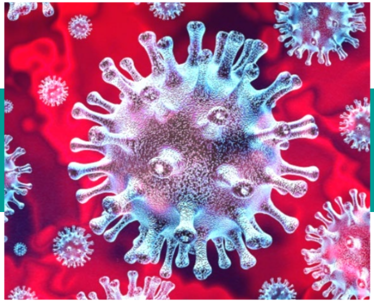
GAD Webinar

Climate Change Risk Management

20th August 2020

Risk management reflections



Consequences of the crisis

Asset volatility / losses

Policy intervention

Reduction in carbon emissions

Project delays

Parallels between COVID & climate

Us and the environment

Systemic and cross cutting

Co-ordinated global response

Policy decisions key

What might happen next?

Scenario analysis

Summary of lessons learnt

1. Treat COVID crisis as a wake up call to value of risk management
2. Plan for systemic risks
3. Change is possible

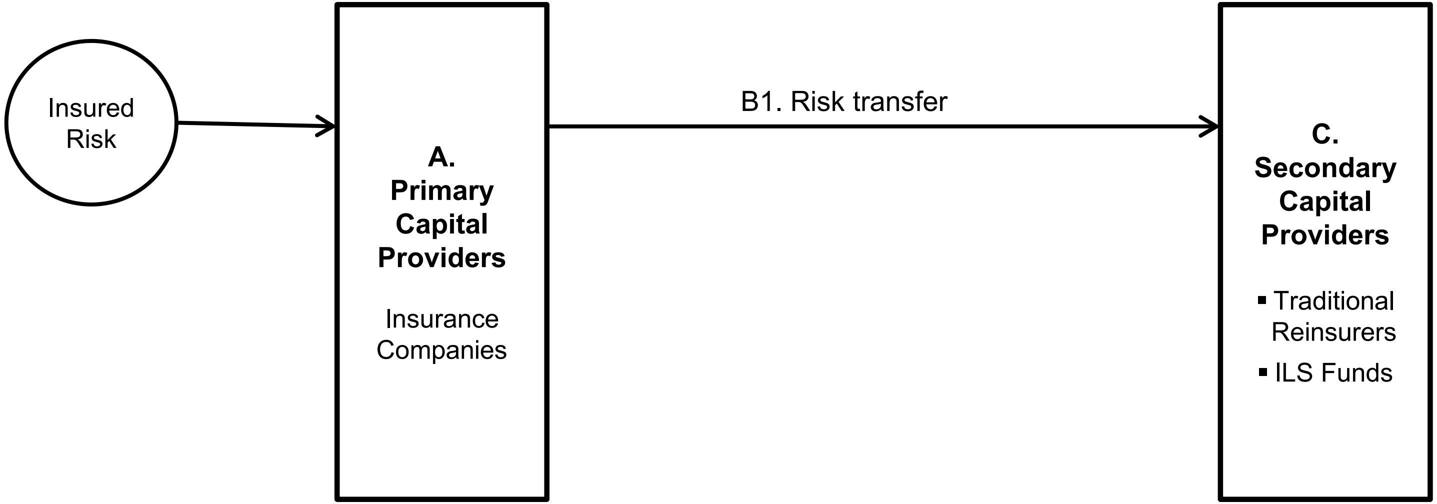
Scenarios help us understand uncertainty

COVID-19 & climate change risk management

From Risk Transfer to Risk-Sharing: Time for a Paradigm Shift?

Professor Paula Jarzabkowski

Insurance is a process of risk transfer



- Risk
- Responsibility
- Reward

Solvent insurance matters

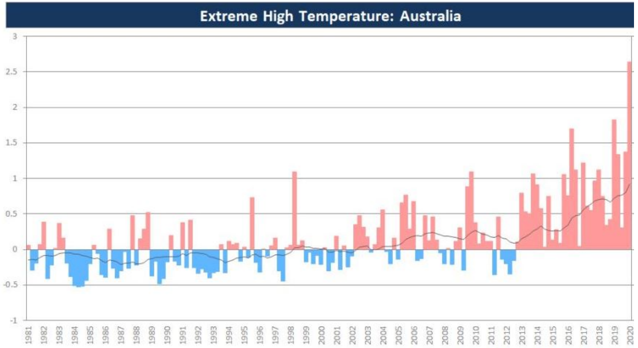
Principles of insurance

- Risk diversification
  - Multiple, non-correlated risks increase capital efficiency
- Risk pooling:
  - The premiums of the many pay for the losses of the few
- Risk-reflexive pricing
  - Solvency & a promissory note
- Reinsurance

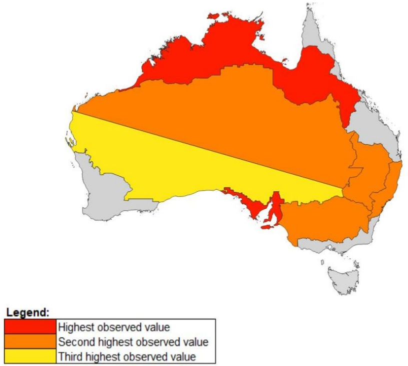
Pandemic is an existential threat to the insurance industry

  - Systemic and concurrent
- What about climate change?

