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The Insurer's New Regulation: Risk Management, Perceived Security, and Collective Illusions

Michael Fackler
Independent Actuary, Munich, Germany

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Motivation

This talk is inspired by Mark Graham‘s GIRO 2011 presentation

The Great 99.5th Percentile Swindle

and tries to explain why the discussion that he intended to initiate

- was initially slowed down by hesitation and resistance in the UK
- and is still unwelcome in many European countries.

Abstract

People want **security**, not least in the financial sector.

Regulation (Solvency, Basel etc.) caters for this need.

Or does regulation just provide *perceived* security?

If yes, would that be so bad?

Illusions of a social group, such as a sense of security without a sufficient real foundation, are ambivalent: whether the group sticks to the illusion or abandons it at some point, either can be dangerous.

Abstract

The talk explains

- why such illusions arise and often persist,
- when they are useful or even necessary,
- what that means for actuaries and all others who are supposed to **create transparency** and **manage risks** in the financial sector.

Agenda

Collective illusions

- Problem
- Background
- Examples

And the actuaries?

Conclusions

Collective illusions

Problem

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Problem

Give the man who is telling the truth a horse, so that he can escape afterwards.

Old Persian proverb

The phenomenon

If you deviate from the prevailing opinion, you make yourself unpopular, even when you have the best intentions (e.g. warnings).

Reasoning does not help: opposition is emotional, even it it is only about facts.

Who is affected?

- Visionaries of any kind
- Mavericks of any kind
- Experts of any kind

- Bearers of bad news
- Those who warn of risks

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Collective illusions

Background

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Background 1

It is harder to crack prejudice than an atom.

Albert Einstein

Cognitive bias

People prefer information that confirms their beliefs.

Information is perveived and assessed selectively.

Self-confidence enhances open-mindedness.

Explanation: *psychologal immune system* – people want to feel good.

Facts and values

Facts influence opinions and decisions (e.g. smoking, toxic waste disposal, climate change).

Staying impartial is extremely difficult in case one is involved.

What does not help:

- explanations
- fair decision processes

Background 2

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

Albert Einstein

Importance of the group

Evolutionary trait: exclusion from the group is fatal, must be avoided at any cost.

A *possible* death *later* is better than a *certain* death *now*.

Response: adaptation, even in beliefs

Power of the group

Evolutionary trait: the group must operate *as a group*.

Response:

- Group pressure on mavericks
- Math. sociology: minorities (> 5-10%) can sometimes prevail, but must be determined and persistent.

Swarm intelligence?

... is there.

But there is also...

Swarm stupidity

Concept from disaster research: *Groupthink*

Background 3

He who does not trust enough, will not be trusted.

Laozi, philosopher and writer

Even the best must now and then lie,
sometimes he does it with pleasure.

Wilhelm Busch, humorist and poet

Social trust

In *large* social groups we have to deal with a lot of strangers.

Here cooperation reqires a *leap of faith*:
the belief that the community (system) in principle works.

- structure
- typical behaviour
- competence of leaders

Dilemma: trust builds up only very slowly, but can be destroyed in a second.

Building trust

The community must be *perceived* as well *functioning*.

Possible actions:

- laborious: real improvements
- clever: myths, propaganda, manipulation

Both variants occur.

Both variants work.

Intermediate conclusion

The *subjective* faith in the system can generate trust and emerge as a *real* feature – even when it is based on illusions.

We should face collective illusions of our fellows with ...

- *calm*, when they bother us,
- *pragmatism*, when they help us,
- and *self-confidence* (hampers contagion).

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Collective illusions

Examples

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Example 1: Nation

Each nation has the naive view to be God‘s best idea.

Theodor Heuss, journalist and statesman

We have made Italy. Now we must make Italians.

Massimo D‘Azeglio, writer and statesman

Example 2: World view

Convictions are more dangerous enemies of truth than lies.

Friedrich Nietzsche, philologist and philosopher

Example 3

We are full of fear, but of the wrong issues.

