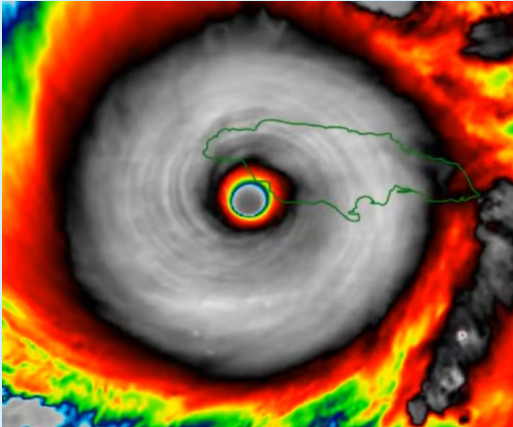


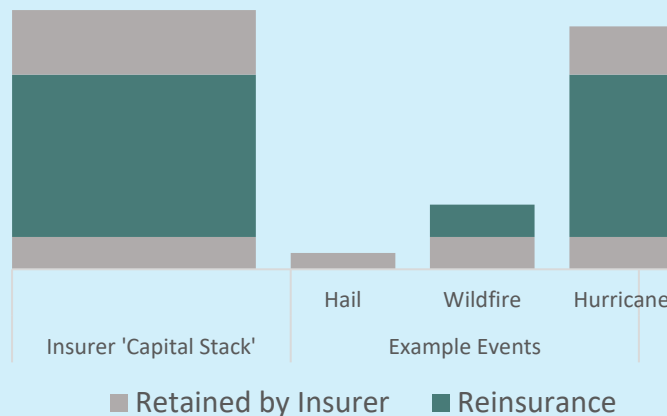
Introduction to Natural Catastrophe Reinsurance

Reinsurance: 'insurance for insurers'

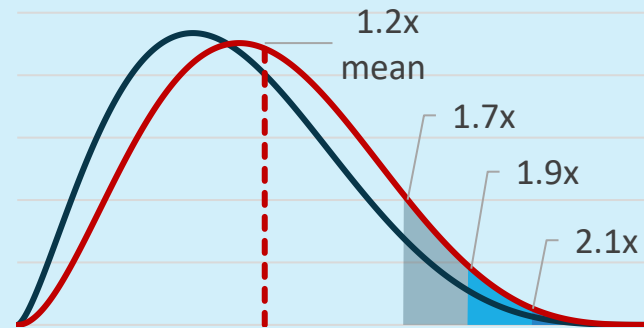


Hurricane Melissa 2025

'XoL' reinsurance – since c.1906



'Tail' risks are sensitive to mean state



Risk and capital in context¹

Risk

- Ian (2022) \$50bn
- LA Fires (2025) \$35bn
- Katrina (2005) \$60-80bn
- 'Worst case' HU \$750bn?

Reinsurance capital \$750bn

- (Nat cat is systemic)

Institutional capital \$80tn (\$100bn in reinsurance funds)

- (Nat cat is a diversifier)

Collaborative challenges

Technical

- Reinsurers are used to adapting to shocks (e.g. catastrophe models)
- We need physics (models) and data (observing system) to understand present and future risks

Financial

- Price the risk correctly:
 - Stability for consumers and capital
 - Drives adaptation/risk mitigation
- Reinsurance investments (funds) for institutional capital owners

Social

- (Re)insurance as a financial buffer in an uncertain world
- 'Protection gap'
 - E.g. US flood
 - Global: 30-40% of losses insured²

2. Integral ILS estimate based on review of sources including Swiss Re, Munich Re, Aon

1. Integral ILS estimates