#### IAA Joint Section Colloquium Online October 14, 2021

Are actuaries independent guardians of financial security or just telling a convenient tale?

> Dr Michael Fackler, DAV independent actuary

#### About the speaker

- Dr. (rer. nat.) Michael Fackler, Munich, Germany
- Qualified actuary DAV, self-employed
- University at Munich & Pisa: math, physics, & some philosophy
- Doctorate at Univ. Oldenburg, in parallel with working: on experience rating, completed 2017
- 10 years with leading reinsurers
- 15+ years as consulting actuary
- Main areas: non-life reinsurance pricing, scarce data

#### London Market debate: Excerpts

*Is there evidence for market-wide group think?* Tredger et al.

*Financial markets are also social structures.* Weick et al.

The review noted that frequent industry use of the phrase **"this is common in the industry"** ... was striking.

#### Haddrill et al.

#### more

# It is inevitable that some modelling practices are *social constructs*.

# Management **may not want to be told** how uncertain the estimates are.

# "People believe in this model. If we [the actuaries] say it is wrong, it undermines us and the model."

#### Frankland et al. [paper & discussion]

## Collective self-deception?

- Does insurance modelling reflect reality quite well, or rather draw a socially agreed picture?
   *real vs perceived security* –
- Do actuaries (have to) go with the crowd?
  *independence* –

Observation:

• In case of high **uncertainty**, everyone prefers to work with an **optimistic** actuary.

## Background 1 Psychology: Confirmation bias

It is harder to crack prejudice than an atom.

Albert Einstein

## Background 2 Anthropology: Peer pressure

In order to be an immaculate member of a flock of sheep, one must, above all, be a sheep.

Albert Einstein

#### Background 3 Sociology

*Trust is the foundation of society.* 

#### Frederick Douglass, abolitionist & statesman

#### Social trust

- In **large** social groups we have to deal with a lot of strangers.
- Here cooperation requires a **leap of faith**: the belief that the community (system) in principle works.
- Social trust relies on **shared** convictions and narratives.

## Fighting for trust

# **Dilemma:** Social trust builds up very slowly, but can erode in a second.

Essential: The community must be **perceived** as functioning properly.

Possible actions:

- arduous: real improvements of the system
- clever: myths, propaganda, window dressing Both variants occur.
   Both variants work.

#### Example

Ein solch Papier, an Gold und Perlen statt, ist so bequem, man weiß doch, was man hat.

Such paper's convenient, for rather than a lot Of gold and silver, you know what you've got.

Mephistopheles, demon (in: Johann W. von Goethe, *Faust, Part II*)

## Money

- **Fiat money** (banknotes, scriptural money) is basically a promise: that the current economic system will function in future.
- The belief in this promise is the basis of the modern economy
- Bottom line: A **subjective** feeling is the **real** basis of the economy.
- The system works at least for some decades in a row.

#### Insurance

... hinges crucially on social trust – within and beyond the industry:

- money-based
- complex
- long-term
- volatile
- subject to uncertainty

#### Fighting for reputation

- Social distrust may affect single insurers or the industry as a whole.
- No one wants such distrust to arise and it is this pressure that the actuaries ultimately feel.

# The **Transparency Dilemma** of risky environments

The actuary's role: ensure transparency as regards risks and uncertainty.

But:

- The more **transparency** you achieve, the more **problems** may come to light.
- This enhances **real** security, but can undermine **perceived** security, as too much bad news erodes social trust.

## Two tough questions

- 1) What is the optimum amount of transparency?Rough estimate:0 << x < 100%
- 2) **Who** decides what is rendered transparent and what isn't?
- Sometimes actuaries are the ones who decide, presumably not badly, some even like to do that.
- However, such decisions manage social trust, which is not an independent expert role, but a political one.

#### Conclusion

Generalising beyond insurance:

- Managing complex risks in large communities involves striking a balance between self-critical transparency and cultivating an image that builds trust.
- **Independent experts** can have a key role in this, but it is one that is **at risk** of merging with a political role.

#### The End

#### Thanks for joining this talk.

# See the paper for details (colloquium website or SSRN).

michael\_fackler@web.de