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DESIGNING PUBLIC-PRIVATE RESPONSES TO SYSTEMIC RISKS

Enabling insurers to manage the risks and capture the opportunities associated with systemic risk

MORO conference - Wiesbaden

THE LESSONS FROM TERRORISM AND HOW THE UK'S CURRENT MODEL IS A PUBLIC/PRIVATE SCHEME TO HELP ADDRESS AN EVER EVOLVING TERRORISM INSURANCE PROTECTION GAP IN THE UK

Origin

- Pool Re is the insurance industry's mutual for reinsuring terrorism risk in Great Britain.
- > Pool Re was established in 1993 as a response to the market failure arising from reinsurers withdrawing terrorism cover after the Provisional IRA's property-centric bombing campaign in the 1990s.
- Pool Re was founded by the insurance industry in cooperation with government, and supported by a backstop in the form of a loan facility provided by HM Treasury
- Pool Re exists to correct market failure, protect the UK economy, and safeguard society and livelihoods from acts of terrorism.



Baltic Exchange bombing on 10 April 1992, leading to Pool Re's establishment

Impact

- Since its formation, Pool Re has enabled and leveraged the private (re)insurance sector to serve a public policy objective, notably:
 - Re-established and grown a private market for terrorism insurance protecting assets worth £2.2trn
 - Paid over £1bn in claims without resorting to HMT's guarantee – nil cost to the taxpayer
 - Developed a £10bn+ risk financing structure distancing HMT and the taxpayer from terrorism risk
 - Paid HMT for the facility of its guarantee (~£1bn)
 - Standalone market estimated to have grown £30m to £108m in the last five years alone
 - Strategic use of the fund to invest in partnerships, research and protective security initiatives with government and public agencies, academia, and risk specialists to understand and mitigate contemporary and future terrorism threats

POOL RE'S TERRORISM RESILIENCE OBJECTIVES



Protect the UK economy by stabilising the terrorism insurance market, providing solvency at the point of crisis and avoiding repeated market failure



Enable its members to offer comprehensive, accessible, and affordable cover to UK Plc ensuring economic development



Facilitate growth of the UK economy and continuing investment, particularly in infrastructure, by virtue of the ability to purchase viable terrorism insurance



Accelerate the transfer of risk from Government back to the private market through its ecosystem of risk awareness, modelling, and management



Act as a conduit to ensure alignment of interests between all stakeholders, including private and public parties



Diversify capital sources by encouraging participation from global reinsurance and capital markets



Identify future terrorism vectors and, where there is market consensus, evolve proposition to bridge protection gaps arising from an evolving risk profile and avoid moral hazard

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Support national security strategy by incentivising investment in cost-effective loss prevention measures

HOW POOL RE HAS EVOLVED WITH THE THREAT



Fire and explosion 1993



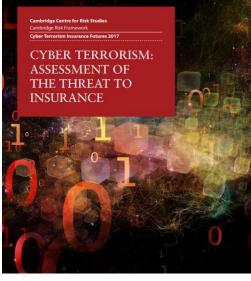
Baltic Exchange Bombing, April 1992



'All Risks', including CBRN 2003



9/11 Attack, September 2001







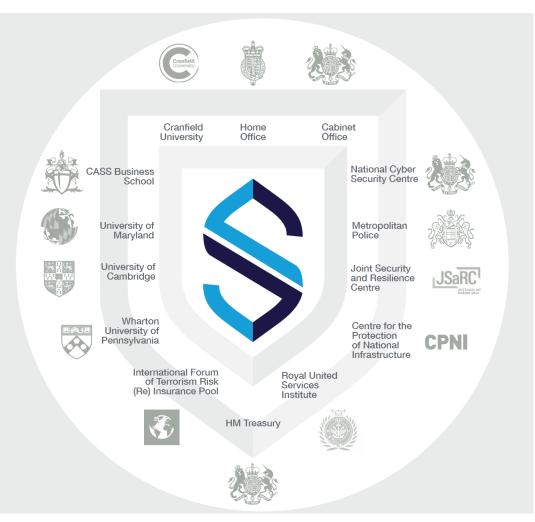
Cyber Trigger 2018



London Bridge Attack, June 2017

POOL RE SOLUTIONS' CO-ORDINATING CAPABILITY

The company uses its unique position between the public and private sectors to invest in partnerships and protective security initiatives with academia, risk specialists, and public agencies to understand and mitigate the modern terrorism threat to the benefit of all stakeholders.



