

## Considerations for Purchasing Coverage Backed by Catastrophe Bonds

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## Catastrophe Bonds Function as One Type of Reinsurance

	Traditional Reinsurance	Collateralized Traditional	Industry Loss Warranties	Catastrophe Bond – Backed Reinsurance
Available Capacity	Significant	Moderate	Moderate	Moderate
Regions/Perils	Nearly all	Nearly all	Wherever industry losses are reported	Most modeled regions/perils
Pricing (relative to Traditional Reinsurance)	--	Slightly higher	Comparable unless capacity is tight	Historically more expensive, but spreads are tightening; considerable expenses
Triggers	Indemnity	Indemnity	Index	Indemnity, Index, Modeled Loss, Parametric
Basis Risk	Minimal	Minimal	Moderate (but can be reduced)	Varies by trigger
Term	Typically 1 year	Typically 1 year	Typically 1 year	Typically 3 or 4 years
Ease of Placement	Simple	Simple	Simple	Difficult



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## Each Catastrophe Bond Trigger Type Carries Different Types of Risk

- Indemnity
  - Based entirely on sponsoring company's losses
- Index
  - Based on reported losses from independent organizations, i.e., PCS in U.S. / Canada or PERILS in Europe
  - Basis risk can be reduced by increasing fidelity (e.g., county-weighting)
- Modeled Loss
  - Utilizes objective post-event loss calculation based on third party model
  - Model loss calculation is often dependent on available parameters of an event
- Parametric
  - Can be either 1<sup>st</sup> or 2<sup>nd</sup> generation
  - Based on available parameters of event



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### Bonds Can Utilize Different Reset Mechanisms

- Most bonds use a standard reset
  - Matched attachment probability
  - Matched expected loss
- However, recent transactions have introduced significant flexibility in their resets and can be based on
  - Expected loss ranges
  - Attachment probability ranges
  - Drop down



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### Catastrophe Bonds Also Offer Additional Benefits

- Fully collateralized (minimizing credit risk)
- Multi-year coverage
  - Offering stable pricing and guaranteed capacity
- Additional source of capacity beyond the traditional reinsurance market
- Flexible triggers and reset mechanisms



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### Bonds Are Typically Issued Through a Standard Process

- Company decides to sponsor a catastrophe bond and contacts service providers (broker/dealers, attorneys, modelers, rating agency, etc...)
- Deal team structures the transaction
- Offering materials are prepared and transaction documents are drafted
- Transaction is launched and marketed to investors
- Transaction documents are finalized and funds are transferred



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## Summary

- Catastrophe bonds can be used to supplement traditional reinsurance
- Provide additional flexibility through varied trigger types and reset mechanisms
- Can help reduce credit risk and provide long term, stable, guaranteed capacity
- Typically follow a standardized issuance process

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