

## Open questions

### ... for regulators and professional bodies (Authorities).

Academics in law, policy, ethics and mathematical sciences might be amused.

Financial Conduct Authority, Financial Reporting Council<sup>1</sup>, Institute and Faculty of Actuaries, the Pensions Regulator, ...

**A.** If a company board assessment of risks included the statement:

*Risk that a complaint is made to an Authority, leading to a disciplinary procedure that could undermine the process, introducing delay and uncertainty.*

and proposed the following mitigating action:

*Board to consider contingency plan for preliminary contact with the Authorities to give proper context for negative consequences of any decision to open an investigation. [The authorities may not be receptive (to stalling), in order to defend the robustness of their investigatory process.]*

should the Authorities be interested? Should employees be expected to inform the Authorities of this proposal to discourage due process?

**B.** Suppose an Authority told a whistle-blower that the information he provided gave rise to concerns about the way that Waggy Widgets Ltd deals with requests by directors for information and explanations, and investigates concerns raised by directors. Such concerns ought to be investigated, and the Authorities asked for permission to contact Waggy Widgets Ltd.

If permission were given by the whistle-blower, how long would you expect the authority to wait before taking action? A month (20 working days)? Four months? A year?

**C.** The authorities who regulate medicines and medical devices require detailed evidence of high quality data collection, checking and management, and analyses must use fully validated external software programmes, such as SAS. I have noticed many accountants (including the 'big four') laugh about the frequency of errors in spreadsheets, and widespread use of 'models' written in-house in excel.

Has anyone considered a comparison between the accepted standards in the financial sector and the pharmaceutical sector?

## Technical Actuarial Standard 300: Pensions

<https://www.frc.org.uk/getattachment/d47aecc1-89a7-40af-8bfe-6ac095be6d2a/TAS-300-Pensions-Dec-2016.pdf>

TAS 300 supports the Reliability Objective that “*users for whom actuarial information is created should be able to place a high degree of reliance on that information's relevance, transparency of assumptions, completeness and comprehensibility, including the communication of any uncertainty inherent in the information*”.

Paragraph 12 “... *The information that is provided shall include:*

*(a) an indication or description of future cash flows including their timing;...*”

**D.** Does the actuarial profession consider that for a November 2018 valuation, say, an illustration of benefit cash-flows which was provided for training in March 2017 but not included in any formal reports to a pension scheme; was based on salary data with errors for 19

“*(b) projections of the funding level, or a description of how the funding level is expected to change over an appropriate time period(s) with an explanation of the choice of the time period(s); and*

*(c) an indication or description of the volatility of the future funding level and the major causes of the volatility.*”

**E.** Does the actuarial profession consider that monitoring based on assumptions for 2013, say, adequately describes the volatility of future funding under a different set of assumptions for a 2018 valuation?

**F.** Does the actuarial profession consider that providing brief summaries of the effect of changes in individual financial and demographic assumptions, without any consideration of associations between assumptions and the impact of likely joint changes adequately describes the major causes of the volatility?

<sup>1</sup>Independent Review of the Financial Reporting Council, 2018,  
<https://www.gov.uk/government/news/independent-review-of-the-financial-reporting-council-frc-launches-report>

*“4. Communications shall include the derivations of material assumptions used in the technical actuarial work ...”*

Pension valuations must predict returns on scheme investments. Predicted investment returns always have a material impact on predicted funding levels. Suppose an actuary decides to predict the next 30 years as follows (call it Smith's returns):

For the first eight years the returns will be inflation (CPI) +0.1%, the next seven years a linear decline from CPI-0.3% to CPI - 1.9%, and for the final 15 years returns will follow a linear decline from CPI+1.2% to CPI - 0.5%.

Smith's returns assume abrupt jumps in rates at year 8 and year 15.

**G.** What information would the actuarial profession consider adequate to provide transparent derivations of these assumptions?

**H.** How does the actuarial profession expect the uncertainty inherent in the choice of the eight numbers in Smith's returns (CPI + 0.1%, 8 years, CPI-0.3%, 7 years, CPI - 1.9%, 15 years, CPI+1.2%, CPI - 0.5%) to be communicated? What is required to provide "completeness and comprehensibility"? If this is the only information provided, the implication is that there is no uncertainty and no correlation between the eight numbers.