

Navigating Emerging Risks and New Growth Frontiers in Asia Pacific

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01

The Risk Landscape

02

The changing risk distribution

03

From uncertainty to insurable growth

When Does a Traditional Risk Become an Emerging Risk?

Flood is familiar. The context around it is changing.

1 FAMILIAR PERIL



FLOOD

Traditional view

- River, flash and coastal flood
- Historical claims experience
- Established hazard models

The peril is known

2 EMERGING DRIVERS

What has changed?

- 1 CLIMATE VARIABILITY**
Changing rainfall and flood patterns
- 2 URBAN CONCENTRATION**
More value in flood-prone locations
- 3 INTERDEPENDENCE**
Power, transport and telecom links
- 4 NEW ASSET CLASSES**
Data centres, renewables and BESS

Exposure and vulnerability evolve faster than historical experience.

3 LOSS BEHAVIOUR

How losses respond

- 1 HIGHER UNCERTAINTY**
Past observations are less predictive
- 2 LARGER ACCUMULATIONS**
More assets affected simultaneously
- 3 FASTER PROPAGATION**
Infrastructure failure amplifies loss
- 4 NEW TAIL SCENARIOS**
Previously unseen combinations emerge

The shape and dependence of the loss distribution change.

Emerging risk is often a change in the loss distribution, not the invention of a new peril

Familiar perils

Flood is still flood; heat is still heat; liability is still liability.

Frequency & severity

Loss events are occurring more often and with greater intensity.

Correlation & accumulation

Interconnected exposures can create larger, simultaneous portfolio losses.

History is less predictive

Experience alone may no longer be a sufficient guide to future losses.



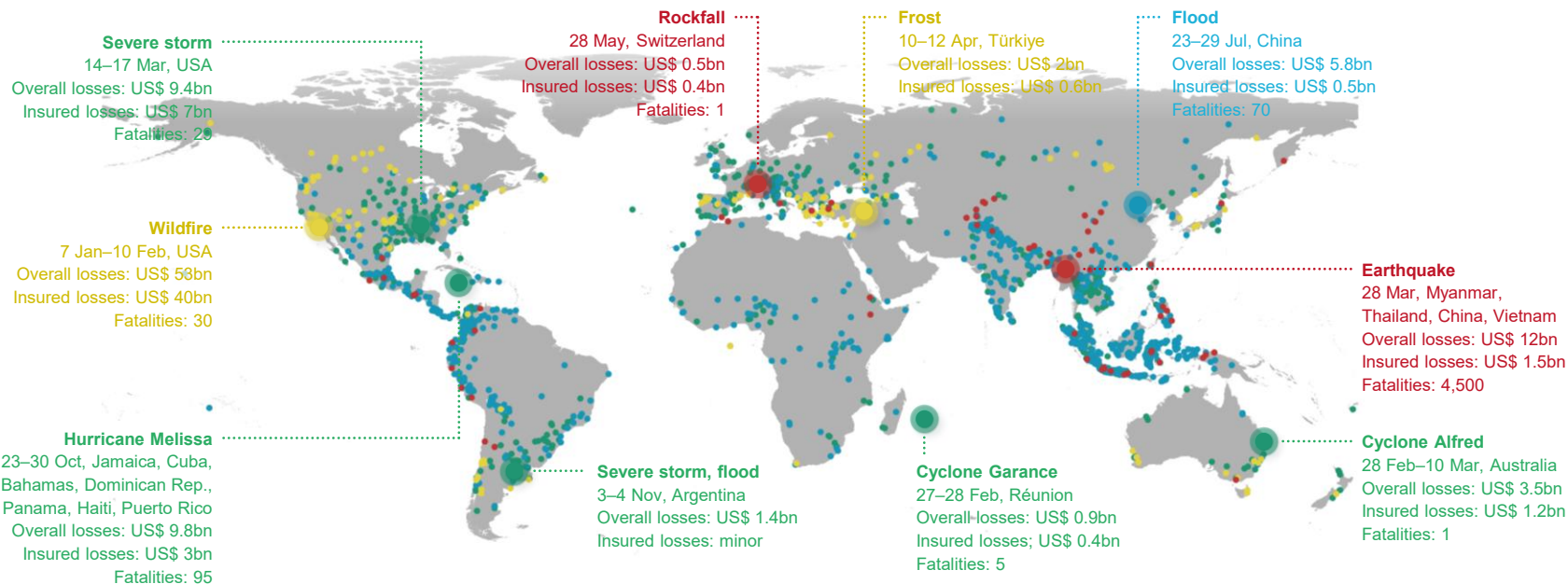
The Risk Landscape

High hazard intensity, concentrated exposure and uneven financial protection



The year that was...

