



BANK OF ENGLAND

# **25th International Association of Insurance Supervisors Annual Conference**

## **Climate Risk and Natural Catastrophes – Closing the Protection Gap**

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# **Climate Risk and Natural Catastrophes – Closing the Protection Gap**

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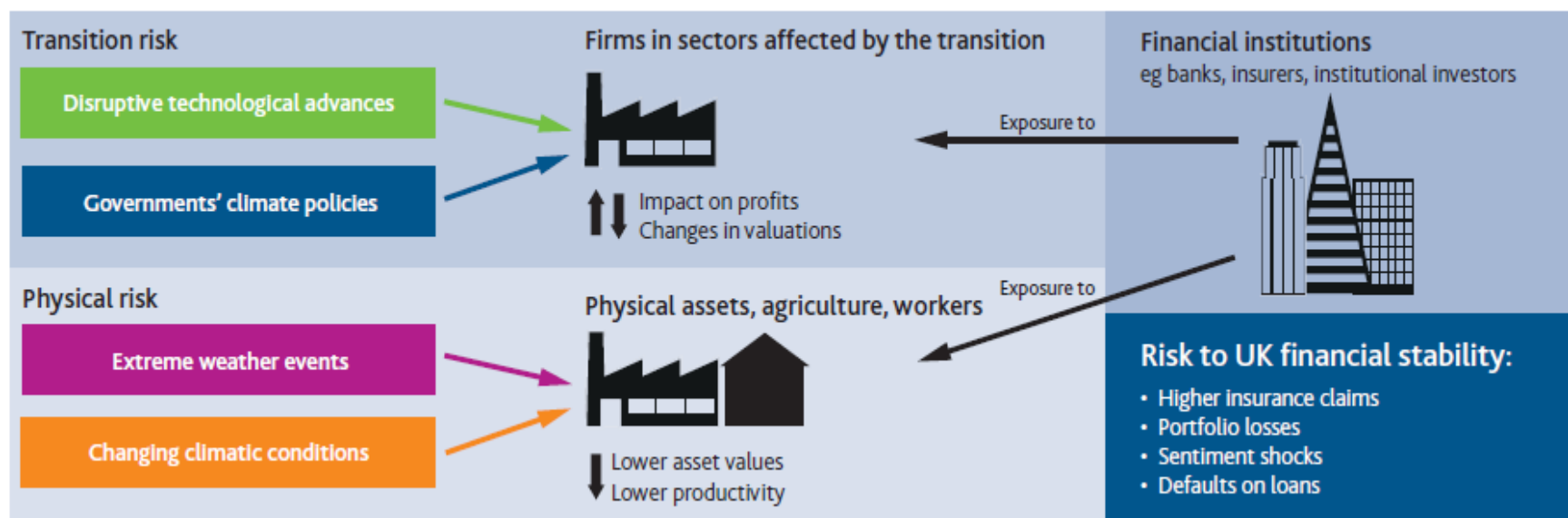


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# Climate change

- Climate change, and society's response to it, present financial risks relevant to the safety and soundness of insurers.
- The Bank's initial focus was on the insurance sector, when the Prudential Regulation Authority (PRA) published a report on the impact of climate change on the UK insurance sector in September 2015. This highlighted the three primary channels through which such impacts might be expected to arise: (1) physical risks; (2) transition risks; and (3) liability risks.

Figure 2 Primary channels for climate-related financial risks



# The financial risks from climate change



# Climate change

- In September 2018, the Bank has completed a review of the UK banking sector. The report highlighted a transition in thinking is taking place across the sector from viewing climate change as Corporate Social Responsibility to a core financial and strategic risk.
- We published a Consultation Paper and Supervisory Statement on ‘Enhancing banks’ and insurers’ approaches to managing the financial risks from climate change’. This sets out the PRA’s proposed expectations concerning how firms:
  - embed the consideration of the financial risks from climate change in their governance arrangements;
  - incorporate the financial risks from climate change into existing risk management practice;
  - use (long-term) scenario analysis to inform strategy setting and risk assessment and identification; and
  - develop an approach to disclosure on the financial risks from climate change.
- The consultation period will end on 15 January 2019.



# Flood Re: a public-private partnership on flood insurance

- Flood Re was established by the Water Act 2014 in collaboration with the insurance industry with the purpose of allowing for the provision of affordable flood insurance. Flood Re is a mutual commercial entity, owned and managed by industry, and operationally independent from the UK Government.
- Flood Re operates on a not-for-profit basis, its risk seeking appetite being limited to what is necessary to fulfil its public policy objectives. A key public policy objective of Flood Re was to increase levels of affordable insurance protection against flood in the UK, following the withdrawal of insurers or excessive hardening of rates.
- Since Flood Re was established in 2016, 150,000 households have benefited from protection against flood that was not previously available. To further reduce the protection gap, in 2019 Flood Re will reduce its premium rates for both buildings and contents cover.
- Flood Re is subject to the same prudential requirements as other insurers, including capital requirements calculated under Solvency II.
- Flood Re is planned to end in 2039 with action taken to reduce flood risks.



