Presentation on the World Bank’s perspectives on Asian catbonds: Michael Bennett, World Bank
- Presentation on ABAC/APEC’s work on catbonds: JC Parrenas
- Comments on how they would view Asian catbonds: 3-4 asset management company representatives