Selected natural catastrophe loss events worldwide in 2025



Geophysical events

Earthquake, tsunami, volcanic activity, rockfall



Meteorological events

Tropical storm, extratropical storm, severe convective storm, local storm



Hydrological events

Flood, mass movement



Climatological events

Extreme cold temperature, wildfire



Selected significant catastrophes



Small, medium and large loss events

Wildfires, flooding, severe thunderstorms

Non-peak perils dominated natural disaster losses in 2025



■ Meteorological ■ Hydrological ■ Geophysical ■ Climatological

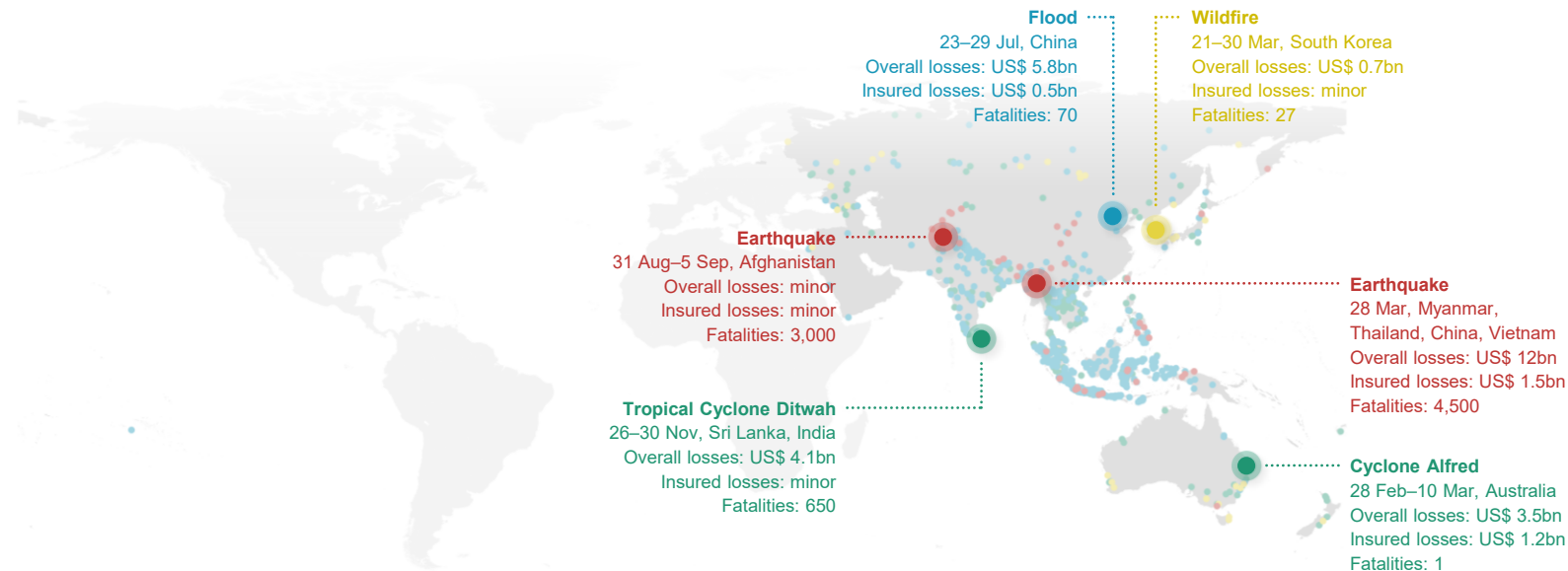
Worldwide, natural disasters caused overall losses of some US\$ 224bn in 2025 – lower than in 2024 and the 10-year average.

Insured losses exceeded the US\$ 100bn mark once again: Claims reached US\$ 108bn, of which >90% were caused by non-peak perils (e.g. wildfires, severe thunderstorms, floods).

LA wildfires were the costliest natural disaster of 2025: overall losses of US\$ 53bn and insured losses of US\$ 40bn.