COULD THE POOL RE MODEL BE USED AS A TEMPLATE TO ADDRESS OTHER, SOCIETALLY CATASTROPHIC RISKS FOR WHICH THERE CANNOT BE ADEQUATE COMMERCIAL INSURANCE WITHOUT STATE SUPPORT

Track Record of Developing Markets and National Resilience

Pool Re has proven with terrorism risk that the combination of a solutionsbased approach to managing risk with the economic stability provided by government guarantee:

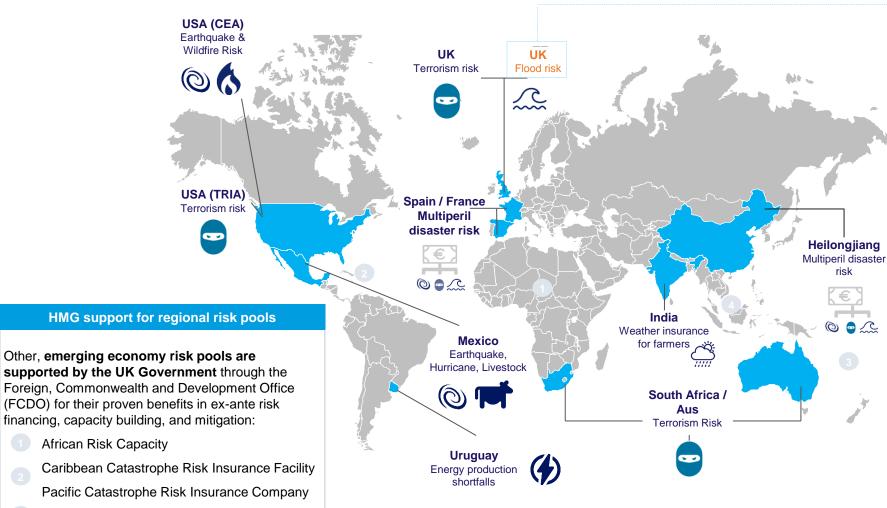
- Stimulates a commercial market to grow that would otherwise not be able to exist by incubating extreme risks
 - Incubating risk allows commercial insurers to deploy capital and grow their understanding of the risk without being exposed to the extreme tail risk of unquantifiable or unprecedented events, gradually increasing their 'skin in the game'
- > Monetises a guarantee given by HMT and reduces its contingent liability
- > Increases investment in and understanding of risk mitigation
- > Improves the UK's economic resilience and grows capacity
- > Is not anti-competitive as the market has equal access

Pool Re thus realises many of the IMF and OECD's recommendations on best practice in managing contingent liabilities (CL), as outlined in HMT's 2020 Contingent Liabilities framework and set of recommendations for Government's role as insurer of last resort

A Template for Other Risks?

- Nearly three decades on, terrorism is a far more complex and potentially more catastrophic risk, but one for which there is a large and competitive insurance market to meet the needs of policyholders and anchor the UK's economic resilience.
- It is no longer an uninsurable peril because insurers and politicians partnered to create a model which allowed them to share a risk which neither could address alone, or afford to remain unresolved.
- Covid-19 has highlighted that the traditional insurance model is increasingly unable to keep pace with or provide meaningful protection against a rapidly evolving risk universe increasingly dominated by "intangible" risks to business continuity
- The appetite for more of these partnerships has historically been tempered by reticence from Government to intervene and potentially become locked into markets, and concern from the industry that state intervention would erode profit opportunities.
- But the experience with terrorism risk should assuage such concerns. In recent years, Pool Re and its stakeholders have delivered on a strategy to significantly grow commercial carriers' skin in the game, reducing reliance on the Government's guarantee by stimulating profit and growth opportunities in (re)insurance and capital markets even as the risk continues to evolve.