York, December 2015, after Storm Desmond



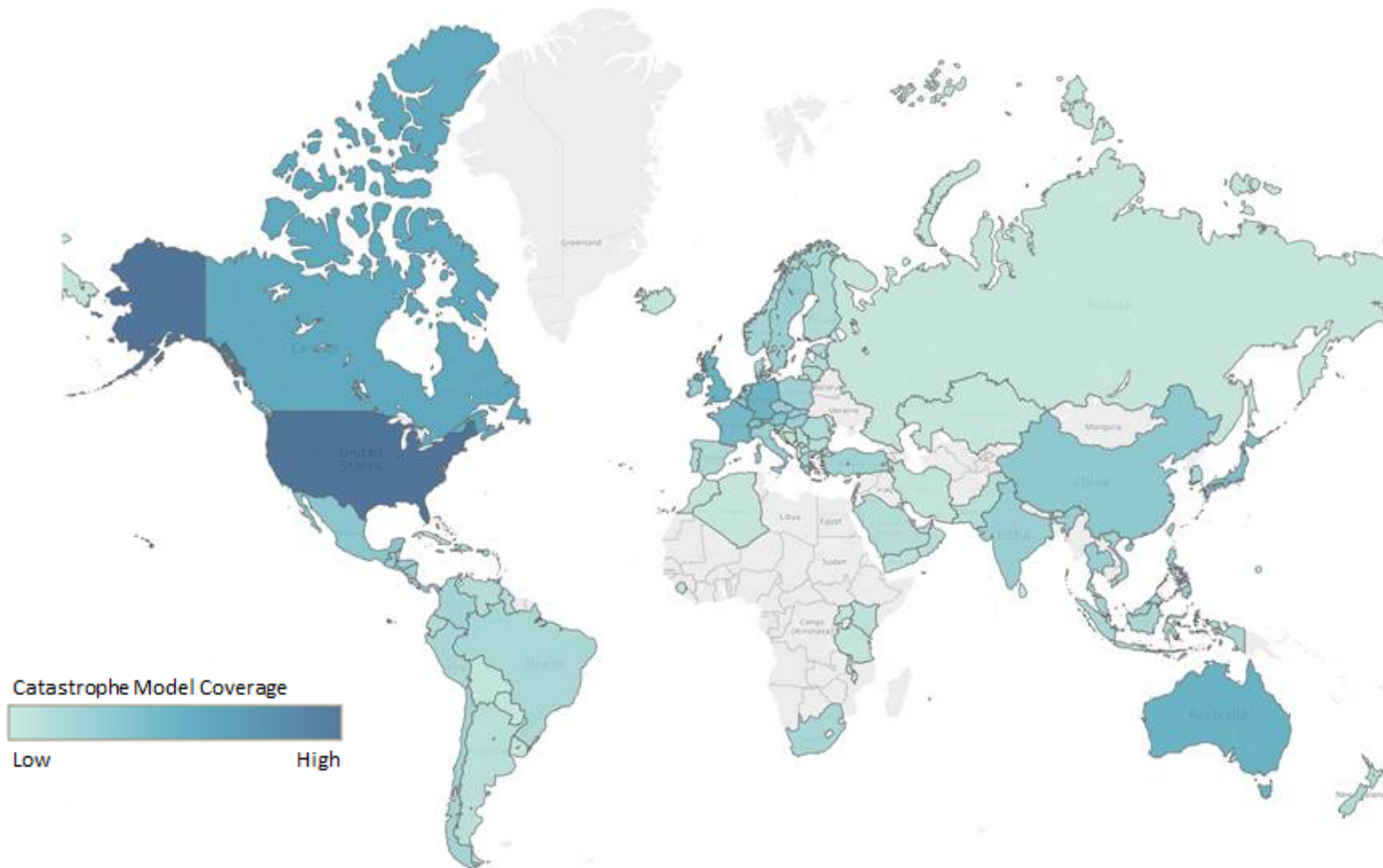
# Centre for Global Disaster Protection (CGDP)

- The Centre for Global Disaster Protection (CGDP) is a new London-based organisation established by the Department for International Development (DfID) and the World Bank.
- CGDP wants to work with insurers to design financing and insurance packages that encourage investment in resilient infrastructure and give an insurance payout to enable fast recovery if natural disaster events occur.
- The CGDP aims to provide a range of innovative financing solutions to developing countries vulnerable to natural disasters and is seeking to utilise the risk management expertise provided by the London Market. Possible finance solutions include:
  - an insurance-linked loan package (concessional loans with integrated resilience conditions);
  - resilience impact bond (a bond with outcome-based repayments that are focussed on resilience and social goals); and
  - resilience bond (which is a catastrophe bond where bond coupon payments are reduced when resilience measures are implemented).



# Centre for Global Disaster Protection (CGDP)

- Model coverage is better in developed countries than developing countries.
- The darker the colour, the better the model coverage for that country (i.e. more commercially available cat models for that country). Countries with colour grey have no model coverage.





# The economic benefits of resilient infrastructure

- Lloyd's innovation report 2018 explains that evidence demonstrates that preparing for disaster pays off; it generates a "resilience dividend". This dividend means that resilient infrastructure is an economically logical investment.

Figure 3: The benefit-cost ratio around the world



The benefit-cost ratio is a simple indicator which shows by how much the benefits of a project outweigh the costs. A ratio of 1:1 means the benefits equal the costs. The evidence demonstrates that preparing for disaster pays off; it generates a "resilience dividend". This dividend means that resilient infrastructure is an economically logical investment.

Source: Benson, 1998; Dedeuwaerdere, 1998; FEMA, 1998; Vermeiren and Stichter, 1998; Mizina et al., 1999; Mechler, 2004a; b; Venton and Venton, 2004; MMC, 2005; IFRC, 2015; Rose, 2017



# Q&A



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