

Emerging Risk Subcommittee

Cyber
Mortgage

Cyber Insurance – Why the Interest?

- Have you been involved in a Data Breach?
- Coverage for E-Commerce
- Premium Volumes to Grow
 - US Premium – \$1.5B-\$3B Currently → Forecasted @\$20B in 2025 (Allianz)
- Publicity
 - Data Breaches
 - Internet Attacks
- Daunting Potential Losses

Cyber Loss Potential

- Data Breach
- Business Interruption
 - Ransomware
 - Distributed Denial of Service (DDoS)
- Physical Damage to Property
- Theft of Intellectual Property
- Privacy Liability (stemming from a Cyber Breach)

Headline Losses

- Data Breach → Target 2013
- Business Interruption
 - Ransomware → San Francisco Muni 2016
 - Distributed Denial of Service (DDoS) → Dyn Cyberattack 2016
- Physical Damage to Property → Stuxnet 2010
- Theft of Intellectual Property → Sony 2014 (Interview)
- Privacy Liability (stemming from a Breach) → Ashley Madison 2015

Cyber Insurance Coverage

- Data Breach
 - Forensics
 - Legal Costs
 - Breach Notification
 - Credit Monitoring
 - Regulatory Fees and Fines

Cyber Insurance Coverage

- Business Interruption
 - Identical to BI coverage – the trigger must be a defined Cyber event
 - Main concern for Reinsurers
 - Have not seen many losses yet (Amazon, Southwest)
 - Waiting period deductibles (e.g. 24 hours)
 - Ransomware
 - Cost of the Ransom (paid in Bitcoin)
 - Insurers help with procuring the currency

State of the Market

- 60+ carriers (US, London, Bermuda)
 - Less than a dozen primary writers
- 90-95% of business is in the US
- Softening rates for most industries
 - Hospitality and Healthcare are the exceptions
- Limited loss activity
- Reinsurance purchases
 - Embedded in the Professional Lines treaties
 - Stand alone treaties on the rise
 - Most of the reinsurance treaties are Quota Shares

Pricing Cyber Business

- Coverages that have had frequency can be priced
 - Limited number of insurance-specific data sources to do this
 - A large number of different product offerings and coverages provided
 - Standardized working and language are a work in progress
- Big Limits available are becoming less of an issue as insurers get comfortable with the risk
 - Companies can buy coverage up to \$500M if towers are assembled

Worldwide Focus on

- Infrastructure Attacks
 - Power Grid
- Airline Attacks
- Election Hacking
- E-Commerce
 - Percentage of Goods sold

Cyber Aggregation

- Companies concerned about overall exposure to Cyber
 - Cat Scenarios impacting multiple LOBs or insureds
- Cyber exposure exists in more than just “Cyber” policies
 - Silent Cyber
 - Aviation Insurance (all perils vs. named perils)
 - Property Cat
 - Sub-limited cyber coverage for property damage to data/systems and business interruption.

AIR Nightmare Scenarios

"Hurricane Andrew of Cyber" has yet to come

- Hacking of a Major Commercial Cloud Service Scenario
 - Satellite Radio / Netflix / Access to Software-Data / Really Hard to Know the Impact
- Power Blackout
 - BI losses across a large geographic area
 - The Northeast Blackout of 2003
- Breach of Major Credit Card Acquirer or Payment Processor
 - Consumer-> Merchant -> Acquirer/Processor -> Brand (e.g. Visa) -> Bank
 - The top five acquirers (Bank of America, Chase Paymentech Solutions, First Data, Citi Merchant Services, and Vantiv) together handled almost 58% of the transaction volume in 2011.
- Compromised System Software Scenario (e.g. Windows)