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GI Research Opportunities

Chris Bird



18 June 2019

Let me tell you about a committee



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GI Research and Thought Leadership subcommittee

... is responsible to the GI Board for all matters relating to research and thought leadership, specifically within the GI Practice Area.

Christian Bird	Jo Lo (chair)
Cherry Chan	Adhiraj Maitra
Thomas Day	Yuming Mei
Zvi Ebert	Dimitris Papachristou
Michael Garner	Chris Smerald
Laura Hobern	Martin White

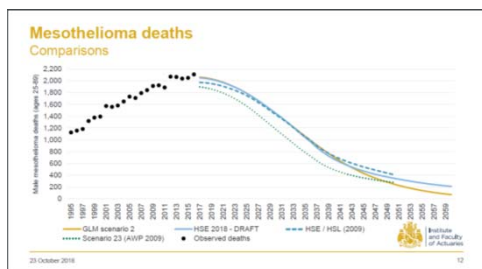
<https://www.actuaries.org.uk/about-us/governance-and-structure/other-boards-and-committees/practice-boards/general-insurance-board/gi-research-and-thought-leadership-committee-girtl>



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Recent research highlights from working parties



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Managing Uncertainty

Principles for improved decision making

by Members of the IFoA Working Party

- Face up to uncertainty
- Deconstruct the problem
- Don't be fooled (un/intentional biases)
- Models can be helpful, but also dangerous
- Think about adaptability and resilience
- Bring people with you



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Possible ideas

Claims Inflation

Correlation and dependencies

Visualizations and validation measures

Commercial lines data pooling

Sustainable development goals and GI

Parametric and other new products

Publically available data collection and standardization

Cyber data analytics

IFoA Encyclopedia of GI Actuarial Science

Super trends

Liability accumulations and catastrophe events

New Economics and GI

Space Weather

Food system fragility

New technology / internet of things



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Claims Inflation

Some initial thinking:

- Attempt to produce measures of trends for different lines of business and products; measured from market data, looking at changes in trends over time.
- Investigate links to macro-economic measures or other indices such as price inflation, wage inflation, health-care cost inflation etc, taking care with timing/lag effects.
- How could an “Actuarial Claims Inflation” index work? Does it have to be purely data driven? Maybe survey type?



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Correlation in GI

Some initial thinking:

- Analysis and benchmarking from industry data. Current public info of limited use as it suffers from inconsistencies between firms. Is it possible with a focussed effort to compile a quality industry dataset for analysing GI dependencies?
- Create an "Actuarial Dependency Index" - where regularly we survey senior industry experts on tail dependencies. Much like surveys like the "Purchasing Manager Index".
- Formulate a better understanding of dependency effects so that we can better model them. For example how correlation should be lower for small lines with inherent noise, and higher for very large accounts where volatility is dominated by systemic effects.



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Super Trends

Some initial thinking:

- A series of research reports, focussing on possible or plausible, desirable or undesirable scenarios in the medium term future – and how these may connect with the GI industry
- Some broad areas: demography / longevity; new technology / internet of things / cryptocurrencies; energy; political and legal changes; social movements; environmental developments; economics / inequalities
- Links with existing research organisations – collaborations / readers digest / build on general research



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The way forward

We would love to hear your thoughts

Please send to girtl@actuaries.org.uk , the more specific the better

Over the next month - shortlist up to five ideas to develop further into proposals

Select one or two to undertake, commence in 2019Q4



Questions

Comments

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