Australian Actuaries Climate Index: Extreme High Temperature



Regions Breaking Records for Extreme High Temperature



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Will risk transfer suffice?

The principles of insurance

- Risk diversification => risks aren’t correlated?
- Risk pooling – the premiums of the many pay for the losses of the few => what about losses of the many?
- Risk-reflexive pricing => affordability issues (legacy assets, yet assumes control over the sources of resilience)
- Reinsurance => insufficient global capital

- Systemic risk is uninsurable or only partially insurable

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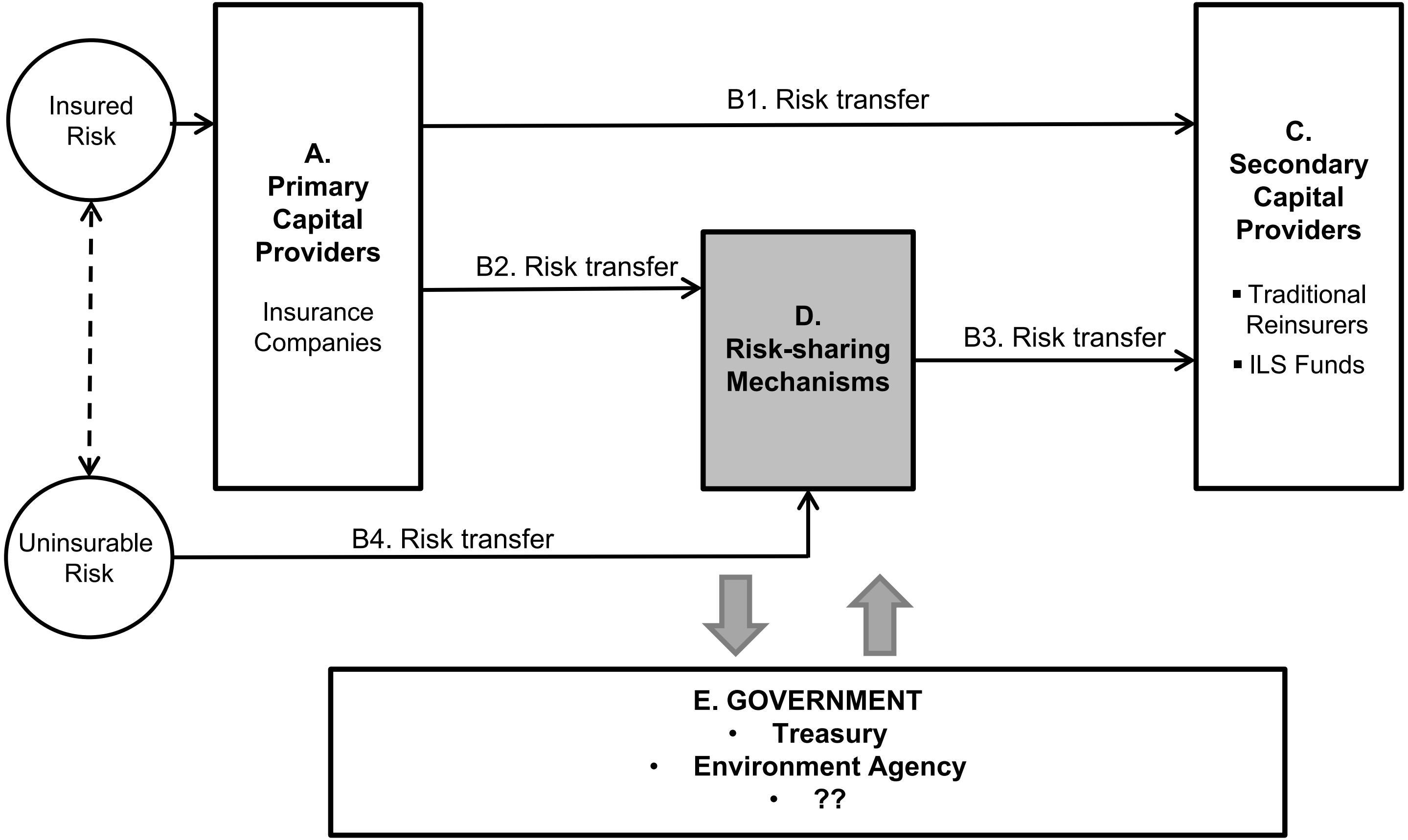
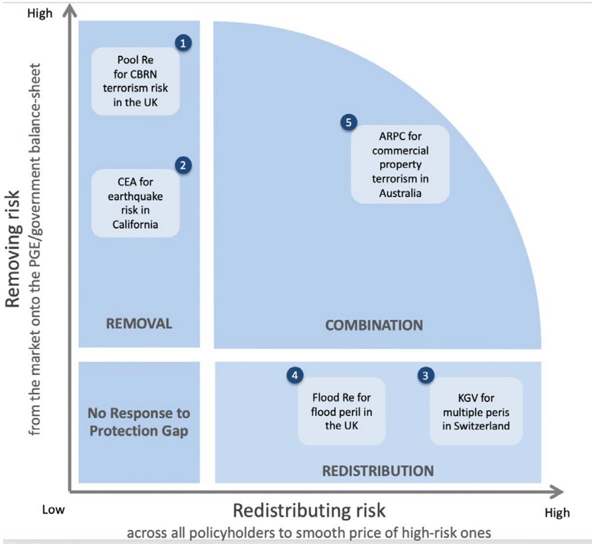
Moving to Risk Sharing