Hoimar von Ditfurth,

physician and scientific journalist

Risk perception

Examples: Traffic, BSE, hygiene, natural hazards, genetic engineering, nuclear energy, financial system

- very heterogeneous, inconsistent and wavering
- anything occurs: from repression to panic
- depends extremely on world view

Problem: People like to rely on regulation – and pass the buck.

Further problem: In many areas illusion of security is much cheaper and quicker to get than real security.

Example 4

Such paper's convenient, for rather than a lot

Of gold and silver, you know what you've got.

Mephistopheles, demon

(Source: Goethe, Faust II)

Money

Fiat money (banknotes, scriptural money) is basically a promise: that the economic system will continue to operate as it does now.

The confidence in this promise is the basis of the modern economy (horror scenario: bank run)

Consequence: special role of the banks in the economic system

Money

Bottom line: A *subjective* feeling is the *real* basis of the economy.

Money is probably the most important collective illusion of the modern age.

The system works – at least for a few decades in a row.

currently: All policies adopted in the recent financial crises aimed *primarily* at saving collective illusions.

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And the actuaries?

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Well, the actuaries ...

... 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

Excerpts from London Market‘s discussion

*Your regulator tells you to make an exact replica of the Mona Lisa. You receive no illustrations of the painting, but **several 300-page documents**.*

*The project moved **away** from the **principle-based** system that was originally intended.*

Manuel the [anonymous] Scandinavian actuary:
The faulty towers of Solvency II

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

Tredger et al.

Further excerpts

*The power of the **social context** is particularly strong when people's actions are **public**, when decision makers are under **time pressure**, and when there is **uncertainty** or ambiguity surrounding the decisions. **Underwriting** risks meet all these criteria.*

*The **spatial concentration** ... in the London Market ... can lead to biases arising from social interactions.*

*Financial markets are also **social** structures.*

Weick et al.

Further excerpts

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****.*

*... "****confidence*** *in the model" rather than "learning from modelling"*

... sensitivity of capital requirements to ***unverifiable*** *statistical assumptions*

Tsanakas: Modelling. The elephant in the room

Further excerpts

*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."*

*Are we, in trying to set a **1 in 200** estimate, actually asking ... something that can be **meaningfully** modelled?*

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

Frankland et al. [paper & discussion]

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Conclusions

Security in finance

People want to feel secure.

Financial regulation caters for this need, ... but possibly only achieves *perceived* security – and is nevertheless very expensive.

Actuaries, risk managers and many other competent and committed people want security, too: to have *things under control*.

But maybe they just steer a small vessel (quite deftly) through heavy seas.

The *transparency dilemma* of risky environments

The more *transparency* you create, the more *risks* come to light.

Transparency improves *real* security, but may undermine *perceived* security and the overall trust in the system.

Question: How much transparency is optimal?

Rough estimate: 0 << x < 100%

Company‘s dilemma

Fluctuating economic results are unwelcome.

„Smoothing“ of the key figures is forbidden.

But, maybe you cannot eliminate both at the same time.

If the financial sector is much more volatile and instable than people (want to) believe, then *modern transparent regulation* makes this *visible* – and the actuaries are the *bearers of the bad news*.

Individual‘s dilemma

Actuaries and other experts can probably not fulfil all expectations at the same time.

This can be unpleasant, but being aware of the problem helps cope.

Knowledge about human behaviour should enable us to go to work with a different *attitude*, to stay more calm and serene in spite of the various pressures around.

Bottom line

The dealing with complex risks in large communities is a balancing act between

self-critical transparency and *image cultivation to build trust*.

The (tough) decision what to make transparent and what not, is part of

politics / management,

not an expert‘s job.

A last quote

The greatest illusion:

to believe not to have any.

The worst illusion:

to believe not to need any.

Walter Ludin,

Swiss Capuchin monk and journalist

Questions

Comments

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Michael Fackler
Independent Actuary
Munich, Germany
michael_fackler@web.de

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