Ensuring Resilience: Opportunities for the Insurance Industry

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Overview

- What do we mean by resilience?
- Insurance industry approaches to resilience
- Some challenges of today’s approaches
- We could improve the world if… - opportunities to improve resilience to consider
What Do We Mean by Resilience?

Reaction to events, based on purely arbitrary distinctions for illustrative purposes

<table>
<thead>
<tr>
<th>Frequency</th>
<th>‘Never noticed’</th>
<th>‘Acceptable disruption’</th>
<th>‘Serious manageable problem’</th>
<th>‘Unrecoverable event’</th>
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<tbody>
<tr>
<td>Severity</td>
<td>Ability to withstand event that occurs</td>
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Pre-event mitigation / avoidance
Insurance Industry Approaches to Resilience

Illustrative examples of how insurance companies improve resilience today

**Pre-event mitigation / avoidance**

- Provide external perspective / signal to insured as to risk level through pricing and risk selection
- Incentivize insureds to reduce expected loss by rewarding risk mitigation / avoidance investments (e.g. training, technology deployment, inbuilt redundancy)

**Increased ability to withstand event**

- Pay indemnity to ‘make good’ loss
- Provide post-loss services to increase effectiveness and speed of recovery

**Insured-oriented**

- Use human experience of many clients to inform judgements
- Leverage technology to improve risk selection and pricing models
- Invest in technology / research to reduce insureds’ expected loss

**Insurer-oriented**

- Hold sufficient capital to withstand even low frequency events
- Diversify risk through reinsurance / other capital transactions
- Assume more risk to achieve diversification benefits against larger earned premium received
Some Challenges of Today’s Approaches

Selected points for reflection

1. 1-year insurance contracts limit effectiveness of insurer-insured interaction

2. Limited ability to see across insurer results, coupled with very different ingoing insurer objectives and beliefs, make deriving a market signal difficult

3. Low data volumes / limited pool of comparable clients in some spaces mean high pricing model uncertainty for individual risks and some portfolios

4. Computational and statistical techniques exist that can reduce model uncertainty; but are typically black box and difficult to combine with human judgement

5. Understanding more potentially catastrophic events than peers is a competitive advantage in resilience for insurers; but potentially a disadvantage in winning business
We Could Improve Resilience If…

Possible opportunities to improve resilience to consider

...we had longer term insurer–insured relationships, aligning interests more tightly and enabling co-investment

...we could tell more readily how insurer results compared to those of peers, so we had a better idea of what the market was telling us

...insurers could aggregate much more data from insureds, to derive signals from data that never seemed relevant before

...insurers selectively and anonymously pooled data with the backing of insureds, insurers, regulators and Government, to create sufficient data sets to truly improve resilience

...we could move the debate from ‘who has the data’ to ‘who can use the data most insightfully’

...we invested in talent and their understanding of advanced models, so they can effectively combine human judgement and cutting edge data science

...insurers took into account a similar set of risk scenarios, to reward insurers who invest in understanding more, not those who avoid discovering threats to resilience