

# **Optimising Disaster Recovery: To Act for Human Progress by Protecting What Matters**

## **Our Work with Cambridge Centre** for Risk Studies

Putting communities impacted by disasters back on their feet as quickly as possible, and in a better state, is just one example of how we make AXA's purpose to 'act for Human Progress by protecting what matters' a reality. The case for (re)insurance is clear but is seldom adequately explained. Below is a link to a video that captures our collaboration with the Cambridge Centre for Risk Studies ("CCRS") at Cambridge Judge Business School, which has released a comprehensive report demonstrating the

**M**atters

Renewal Reciproser that (re)insurance has on the speed and quality of recovery following natural disasters. We trust that you will find it very informative.

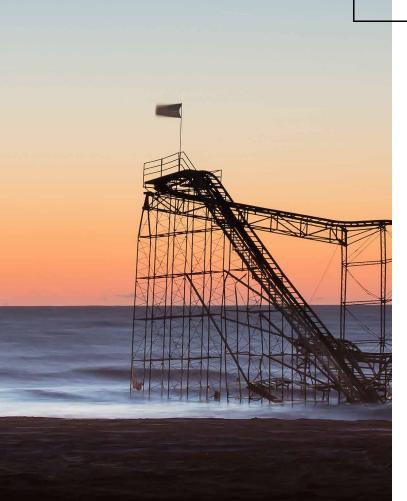




- Each percentage point of insurance penetration (non-life premiums divided by a country's GDP) reduces recovery times by almost a year
- Events in countries with high insurance penetration (3% 4% includes Western Europe, Japan, Australia, South Korea) have an average recovery rate of less than 12 months and events in countries with very low insurance penetration take more than 4 years

Continued

By Cambridge Centre for Risk Studies at Cambridge Judge Business School and Andrew MacFarlane

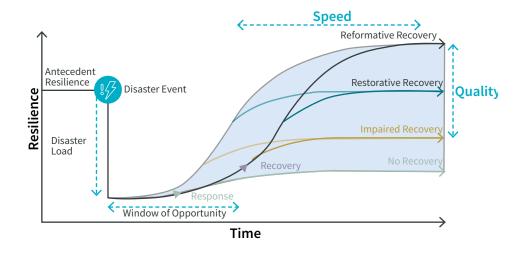


- The US is anomalous the US enjoys very high insurance penetration (>4%) but the fragmented nature of coverage, particularly flood, disaster response and scale of loss have resulted in a recovery rate of just over 3 years (Hurricane Andrew, Great Mississippi and Missouri Floods, Northridge, Katrina, Sandy).
- The quality of recovery for countries with high and very high insurance penetration is sometimes better than pre-loss levels, whereas the reverse is often true for those countries with lower insurance penetration. There is potential for product development in terms of trying to ensure that products allow for "Build Back Better" as part of their terms ensuring that properties rebuilt are done to a more resilient standard than previously.
- Economic recovery is faster than societal recovery in almost 60% of the cases, being particularly pronounced in the first 6 months. For example; in 2013 after the floods in Germany, affecting more than 600,000 people and displacing 80,000, there was recovery to "societal norms" within 12 months. Contrast this with the earthquake in Haiti in 2010, from which the country has never fully recovered.
- Speed and quality of recovery are not mutually exclusive – CCRS have identified several cases satisfying both outcomes.

### References

1 http://david-lallemant.com/building-post-disaster-resilience/

Figure 1: Conceptual Framework of recovery as a process of building resilience. In this context, disaster risk reduction in the recovery process means having a steeper trajectory (faster recovery) and a higher eventual outcome (more resilient). (Adapted from Lallemant 2013)<sup>1</sup>



#### **About the Authors**

Andrew MacFarlane has a BSc. Hons Actuarial Science & Statistics and FIA. He is Head of Pricing & Analytics for London & Bermuda for Reinsurance at AXA XL and a Partner on AXA XL's Leadership Council. In his Head of Pricing & Analytics role he manages the actuarial team across London and Bermuda supporting underwriters across a broad range of business lines and products. Andrew was involved in setting AXA XL's CSR strategy and is a member of the AXA XL CSR Steering Group. Andrew plays an instrumental role in looking to expand AXA XL's involvement in closing the protection gap and leads the Public Sector Partnership practice group at AXA XL. The aim of the group is to strengthen partnerships with the public sector in order to bring socially impactful insurance solutions to the market. Andy is based in Bermuda and can be contacted at: <a href="mailto:andrew.macfarlane@axaxl.com">andrew.macfarlane@axaxl.com</a>.

### **Cambridge Centre for Risk Studies**

The Cambridge Centre for Risk Studies is based within the University of Cambridge Judge Business School. The Centre works closely with business partners in tackling complex issues of management science in risk. This policy of deep engagement has enabled the Centre to develop relevant solutions for businesses. The Centre's leadership combines academic excellence with industry experience.

Further information on CCRS's risk management resources can be viewed at <u>cambridgebusinessriskhub.com</u>.

For further information please contact:

Suzanne Hopkins, Senior Advisor, Cambridge Centre for Risk Studies s.hopkins-oldak@cantabrisk.com

AXA XL is a division of AXA Group providing products and services through three business groups: AXA XL Insurance, AXA XL Reinsurance and AXA XL Risk Consulting. Information accurate as of March 2021.