



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

Michael Fackler, independent actuary



About the speaker

- **Dr. Michael Fackler, Munich, Germany**
 - *Independent consulting actuary*
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- Fellow DAV, 25 years in (re)insurance
 - Univ. at Munich & Pisa: math, physics, & some philosophy
 - Lately: doctorate at Oldenburg on experience rating
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- Main consulting areas: non-life reinsurance pricing, dealing with scarce data
 - Seminars, talks, papers



Quotes from London: the overall picture

- *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.

- *When technically valid estimates are hard to come by, we are happy ... with **estimates** that are **socially valid**.*

Tsanakas

- *Is there evidence for **market-wide group think**?*

Tredger et al.

Quotes from London: the actuaries' perspective



- *It is inevitable that some modelling practices are **social constructs**.*
- *People **believe** in this model. If we say it is wrong, it **undermines** us and the model.*
- *Management **may not want to be told** how uncertain the estimates are.*

Frankland et al. (discussion)

Collective self-deception?

Questions:

- Does insurance modelling reflect reality quite well, or rather draw a socially agreed picture?
- Do actuaries (have to) go with the crowd?

Observation:

- In case of much **uncertainty**, everyone prefers to have an **optimistic** actuary.

1st trap, at individual level: Confirmation Bias



It is harder to crack prejudice than an atom.

Albert Einstein

- Reality is perceived and evaluated selectively, in order to confirm ones convictions.
- Unconscious psychological mechanism in the interests of well-being
- Affects everyone, even experts

2nd, at group level: Peer Pressure



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

Albert Einstein

- Evolutionary trait: staying in social group is vital
- The group provides and demands solidarity.
- Individuals adapt, even their beliefs.
- Both **swarm intelligence** and **swarm stupidity** (groupthink) exist.

3rd, large-group specific: Social Trust

Trust is the foundation of society.

Frederick Douglass

- Leap of faith: trust that the community (the system) functions properly
- Necessary for open collaboration between strangers
- Based on shared convictions and narratives (e.g. nation-building)
- Much easier and quicker to destroy than create!

Trust-preserving measures:

- arduous: **real** improvements of system
- clever: **perceived** improvements (myths, propaganda, window dressing)

Example: Fiat Money

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

Mephistopheles in Goethe's *Faust, Part II*

- Today's money, without gold backing, is just a **promise**: that the current economic system will function in future.
- The **subjective** belief in this promise is the **objective** foundation of our economy, this has worked for decades.
- Fiat money is the most important **collective illusion** of the modern age – and insurance depends heavily on it.

Insurance

... hinges crucially on social trust inside and beyond the industry:

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

People want to feel secure. **Financial regulation** caters for this need, but ...

- is **arduous** and ...
- possibly nevertheless only achieves **perceived** security.

The actuary's role?



*... And in the naked light I saw
Ten thousand people, maybe more.
People making without sleeping
Regulations without listening,
People filing forms, devoid of meaning bare.
But no one dared
Disturb the hounds of solvence. ...*

Walther Neuhaus: The Sound of Solvence
<https://waltherneuhaus.wordpress.com/2015/10/>

The transparency dilemma

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.
- Distrust may affect single insurers or the whole industry.
- No one wants such distrust to arise – and **this** is the pressure that the actuaries ultimately feel.

Two tough questions

1) What is the optimum amount of transparency?

Rough estimate: $0 \ll x < 100\%$

2) Who decides what is rendered transparent and what isn't?

- Sometimes actuaries are the ones who decide, presumably not badly, some don't even mind having to do it.
- However, such decisions **manage social trust**, which belongs to the **political** sphere, not to the conventional expert role.

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** have a key role to play in this, but it is one that is **at risk** of merging with a political role.

Final question: Can / should actuarial associations do something about this?

- to support their members (in their individual roles)
- to prevent reputational risk (as regards the profession itself)

Thank you very much for your attention!

Contact:

Michael Fackler

mail: michael_fackler@web.de

See also homonymous article in:

The European Actuary, 19 (March 2019)

<http://www.theeuropeanactuary.org>

Quoted literature

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