Natural disaster figures for 2025

Selected natural catastrophe loss events in APAC



Geophysical events

Earthquake, tsunami, volcanic activity, rockfall



Meteorological events

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Hydrological events

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Selected significant catastrophes

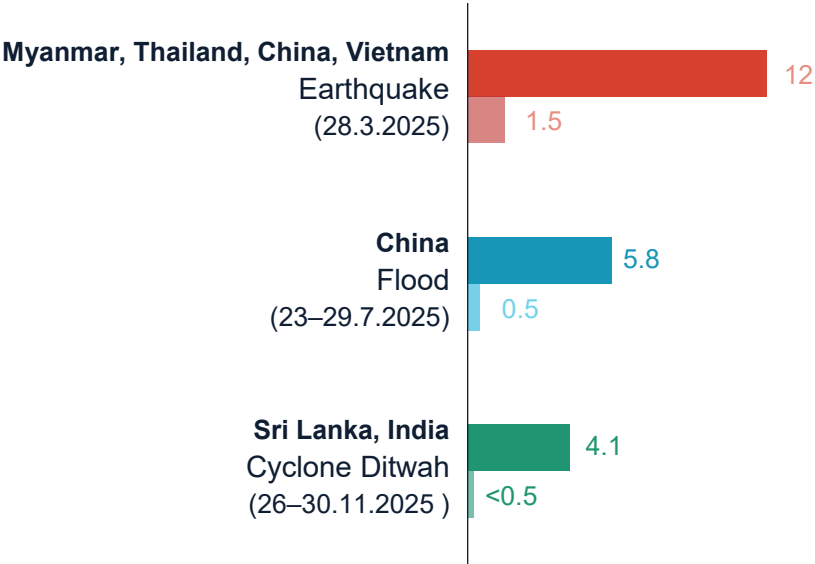


Small, medium and large loss events

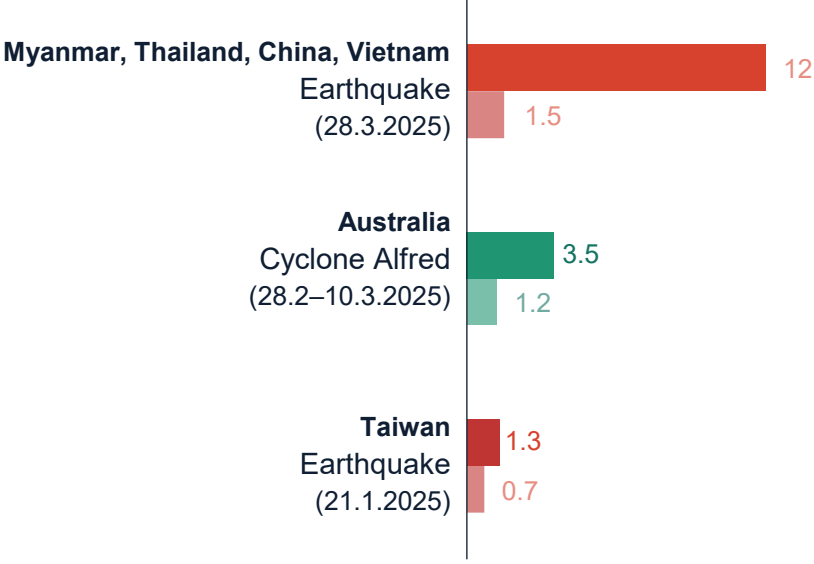
Top three natural catastrophes in APAC