PUBLIC/PRIVATE DISASTER RISK MANAGEMENT SCHEMES EXIST ALL OVER THE WORLD, WITH A BROAD RANGE OF MODELS AND MANDATES, AND FOR A BROAD SPECTRUM OF RISKS



3 Southeast Asia Disaster Risk Insurance Facility

Domestic comparison: Flood Re (UK)

> Flood Re is a UK mutual reinsurer. It was established as a joint initiative between the UK Government and private sector insurers, designed to make household flood insurance policies more affordable and more available for eligible homes in high flood risk areas, while minimising the associated costs.

- In order to do this, Flood Re provides reinsurance cover at a subsidised rate to cedants, resulting in an expected underwriting loss each year.
- Flood Re finances this through a £180m levy on UK household insurers in proportion to their relevant underwriting profiles.
- > This levy is also used to purchase an outwards reinsurance programme. It raised £180m for the 2018/19 period and purchased a reinsurance programme with a maximum liability limit of £2.2bn in 2019.
- The Scheme was established by the Water Act 2014, and is expected to be in place for a total of 25 years while the industry transitions to risk-reflective pricing.

The perspective of Government on managing systemic risk over the next decade, and the role of the (re)insurance industry

From Cause to Effect: Rethinking Resilience

- > The Covid-19 crisis has forced the majority of governments around the world to confront their now clear status as de facto insurers of last (or indeed first) resort when systemic risks manifest.
- > The pandemic, and nations' response to the pandemic, has highlighted the limits of private sector capacity to underwrite business-continuity losses resulting from any systemic loss event, leaving governments unilaterally bearing the risk.
- This is a fundamentally unsustainable and non-resilient model, and a challenge that the industry has shown a strong appetite to help to address.
- The stark message delivered by the House of Lords Select Committee on Risk Assessment and Risk Planning, which in December 2021 delivered its comprehensive Report into 'Preparing for Extreme Risks: Building a Resilient Society', carries a salient message not just for the UK but for policymakers from all around the world:

The UK must be better at anticipating, preparing for and responding to a range of challenging risk scenarios, including those which it has never experienced before... **[We] must move away from a risk management strategy which prepares for individual risk scenarios in isolation and often ignores or fails to appreciate the interconnected nature of our society**. No two risk scenarios will play out in the same way and many emergencies will produce cascading effects that are capable of major disruption as they rip through society.

Despite the manifestation of risks being highly uncertain, attempts are made to anticipate them and plan accordingly. [However,] we consider that generalised resilience is the right response to the threat of increasingly unpredictable risk. The Government's risk management system should change from attempting to forecast and mitigate discrete risks, towards a more holistic system of preparedness.

Provided fundamental policy principles are met, Government can leverage the insurance industry's expertise, infrastructure, and capabilities in building resilience to catastrophic risks

Expertise in risk management and mitigation



Quantification of large catastrophic risk events

• Expertise in infrequent large loss modelling



Developing a relevant customer proposition

- Design of commercial products which meet the specific protection needs of businesses, to enable businesses to conduct trade confidently
- Enabling the transfer of risk

Awareness, prevention and risk control

- Experience in increasing awareness through education
- Management of incentives to align behaviours through effective prevention/ mitigation
- Reinforcing pre event, event and post event preparedness and mitigation e.g. resilience communities and risk bursaries (customer undertakes assessments; insurer fronts the cost of the mitigation measures)

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Learning and data

- · Process to refine and enhance future outcomes
- Collation of data for use by Government agencies and academia

Capabilities and infrastructure available



Customer reach and distribution

 Access to UK SME and large corporates through existing distribution channels



Premium collection and policy issuance

Ability to easily transact with customers to collect risk-based premiums and issue policies

Claims validation and payment

- Ability to confirm legitimacy of claims to help mitigate fraud
- Capable of making large scale disbursements to businesses at speed to provide liquidity to customers quickly

