Role of Parametric Insurance in Climate Resilience: Bermuda’s Supervisory Experience

Presentation to the NAIC Innovation Workstream of the Climate & Resilience Task Force

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Agenda

• Parametric Insurance – Tool for Climate Resilience

• Bermuda’s Supervisory Experience
  • Parametric Insurance & Capital Markets
  • Tailored Supervisory Approach
  • Parametric Insurance - Basis Risk & Outlook
Parametric Insurance – Tool for Climate Resilience

- Extreme weather events occur with greater frequency and impact, BMA is seeing more parametric insurance solutions.

- Harder to rely on historical weather data alone to predict climate-related weather risks - increasingly complex and unpredictable.

- Predefined triggering event & payment - if an event (e.g., hurricane, earthquake) hits the defined trigger level for the index/measurement reflecting the peril in question, contract pays out according to a predefined scheme.
Alternative risk solutions that enable organizations to finance or to transfer risk in a non-traditional way – do not necessarily require physical damage to occur.

ILS/Capital markets able to engage more easily with parametric structures:
- Sophisticated from a modelling point of view
- Innovative designing customized solutions with uniquely tailored index and pay-out structure aligned with economic exposure
- Cat, Earthquake etc.

Addressing coverage gaps (e.g. non-damage business interruption) in a cost efficient manner – Institutional investors (e.g. pension funds) with appetite to deploy capital if attractive risk adjusted return thresholds are met.
Parametric Insurance & Capital Markets: Alternative Capital - Bermuda vs Global

Parametric Insurance & Capital Markets: Motivations for Participating in ILS

Investors

- Low correlation to the traditional capital markets
- Attractive risk-adjusted returns
- Innovative ILS – e.g. Cat bonds can be listed/liquid
- Short term duration – typically 1-3 years

Cedants

- Access to additional cost effective capacity coverage – e.g. peak zones
- Multi-year contracts adds price stability (2-3 year deals)
- Credit risk/diversification of capacity
- ‘Partnership’ to remain relevant, earn fees
Tailored Supervisory Approach – Policyholder Protection

- Collateral to full policy limits
- Trust account or collateral accounts
- Investment strategy is “cash and cash equivalent”
- Clear/incontrovertible and effective contractual language
- Loss triggers and events are clearly defined
- Premium and interest structures are clearly defined
- Independent parties in place to adjudicate on loss events
- Funding is available for the operating costs of the SPI

Parametric Insurance: Basis Risk

**Indemnity**
- Requires loss (claims) adjustment process
- Pays on actual loss
- Cost of loss adjustment
- Payment delays due to loss adjustment

**Parametric**
- Payment upon triggering event
- Fast payments
- Simple, transparent
- Basis Risk
Parametric Insurance - Basis Risk & Outlook

• Form - derivative without changing the substance of the underlying risk, thus rendering such risks to differ in no way from those common in the traditional reinsurance market

• Substance/Functionality:
  – Supervisory focus: the relative uncertainty of the relevant trigger
  – Policyholder exposure, close relationship between the trigger and exposure
  – Parametric solutions complement rather than replace traditional indemnity products
  – Customized wordings based on specific needs of policyholder, typically aligned with wider insurance program.
  – Structuring challenges - how to design and adapt to specific needs
  – Risk that an unusual event does not trigger payment

• Outlook
  – Parametric covers will continue to grow
    • climate risks, protection gap, data analytics
Questions?