2025, by overall losses and insured losses

Ranking by overall losses
US\$ bn



Ranking by insured losses
US\$ bn

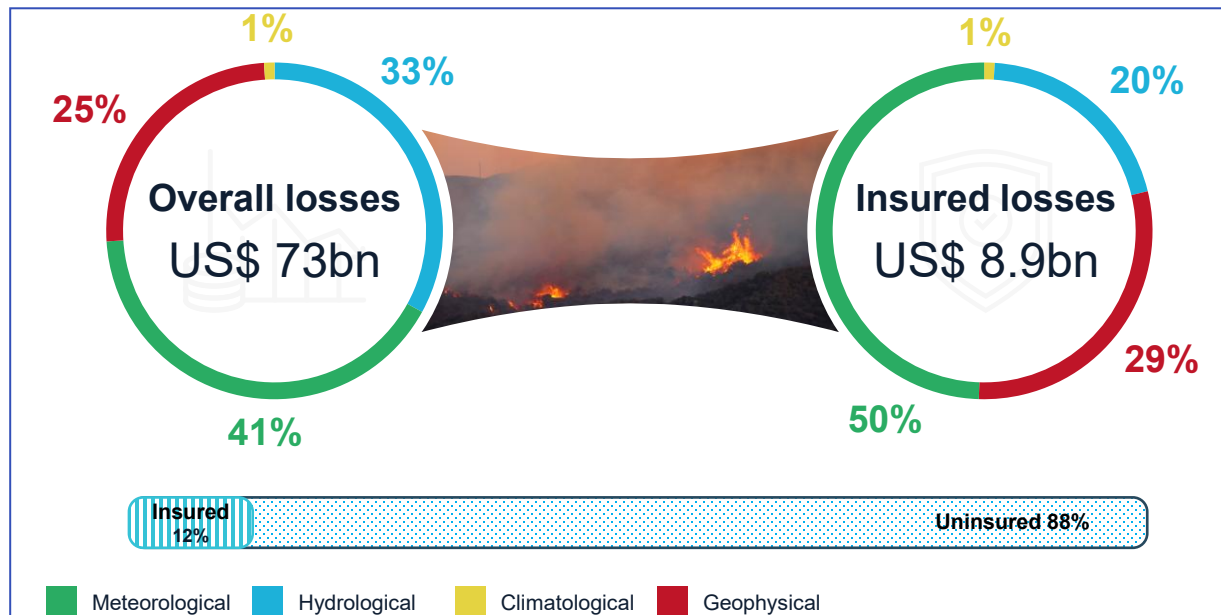


 Meteorological  Hydrological  Climatological  Geophysical
 Overall losses  Insured losses

APAC's protection gap is the central growth frontier

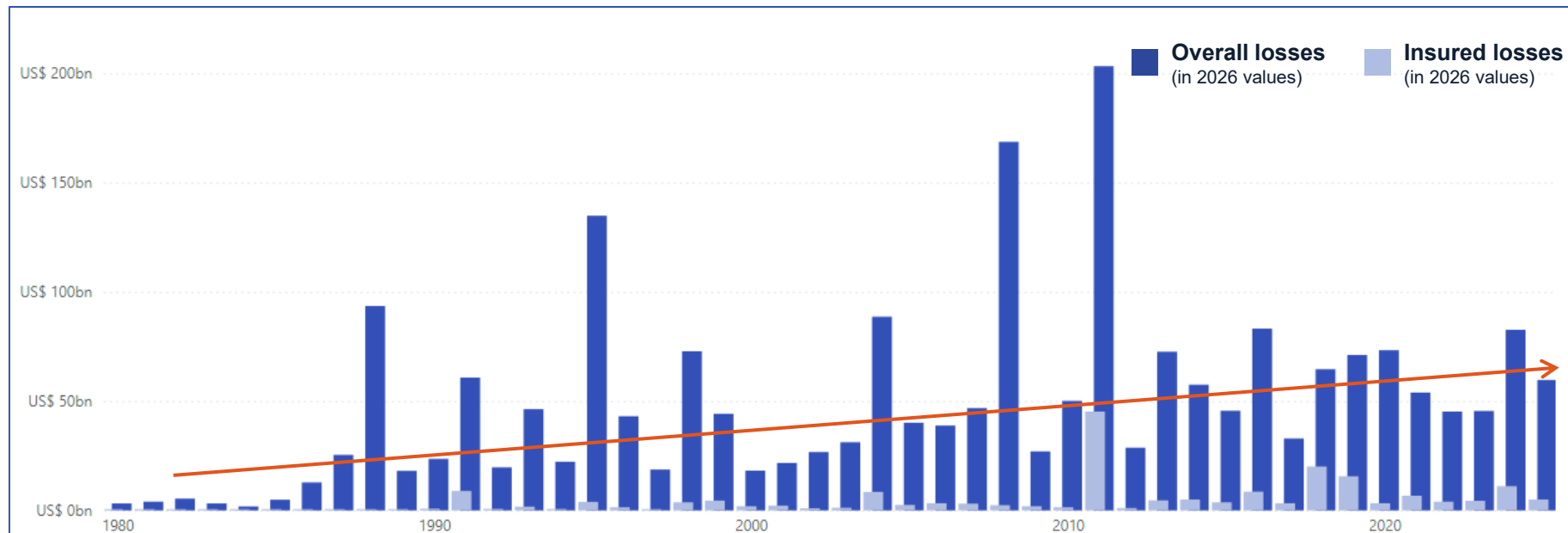
In the Asia-Pacific region, overall losses of US\$ 73bn were due partially to the earthquake in Myanmar, flooding in north-eastern China, and Cyclone Ditwah in Sri Lanka and India.

