

Communicating uncertainty to a Life Company Board

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Communicating uncertainty

Agenda:

- Life Company Board priorities
- Presenting results in an accessible format
- Anticipating the Board's response
- Any questions and discussion

Life Company Board priorities

Need to understand what their priorities are:

- Prudent financial management
- Profitability, use of capital
- Preserve reputation (customers and others)
- Accountable to shareholders + regulators

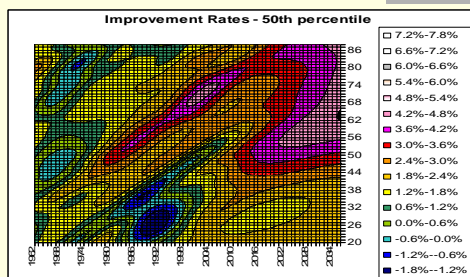
What do they not want?

How to “lose your audience”:

- Waffle
- Too much detail
- Too much theory
- e.g. ...

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What do they not want?



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Problems with longevity risk

Why is longevity risk particularly difficult to communicate effectively?

- Inherently complex for us to calculate/understand...
- ... but need easily-understood concepts

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Why is longevity risk important?

... or, why should the Board be interested?

- One of the 'big three' contributors to ICA stress test
- Difficult to take mitigating action (lack of reinsurance capacity, little capital market activity)
- Very long term liabilities => extra uncertainty
- Impact on profitability of strengthening assumptions

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Why is longevity risk important?

How have we addressed longevity risk in the past?

- Consistent underestimation of mortality improvements ...
- ... and hence potentially unprofitable business ...
- ... so need greater rigour/realism
- Crude attempts to anticipate future trends

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Various sources of uncertainty

The Board will be familiar with uncertainty in other areas of the business

- Stock market volatility
- Credit risk
- Expenses
- Sales projections

... but longevity risk is different and potentially less manageable

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How to present the consequences

Relate the results to concepts that the Board are familiar with:

- Impact on FSA reserves (solvency and available capital)
- Impact on EEV (profit)
- Risk of ruin (suitably defined)
- Plausible future scenarios, e.g. medical progress (but what is plausible?)
- Expectations of life (e.g. male aged 65: 12 years in 1950, 16 years in 2000 and 20 years in 2030)

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How to present the consequences

Some issues that influence longevity are well-known

- Medical advances
- Pandemics, e.g. avian flu
- Climate change (colder winters, hotter summer)
- Lifestyle changes, e.g. obesity (McDonalds vs Jamie Oliver), exercise

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How to present the consequences

Board members read the papers:

'Miracle' cancer cure to be tested
Child obesity 'doubles in decade'
Yeast intake linked to longevity
Alzheimer's vaccine 'promising'
Scientists at odds over longevity
Hunting 'longevity genes'

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How to present the consequences

... and the analysts:

Bulk Annuities Goldmine or bloodbath?

insurers' assessment of their [annuity] liabilities is likely to be realistic

UK Insurers: Longevity risk a problem for secretive pension funds rather than for open insurers

New mortality tables show reserves to be increased

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Ranges and confidence intervals ...

The Board will be comfortable with the concept of a range of possible outcomes/results

"We are 90% confident that the reserves should be in the range £19bn to £21bn"

■ "So why don't we set them at £19bn?"

■ Anticipate their concerns (capital requirements, analysts' reaction) ...

■ ... and the inferences they will make from the information

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... and degree of confidence required ...

The Board will understand that different uses require different levels of "acceptable uncertainty"

■ EEV (say 50th percentile)

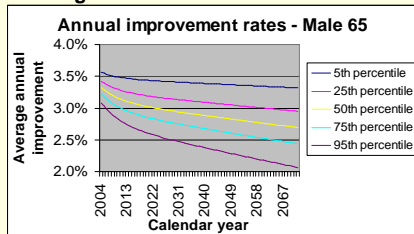
■ FSA (say 80th percentile)

■ ICA (say 99.5th percentile)

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“Say it with pictures”

Graphical presentation offers an alternative way of presenting the information



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... but not “model risk, parameter risk and stochastic risk”

The Board will turn off at anything technical

- Not every nuance of the model(s) used (or even their names)
- Need to allow that other results are possible
- ...
- ... without undermining the message

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“Actuaries are well-paid to give us advice”

Be prepared to answer the question: “What do you think?”

- The Board expects you to use judgement in advising them
- Maintain their confidence
- Need to be professionally happy with the decisions reached

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Summary

We can get our message across to a Life Company Board by ...

- Addressing their priorities
- Giving clear, concise messages – simplifying
- Anticipating their concerns and challenges
- Developing trust and credibility

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Comments and questions

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