

Joint Forum on Actuarial Regulation: A risk perspective

Panel debate of 17 February 2015

Feedback from Andrew Hitchcox

1. Extend Annex 3 to include “Key Drivers of Risk” and “Mitigation Options” 1
2. Don't ignore or delay the critical work on dependencies amongst risks 1
3. Do some back-testing of actual incidents / crystallised risk over the last decade 2
4. Cost-benefit analysis: risks to the public interest of not using actuarial services 2
5. How might JFAR members support practitioners or users of actuarial work in responding to these risks? 3
6. Balanced approach: Role of the governance bodies of users of actuarial work 3
7. Lessons that can be learned from the managing the risks of other professions regulated by the FRC 4

1. Extend Annex 3 to include “Key Drivers of Risk” and “Mitigation Options”

When you read the detailed descriptions of the risks in Section 3, some common themes arise as to the underlying key drivers of the risks:

- E.g. Poor provision of actuarial services.
- E.g. User didn't understand the outputs properly.
- E.g. Underlying risk exposure is so uncertain.

I would recommend that you add a column to the in Annex 3, Titled “Key Risk Driver”. I would be happy to help you identify these drivers and complete the table.

The reason is to make it easier to identify the appropriate mitigation actions:

- E.g. Better technical training for actuaries.
- E.g. Better communications & report writing training for actuaries.
- E.g. Better governance procedures around the underlying risk by the insurance company itself, e.g. transfer it, control it, better transparency of key uncertainties. Of course, the actuary can be trained to make such suggestions, but it helps if there is an extra external push.

Again, I would recommend that you add yet another column to that table, titled “Risk Management Options”, and again I would be happy to help you complete this. These would typically be ideas such as mitigation actions, controls, or the so-called “five Ts”, treat, transfer, terminate, tolerate and take the opportunity.

The above analysis would help determine when actuarial regulation is an appropriate mitigant, and when it is not. Some of the areas covered in the document are squarely in the remit for actuaries to do something about, e.g. our own ‘group-think’. But others are effectively caused by events or individuals outside the actuarial sphere, which means that the policy response can and should be markedly different for different types of events.

2. Don't ignore or delay the critical work on dependencies amongst risks

You mention in Section 1.6.2 that you have not commented on the potential interactions or compounding effects between different risks. I would recommend that you start consulting on this reasonably swiftly:

- A key function of risk management is to understand which risks accumulate, which diversify.
- It is important to understand which risks or combinations of risks can have a systemic effect, because the best mitigation solutions might apply at a higher level than for individual specific risks.

The reason is to prioritise work on the accumulating risks:

- You might spend a lot of time on the stand-alone risks, when the more important issue could be ripple effects and correlations.

3. Do some back-testing of actual incidents / crystallised risk over the last decade

The reason is to validate the findings of this report with actual evidence. This would give greater credibility to the findings, and also might help identify the most material sorts of exposures. There are 40 risk areas in the document, and some filtering / prioritisation process is necessary to proceed.

Sources of actual incidents might be:

- Ask the PRA to let you look at the history of insurance company failures in their files over the last 20 or so years, perhaps after some anonymisation, and examine them to see how much actual actuarial risk was part of the adverse outcome.
- The TPR can ask the PPF to look at pension fund failures that have been referred to them over the last 20 or so years, perhaps after some anonymisation, and examine them to see how much actual actuarial risk was part of the adverse outcome.
- Look in the IFoA's databases from the Disciplinary Schemes.
 - From the Disciplinary Board perspective, a key failing/risk for actuaries continues to be poor communication. The major point is not so much about writing or presenting outcomes well, but more about starting with a good understanding of the client (and other stakeholder) perspective/awareness/capability, and keeping this in mind in all communications.

Also, I would suggest logging near misses from these two sources, as a "nearly crystallised risk" can offer much useful information as to process improvements.

Finally, as well as back-testing for problems, it would also be useful to do some back-testing for successes, even though this is much more difficult. In addition, I would suggest keeping the log you get out of this as a dynamic log going forward, to record arising successes and failures as the years go by.

4. Cost-benefit analysis: risks to the public interest of not using actuarial services

I would recommend that your next report also includes a new section which identifies and assesses the "risk to the public interest of not using actuarial services" in the areas concerned.