Of the APAC insured losses totalling ~US\$ 9bn, a considerable share was attributable to the Myanmar earthquake, Cyclone Alfred in Australia and an earthquake in Taiwan.



Losses from natural disasters in Asia 1980–2025

Overall and insured losses



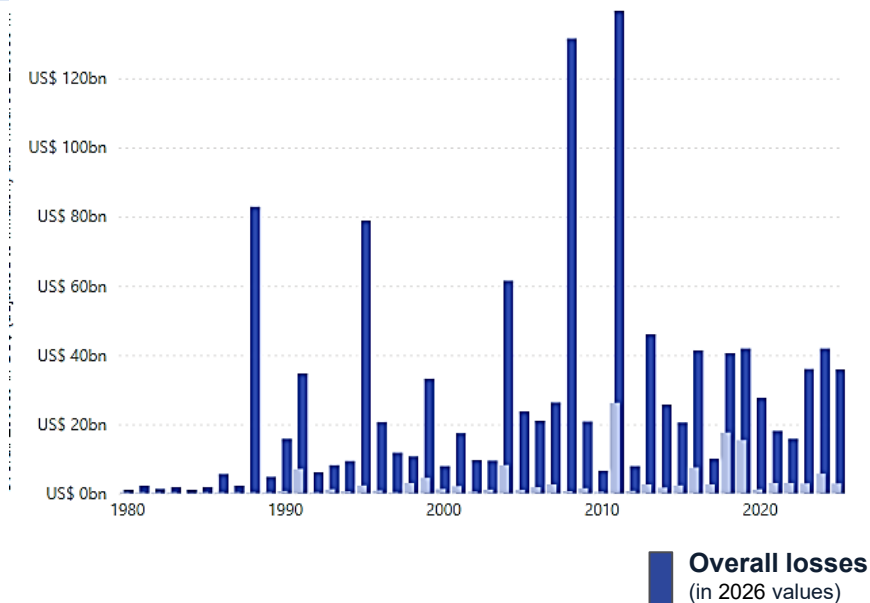
Losses Inflation-adjusted via country-specific consumer price index and consideration of exchange rate fluctuations between local currency and US\$.