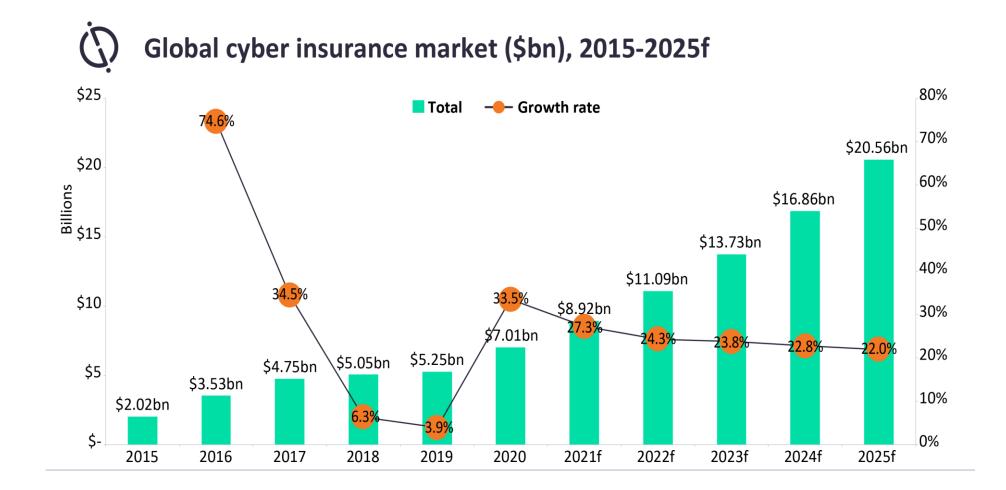
Capital management

- Flexibility to adjust cover, retention/ deductible and retrocession programme depending on market appetite from time to time
- · Efficient structure to align private and public fund and interests
- Ability to include external sources of capital (e.g. retro/ ILS)

Risk Assessment and Business Continuity Planning Tools

 Access to industry standard best practices, and virtual and digital tools developed across the insurance industry: Best practices checklists, Guidance plans, Self assessment/maturity review questionnaire and Resources for SMEs (such as Institute of Directors, Chambers of Commerce, Federation of Small Businesses)

Global Cyber Premiums



Case Study: The "Pandemic Re" proposal submitted to HM Treasury in 2020 indicates a willingness by the UK insurance industry to partner with the state to address societal risks, but is now dependent on engagement and commitment by Government

The "Pandemic Re" Initiative

- In the UK, Stephen Catlin led the "Pandemic Re" initiative, with six working groups consisting of more than 60 individuals from across the industry, which also included lobby groups and ex-government ministers.
- The initiative considered the problem of how to provide compensation to a very high number of businesses simultaneously, using a clear and transparent policy trigger mechanism.
- How to achieve optimum take-up was also considered, as well as the language used to deliver coverage and claims settlement. In common with many of the other global initiatives, parametric triggers were discussed as a way of simplifying the way a policy was activated and providing a common basis for all policies.
- A set of proposals was presented to the UK government in August 2020, and officials acknowledged the enormous extent of the work, collaboration and commitment that had been undertaken in just over three months; for now, however, their focus remains on the current pandemic.

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Proposal Highlights

- The proposal is clear that "the insurance industry can demonstrate its commitment to a public private scheme by sharing the risk with Government through the provision of capital and risk retention; contributing to economic confidence and resilience, as well as providing risk management, mitigation and transfer expertise, infrastructure and capabilities"
- > The proposal considers target customer, Government, and (re)insurance industry perspectives through a range of high-level designs.
- The initial solution is intended to provide protection to "UK SME and Mid Corporate businesses, particularly those with <250 employees, whose behavioural characteristics will inform solution design including propensity to buy and affordability"
- > The scale of the challenge is indicated by our estimate that in 2019, less than 40% of UK SMEs had BI insurance *of any kind*, with far fewer having NDBI.
- The proposal is clear that the industry has reached a position where Government dialogue and steer is now required to take the proposal any further. Government engagement with the following is considered fundamental to developing the proposition further:
 - a) **Overall appetite** to support an insurance solution alongside other Government initiatives
 - b) Willingness to provide a guarantee
 - c) Scope of businesses to be covered (SMEs only?)
 - d) Position on mandatory vs voluntary for customers

The development of a 'UK Pooling-Potential Framework' (UKPPF), taking cyber as a starting point but with applicability to a range of other risks with "uninsurable" tails