Insurance as part of the risk-sharing solution

Public-Private Partnerships for sharing risk

- Risk redistribution across policyholders & insurers
- Risk removal to reinsurers and government
- A dedicated risk-sharing entity: Protection Gap Entities (PGEs)



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Between State and Market: Protection Gap Entities and Catastrophic Risk. Jarzabkowski P, Chalkias K, Cacciatori E and Bednarek R (2018). London: Cass Business School, City, University of London: https://www.paulajarzabkowski.com/downloads/#view-file-1

To go forward

- We need a new risk-sharing approach
- We need innovation in the product set
- We need to consider how we will fund the future, and who will pay

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Ambitions for COP26 - Private Finance

UN CLIMATE CHANGE CONFERENCE UK 2020

IN PARTNERSHIP WITH ITALY

Private finance increasingly focused on climate change

- **Achieving a net zero economy requires a whole economy transition.** Every company must develop and implement credible transition plans.
- **Private finance now squarely focused on the issue of climate change risk.** The Task force for Climate related financial Disclosures (TCFD) now has more than 1000 supporters, representing a market cap of nearly $12tn. Net Zero Asset Owner Alliance members, representing $5 trillion in assets under management are committed to transitioning their portfolios to net-zero by 2050.
- **Great commercial opportunity.** The IEA estimates that the global energy sector needs $3.5 trillion per year of infrastructure investment. Carbon capture and biofuel tech needs $50 to $135 billion per year, and 400 million “green” homes need to be built over next three decades.
- **The window for action is finite.** The world is still well behind the curve. Estimates (from the world’s largest pension fund, GPIF) suggests capital markets are aligned to temperature rises above 3.7 degrees by 2100.

Ambitions for COP 26

The objective for the private finance work for COP 26 is simple: ensure that every professional financial decision takes climate change into account.

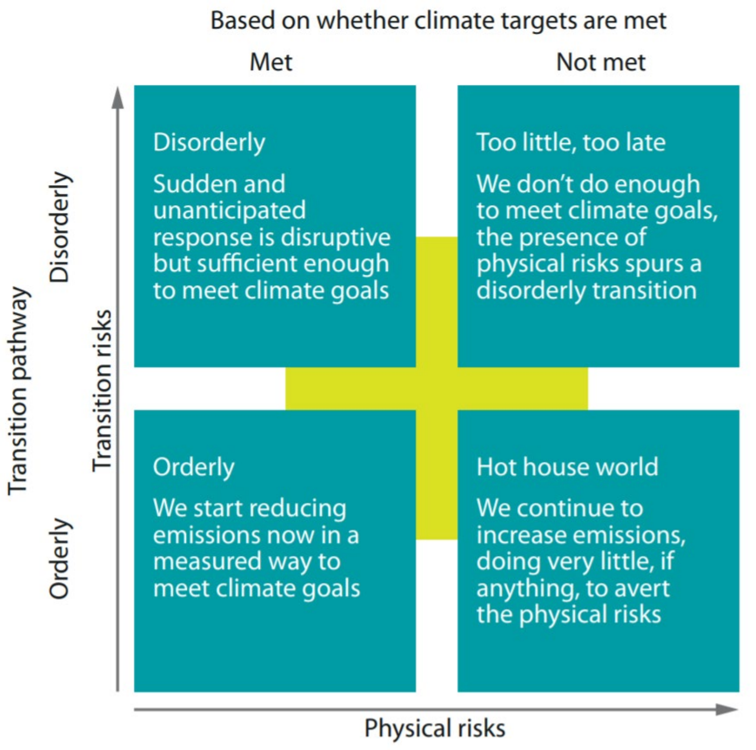
This requires the right framework so that the financial sector can allocate capital to manage risks and seize opportunities in the transition to net zero. To this end, the COP 26 Private Finance Hub is working with the private sector and other stakeholders on three priorities:

Reporting	Risk management	Returns
Improving the quantity, quality and comparability of climate-related disclosures by implementing a common framework built on the TCFD recommendations	Ensuring that the financial sector can measure and manage climate risks	Helping investors identify the opportunities in the transition to Net Zero and report their own alignment to Net Zero

Risk Management

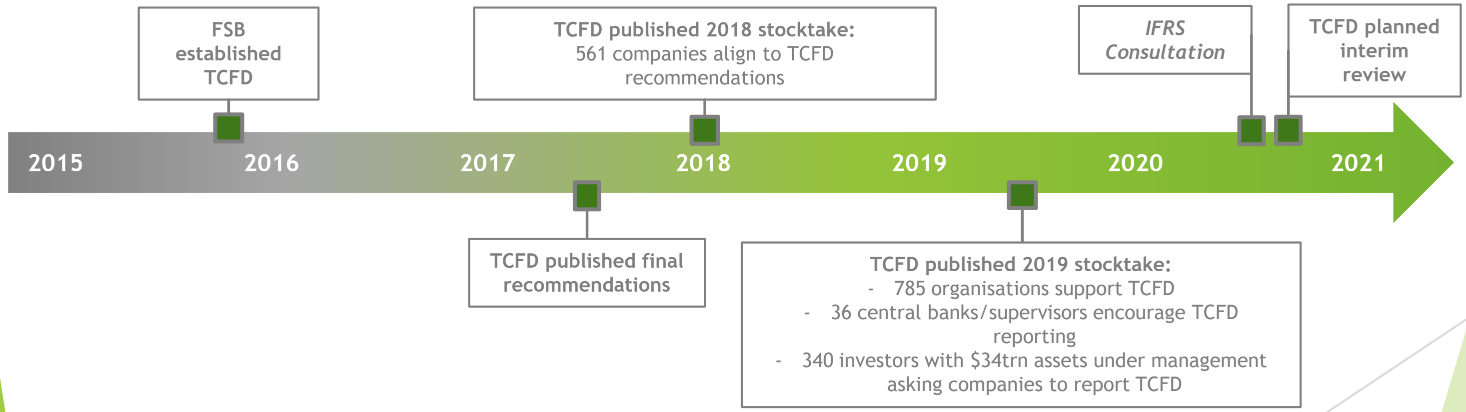
- **COP26 aims:**
  - Central banks and supervisors to conduct climate stress tests and implement new supervisory standards
  - Develop open-source, business relevant reference scenarios that any company in any sector can assess their strategic resilience.
- **NGFS Reference Scenarios,** published this summer, provide scenarios across the physical and transition risk matrix that can be used by central banks, financial firms, and private sector companies.
- **TCFD sector-specific groups** to develop sector-specific scenarios for companies in high-carbon sectors, e.g. agriculture, oil and gas, utilities.

The need for consistent climate scenarios



Reporting

- Following recognition by G20 leaders that the **market has insufficient information** to properly price climate-related financial risk, the Financial Stability Board established the **Task Force on Climate-related Financial Disclosures (TCFD)** to develop recommendations that:
  - Could "promote more informed investment, credit, and insurance underwriting decisions" and;
  - "enable stakeholders to understand better the concentrations of carbon-related assets in the financial sector and the financial system's exposures to climate-related risks."



Aim to build on this foundation to enhance both the quantity and quality of disclosures so TCFD recommendations become as comparable, efficient and decision-useful as possible.

Returns

- **The transition to net zero is about more than managing the downside – it is also a major commercial opportunity**.
- **Objectives of the returns work:**

Help investors identify opportunities in the transition to net zero	Improve investor reporting of their own portfolio alignment	Develop metrics for consumers to allow investment in line with values

- **The Returns work will develop a coherent framework to provide decision-useful information for investors and lenders.** This will provide tools to assess the credibility of transition plans, approaches to measuring portfolio alignment to net zero & Paris goals, and ways to make the metrics consumer friendly.
- **Particularly important post-COVID**. Every company will need to adjust their business strategy, and in many jurisdictions this will require developing a net zero transition plan. And many investors will need to reallocate capital.

Thank You

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