Losses from peak and non-peak perils in Asia 1980-2025

Overall and insured losses

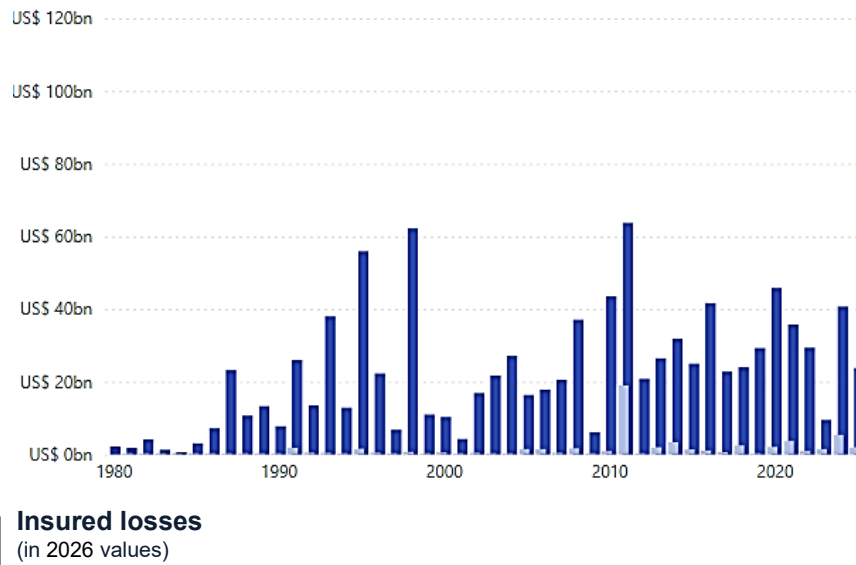
Peak perils

tropical cyclones, earthquakes



Non-peak perils

severe convective storms, floods, wildfires

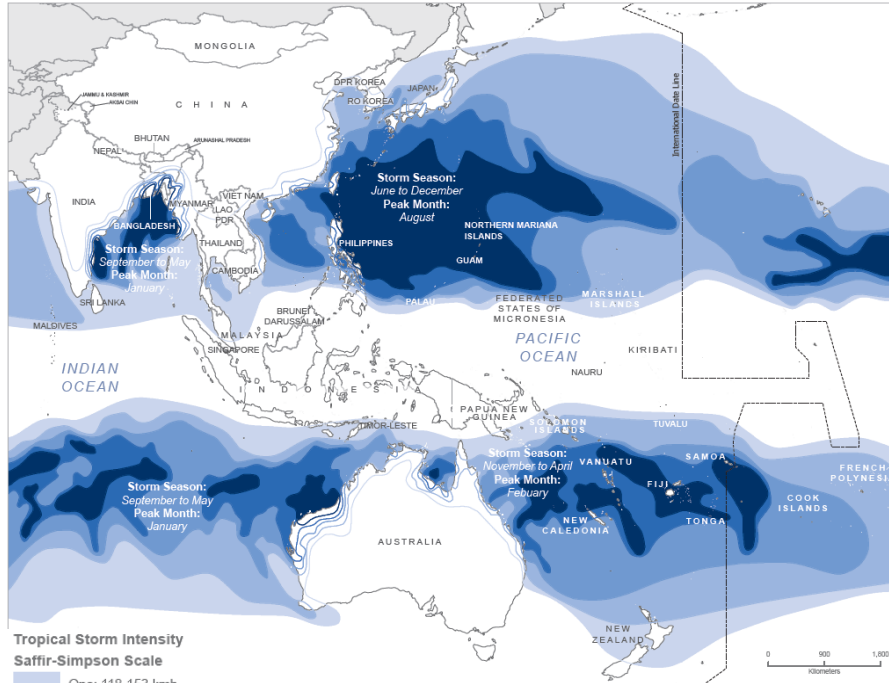


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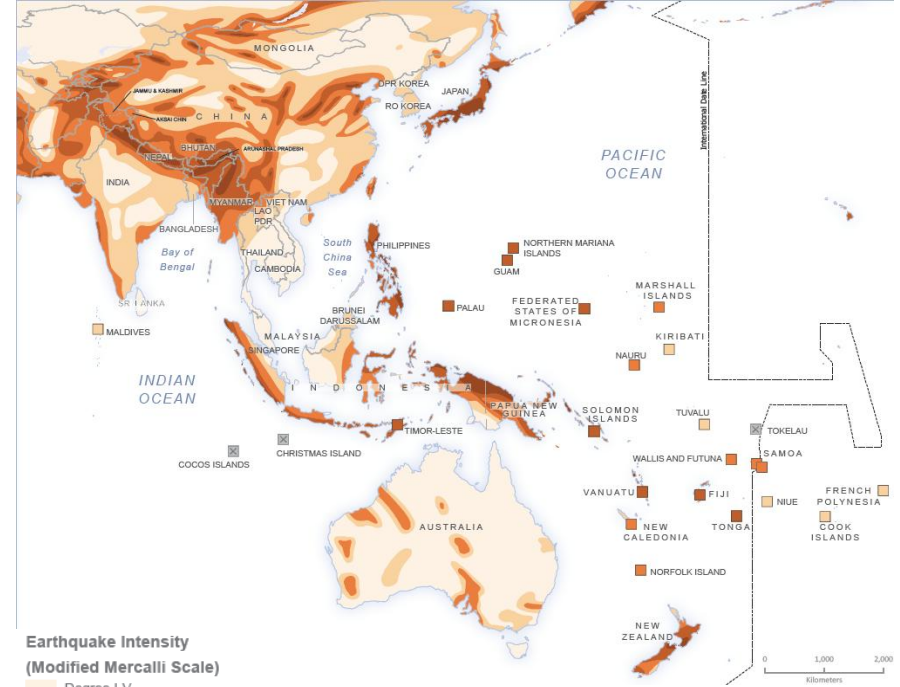
Natural hazard intensity across Asia-Pacific

Hazard alone does not determine loss. Exposure, vulnerability and financial protection determine the economic outcome

