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Insurance and Climate Action: The Business Model for the Insurer of the Future

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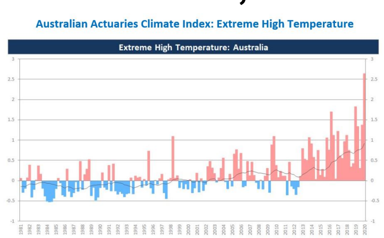
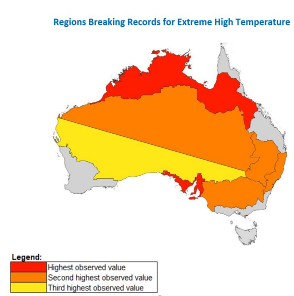
The risks are getting riskier

- A growth in extreme weather events, combined with growing conurbations in exposed areas, means that traditional property risks are getting riskier
- Australian bushfires – remember them?
  - Extreme high temperatures (all regions), extreme winds, below average rainfall
- UK floods – remember them?
  - Excess rainfall, three named storms in a row





Source: Actuaries Institute. Australian Actuaries Climate Index reflects devastating Summer bushfires and storms, 4/05/2020: https://www.actuaries.asn.au/Library/MediaRelease/2020/MediaReleaseAACISummer2020(final).pdf

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Poll. Climate change means:

- Property insurance claims & premiums will
  - Increase?
  - Decrease?
  - Remain the same?
- Policies purchased on extreme-weather exposed properties will
  - Increase?
  - Decrease?
  - Remain the same?
- Cat models will get
  - More granular and accurate?
  - Less granular and accurate?
  - Remain the same?

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Traditional response to higher risk

- Every Cat provides data to revise the models
- Risk reflexive-pricing – increase price on high risk
- Ensure solvency against anticipated claims
- Price is an important signal to policy-holders and, possibly, government, to improve resilience

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Will a traditional response suffice?

The insurance business model

- 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)

What are the strategic implications?

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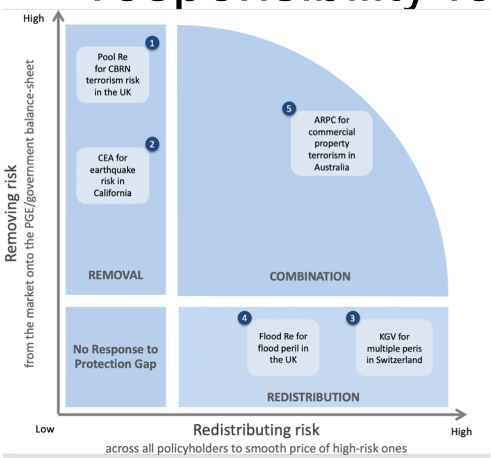
Changing the insurance business model

- Sustainable insurance business model needs sustainability for policyholders
- What is insurance good at? Modelling and pricing risk
- Linking risk modelling to more resilient assets
- Who’s problem is resilience? [the insurance industry’s!]

Opportunities

- Underwriting sustainable risks – ESG underwriting
- Innovation
  - Ex-ante planning to finance disaster an area of growth in the development and humanitarian sector
  - Parametric products to address immediate aftermath of disaster
  - ‘Insuring Nature’ – The Nature Conservancy Mesoamerican coral reefs product
- Risk-sharing partnerships – sharing the risks, and the responsibility for resilience to risk



Source: 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

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Insurer of the future

- Collaborative Cross-sector Partner in climate action
- Risk-sharing across sectors
- Supporting and providing (selling?) services to ensure sustainable/resilient assets
- Managing trade-offs; short & long, public & private (paradoxes!)
- Insurance as an <u>economic</u>, and therefore, <u>social</u> good
- Has great, forward-thinking innovators: YOU!

Recommendation 1: Invest in open-source models that provide a long-term view of climate risk and link to insurance solutions.

Recommendation 2: Joined-up policy-making to put climate-risk models at the heart of national adaptation strategies.

Recommendation 3: Develop consistent climate adaptation regulation and standards across countries.

Recommendation 4: Foster insurance innovations that can respond to a changing climate risk landscape.

Recommendation 5: Strengthen dialogue between insurers and policy-makers around Build Back Better.

Recommendation 6: Converge insurance, humanitarian and development agendas.

Recommendation 7: Promote and invest in risk literacy throughout society.

Source: Insurance for Climate Adaptation: Opportunities and Limitations
Jarzabkowski, P., Chalkias, K., Clarke, D., Iyahen, E., Stadtmueller, D., & Zwick, A. (2019). *Global Commission for Adaptation*: https://www.paulajarzabkowski.com/downloads/#view-file-2

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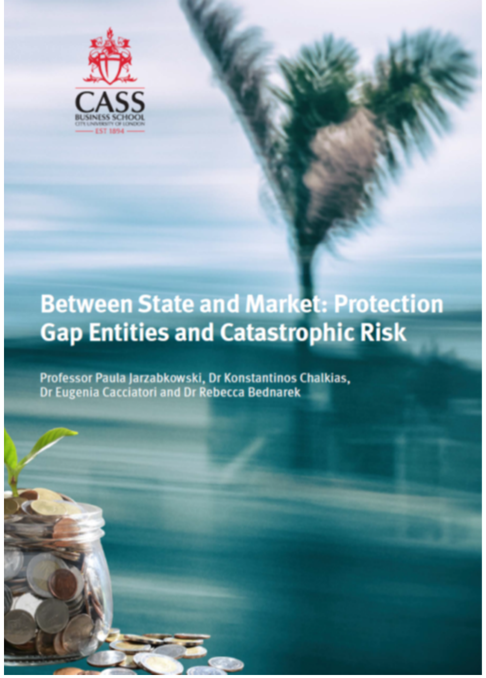

BACKGROUND PAPER

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INSURANCE FOR CLIMATE ADAPTATION: OPPORTUNITIES AND LIMITATIONS

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Executive Summary

Climate change jeopardizes socioeconomic stability, and sets back efforts at development. The increasing frequency and severity of climate-change-driven disasters threaten lives and livelihoods, food security, water supply, property security, and economic prosperity across the globe. **Adaptation** is vital to make society resilient to the impacts of climate change.

Adaptation means increasing our ability to recover from specific disasters; reducing vulnerability and promoting resilience (both physical and financial) to catastrophe. **Insurance** can be a key tool in both these aspects of adapting to climate change. First, it provides the flow of capital to support communities and infrastructure to recover from disasters. Without adequate insurance, the burden of paying for losses falls largely on individual citizens, governments or aid organizations, with significant impact upon already straining government budgets, and economic and social hardship for those affected. Countries with high insurance cover recover faster from disasters, and increasingly, governments are recognizing the role and benefits of insurance in transferring risk from disasters. Yet there is a large and even widening 'protection gap' of underinsurance. Second, insurance

About this paper

This paper is part of a series of background papers commissioned by the Global Commission on Adaptation to inform its 2019 flagship report. This paper reflects the views of the authors, and not necessarily those of the Global Commission on Adaptation.

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