This will then help with the following discussion:

- Actuaries are perceived as being expensive.
- If the cost of the risk of not using actuaries is significantly higher than the risks associated with using actuaries, then an economic case can be made

of the benefits to the public interest of using an expensive but valuable resource.

5. How might JFAR members support practitioners or users of actuarial work in responding to these risks?

The ideas below are just an immediate set of thoughts, I am sure that with some ingenuity, we could come up with some other better ones. Maybe this could be the subject of a follow up working party?

(1) If individual actuaries take too long to recognise / respond to external changes.

Suggestion: early warning system.

JFAR set up a review committee:

- Meet every 6 months.
- Identify a list of changes that can impact quality of actuarial work.
- Publish them on a web page.
- TAS 100 requires actuaries to confirm use of this information source.
- Advantage: consistency of outputs from actuarial work.

(2) Issues that are too big for individual actuaries to know all about, e.g. climate change, cyber risk, including when the amount of subject materials is very extensive for every actuary to be an expert, and also subject matter experts disagree.

Suggestion A: best practice advisory system.

JFAR set up a review committee:

- Meet every 6 months.
- Identify a list of issues that are in this category.
- Publish suggested approaches / summaries of best practice, or when to advise users of actuarial work how big the underlying uncertainty is.
- Publish them on a web page.
- TAS 100 requires actuaries to confirm use of this information source.
- Advantage: consistency of outputs from actuarial work; users informed when their risks are so big that extra caution is required.

Suggestion B: more joint profession working.

JFAR set up a committee comprising actuaries and other subject matter experts, e.g. in climate change or cyber risk.

- Need to amend section in TASs that refer to the use of external expertise, to adapt them to more usability.

6. Balanced approach: Role of the governance bodies of users of actuarial work

The end users of actuarial work may fall into one of the following categories:

- organisations: insurance companies, pension funds,
- expert individuals: insurance company directors, pension fund trustees
- private individuals: insurance company customers, pension fund members

Public interest matters normally arise when there is asymmetry of information, expertise or knowledge, especially for the third category of user.

When users of actuarial services from the first two categories are willingly, or of necessity, exposed to certain risks of extreme uncertainty, such as climate change or cyber risk, then there needs to be a more collaborative or balanced effort in managing the actuarial risk to the user.

We note that the FRC's own "Guidance on Risk Management and Business Reporting" for UK listed companies lays the responsibility for risk disclosure upon the whole Board of companies, in particular for the principal risks and uncertainties. Presumably this desire for collective responsibility helps to avoid risk of a single person not being able to have the total knowledge necessary to cover every facet of the affairs of a large and complex organisation.

7. Lessons that can be learned from the managing the risks of other professions regulated by the FRC

I am no expert, but as I understand it, the FRC has oversight on accounting matters as follows:

- Accounting standards which apply to entities preparing accounts.
- Audit standards which apply to individuals and firms who engage in auditing. These standards are equivalent to our TASs.
- Oversight on the ethical standards adopted by ICAEW, ICAS and the other accounting professional bodies (this is similar to your oversight of IFoA on actuarial ethical matters).

So there are no technical standards on tax or corporate finance for example, but there are ethical standards on accountants who engage in these types of work, with discipline sanctions on misconduct in these fields.

Using the "three lines of defence" model, I would characterise "Accounting standards" as first line and "Audit standards" as third line. In your paper, you do not distinguish between the risks of actuarial services that are more front line than third line:

- I can understand that "risks of assurance activities" are more severe - users are using them as a control mechanism, and the chance of failure has to be smaller for them to fulfil their function.
- However, "risks of actuarial services in front line activities" are more to be shared between the user and the provider - the provider is seeking to use the actuary's expertise and ingenuity in the pursuit of greater gains, and needs the actuary to be more flexible in order to improve the chances of success.

In addition, I presume that the FRC has carried out a similar exercise to assess the risks arising from accountancy work, for example, the risks of mark to model asset values being wrong, disclosures in report and accounts being inadequate, internal MI produced by finance departments to boards of directors being flawed, and so on.

It would be valuable for FRC to share with us the lessons learned from any similar exercises, in order to inform and improve on this JFAR exercise.