Tropical storm intensity



Earthquake intensity



Source: OCHA

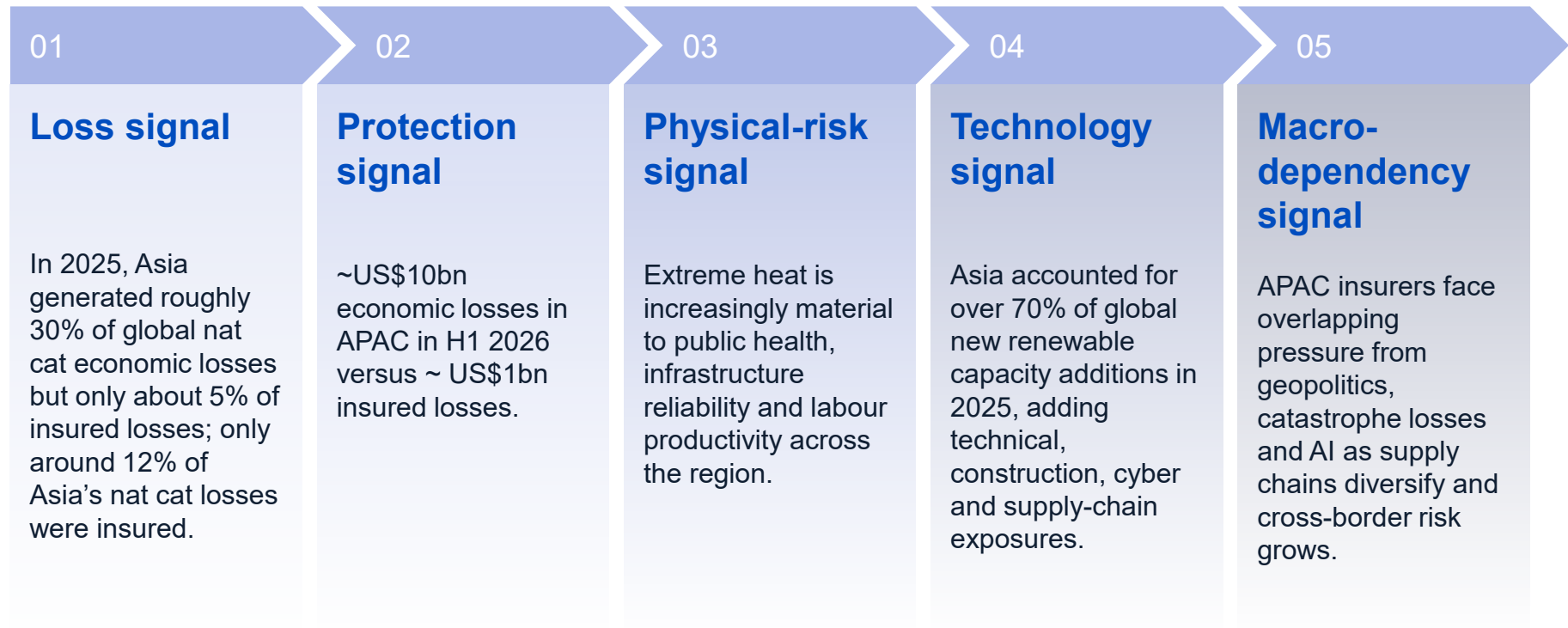


The changing risk distribution

Climate, concentration, technology and connectivity are changing dependence and tail behaviour



Five signals point to one actuarial problem: The joint distribution is moving



Four drivers reshaping the APAC loss process

1

Hazard dynamics

Flood, heat, cyclone and earthquake risk remain core, but dependence and compounding are harder to treat as stationary.

Non-stationary frequency and severity

2

Exposure concentration

Migration, coastal development, infrastructure expansion and rising asset values amplify single-event accumulation.

Accumulation and tail dependence

3

New assets

Renewables, BESS, data centres and EVs add technical failure modes and supply-chain dependencies.

Sparse credibility and new vulnerability functions

4

Geo-trade volatility

Tariffs, supply-chain diversification and political risk affect business interruption, marine, credit and liability lines.

BI, CBI and cross-line correlation

The result is not simply higher expected loss. It is greater uncertainty around the shape and dependence of loss.

New technologies introduce unfamiliar failure modes

Floating solar PV

Loss Mechanism:

Mooring, wind, wave, water-electricity interaction

Accumulation concern:

Shared reservoir or weather footprint

Actuarial Question:

Engineering assumptions and event definition

EV & battery storage

Loss Mechanism:

Thermal runaway, propagation, concentration, salvage

Accumulation concern:

Site concentration and serial defect

Actuarial Question:

Severity distribution and aggregation

Digital infrastructure

Loss Mechanism:

Power/cooling dependence

Accumulation concern:

Shared utilities and cloud dependency

Actuarial Question:

BI/CBI scenarios and limits



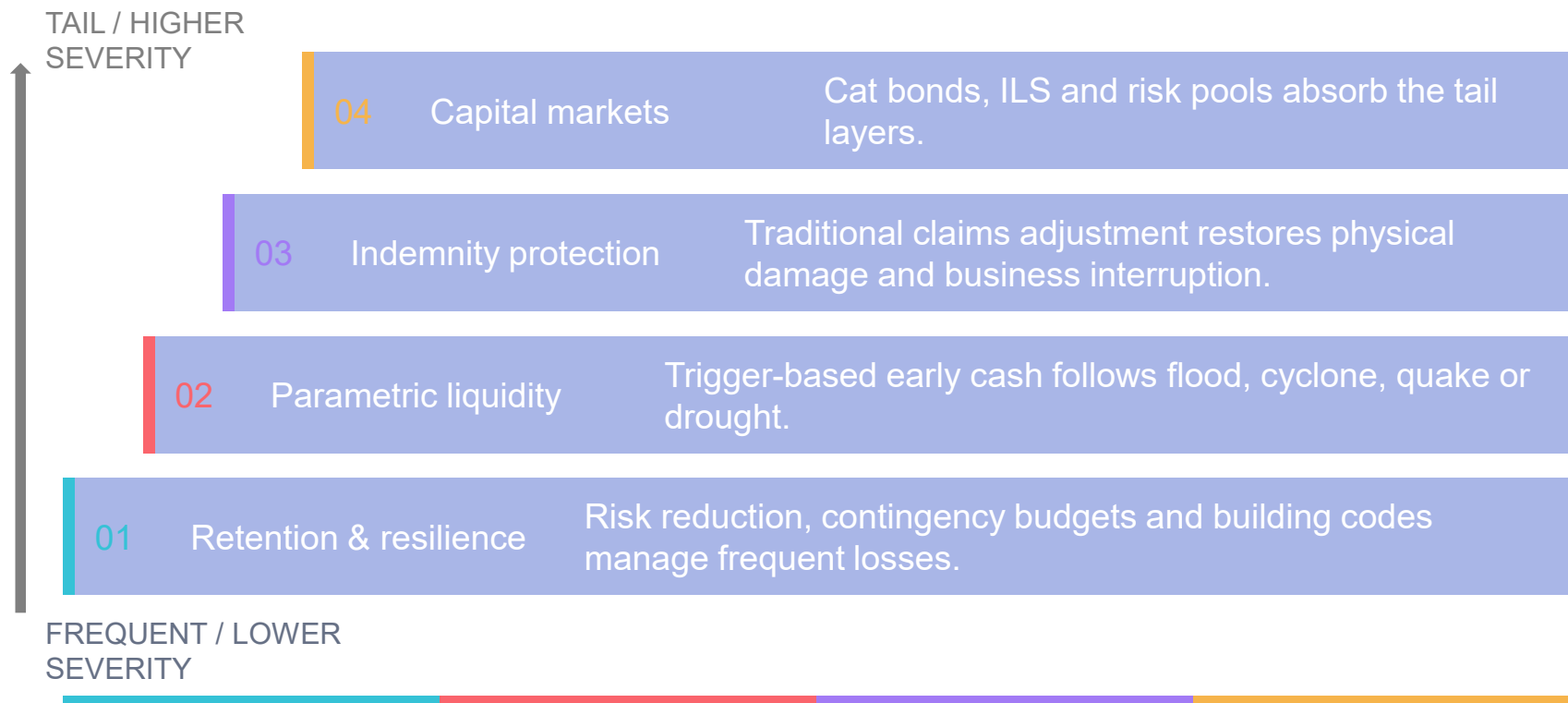
From uncertainty to insurable growth

Actuarial judgement turns unfamiliar risk into measurable, governable and financeable protection



Risk protection instruments must evolve

A resilient programme combines prevention, rapid liquidity, indemnity and tail-capacity solutions.



01

SENSE CHANGE

Continuously update exposure, hazard, vulnerability, claims and portfolio data.

SENSE

02

MODEL MECHANISMS

Use engineering priors, scenarios and telemetry before loss history becomes credible.

EXPLAIN

03

GOVERN UNCERTAINTY

Make non-stationarity, basis risk, tail dependence and capital impacts explicit.

CONTROL

04

DESIGN PROTECTION

Turn insight into adaptive terms, layered protection and sustainable premium pools.

CREATE

Turn emerging risk into insurable growth by making uncertainty explicit, governable and financeable.



Emerging risk is a moving loss distribution-not necessarily a new peril.



Close APAC's protection gap with resilience, rapid liquidity, indemnity and tail capacity.



Turn uncertainty into insurable growth through continuous adaptation.

Questions?



Thank you