Using Cat Bonds

Why use cat bonds?

- Diversify suppliers for a key purchase
  - Reduce reinsurance market disruption risk
  - Spread out effective dates of coverage
- Access broader capital base
  - More capacity at similar prices to traditional reinsurance
- Longer-term protection
  - Multi-year term reduces immediate impact of swings in market pricing
- Manage credit risk

Are your own losses the trigger?

- Indemnity trigger
  - Ex: You recover if Your Loss > $250MM
- Parametric trigger
  - Ex: You recover if Wind Speed > 120 mph
- Industry loss trigger
  - Ex: Your market share is 1%
  - You recover if Industry Loss > $25B

- Benefits of industry or parametric trigger
  - Simplify disclosure to investors
  - Relieve investors of worry about the quality of the sponsor's book

- Downside of industry or parametric trigger
  - "Basis Risk": The risk that your losses exceed what you would have expected based on parametric or industry loss data
  - You may suffer a large loss, but recover nothing
- Who will bear the basis risk?

- Compare your losses in past events to
  (Market Share) x (Industry Loss)
- Check exposure maps for "hot spots"
- See how your modeled share of industry loss varies among events and among models
- Think about non-modeled loss sources
- Analyze book by segment to understand drivers of basis risk
- Customize industry or parametric trigger
  - Use factors by geographic region and/or peril to compute trigger amount

Risk-free rate

- Investor gets “risk-free rate” plus spread
  - Spread comes from reinsurance premium
  - Swap provides the risk-free rate
  - Recent problems with cat bond swaps
- How do we get a risk-free rate now?
  - Enhance traditional swap mechanism
  - Short-term government-backed securities
  - Try to duration-match securities
  - Custom-designed securities