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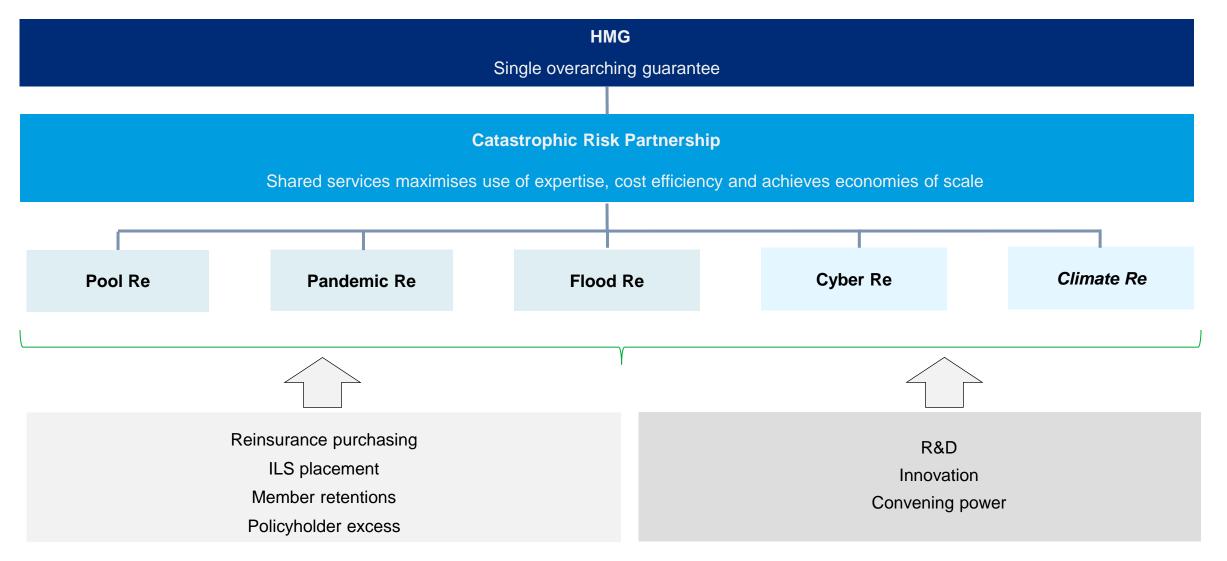
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Phase One		Phase Two
Commercial Cyber Pool	1b R&D and Innovation Centre	Public-Private Cyber Pool
Provides a starting point, demonstrating the industry's appetite for innovation, becoming state-backed after a systemic cyber event renders it necessary (i.e. Phase 2) Underwriting ecosystem and uniform framework which lets commercial entities remain competitive Allows a more sustainable market to develop by creating a cyber underwriting and risk management ecosystem Pooling together risks makes the market more robust, reduces the volatility of claims, and premium costs Decreases national cyber protection gap by increasing cyber insurance penetration and accompanying cyber security rigour Grows FDI, since strengthened national cyber ecosystem improves investment prospects and reduces credit risk	 Consultancy, R&D, and innovation centre underpinning the commercial pool Centre funded through the premiums & economies of scale generated by commercial cyber pool Leverages and is a convening power for UK's world-leading academia, security services, specialist insurance market Mandate to enable the design, implementation, and ongoing success of structures emerging from Phases 1 – 3 represented here – both in the UK and internationally Facilitates the development of a solution: The closing of the knowledge gap, some limited insurance cover and the advice of the private sector in ex ante mitigation steps that customers can adopt to increase their own resilience 	 As part of the design of Phase 1a, Government could: a) Pre-commit to support a PPP b) In event of gradual or sudden market failure (and societal welfare is threatened), intervene to provide liquidity and stability with the provision of a backstop A state-backed cyber pool would provide maximum resilience and competitive advantage. Commercial market able to sustainably grow and profit from cyber risk, whilst fulfilling public policy objectives Pre-empt market failure and mitigate systemic impacts before they occur An enabling environment for risk mitigation and management across the whole of society
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Resilience UK: Discrete 'defined event' risk pools under a single government 'umbrella' (UK example)



APPENDX



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