

**Emily Brown**

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**From:** Baully, John Arthur [engjb@nus.edu.sg]

**Sent:** 30 August 2009 13:18

**To:** BAS Pensions

**Subject:** Response, BAS "Pensions: Consultation Paper" June 2009: Benchmarks & Sanity checks.

Dear Sir / Madam,

Please forward to your appropriate person - thanks

I offer a Response, below, to your **BAS "Pensions: Consultation Paper" June 2009**

**"Defined benefit occupational pension schemes: Benchmarks & Sanity checks"**

I notice that in the whole matter of the Actuarial calculations, modeling, etc. which finally leads to the setting of the % total contributions of salaries, ( usually shared between employer and employee), there is very heavy reliance on the overall complicated process of setting the Assumptions, doing the modeling and calculations, etc. but an absence of reference to "benchmarks" and "sanity checks".

You may know that in complicated calculation / mathematical modeling work, like for engineering design and substantiation, risk management, business management, insurance work, etc. it is usual, actually standard practice, to check the results firstly by some other different calculation procedure if that is possible, but also very importantly, to do further substantiation via so-called "sanity checks", by reference to some standard benchmark solutions that have been established say for a number of "standard cases". It often happens that the case in hand is seen to fall between 2-3 "standard cases", so that then will indicate whether or not the results, i.e. solutions, for the case in hand is reasonable i.e. credible, or "sane". It helps good quality discussions during case reviews, and helps reduce risks.

Thus this type of substantiation needs to be *specifically* included in your recommendations - even if it requires the commissioning of work to establish the "standard cases" data.

The occupational pension schemes have been going for many year now, some as long as 50 years. True, the more onerous requirements of post-1997 have only been going for 13 years, but even so some occupational schemes anyway provided for some index linking from the earlier days - either promised, or as discretionary best efforts which in the event were mostly paid out. That means there is a *lot of data, and evidence*, available. Also, the ups and downs of inflation and investment returns over say the 50 years should by now be giving, *overall*, a reliable average picture.

Besides the UK companies, there is also a lot of information available from abroad.

I therefore imagine, actually hope, that you, or maybe some other UK authority like The Pension Regulator, or the Institute of Actuaries, have established benchmark levels of % contributions needed for a number of "standard cases".

If not, then such studies need to be commissioned.

As an example, one standard case would be the very common one i.e. the typical "defined benefit occupational pension scheme", assuming:

- all the expenses are paid out of the fund,
- most members are "post-1997" i.e. with the required partially index linked benefits,
- pre-1997 members enjoy the same benefits as the post-1997 colleagues i.e. these may be discretionary, but the company usually pays them anyway.
- the scheme is still accepting new members,
- the scheme is long running and in "steady state"
- the population of membership is "typical" and includes the senior managers and directors
- the promotional increases are normal, typical.
- retirement at 65
- normal incidence of early retirements, transfers in and transfers out
- half pensions for surviving spouses
- the returns on investments are just the average say of the % over the last 50 years

There would be other variants, e.g. when none of the expenses are taken out of the fund i.e. the company pays them all separately.

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Thus when a Company+ Trustees + Actuary discuss and then propose the future level of % contributions, perhaps to just maintain position if there is no shortfall, or to make up shortfall, the % contributions proposed should surely be scrutinized by the second independent Actuary and other interested parties, against the appropriate benchmark(s), for a "sanity check".

( I like to remind here that it is a known danger that if the person doing the checking just follows the same methodologies as used originally, there is the risk that the checker will be "led along" the same path and so not spot errors in the process, mathematics or the dubious judgements.)

If there are suspiciously low recommendations for the % levels, then the Company + Trustees + Actuary need to be cautioned and asked for reasons.

Such "sanity checks" would recognise that mistakes can be made, and / or that it is not very difficult to inadvertently bias the assumptions, modeling and calculation work to validate a quite lower % than ideally

needed.

\* \* \* \* \*

I hope that is useful,

Regards

John Bauly

Eur Ing Dr John Bauly, C.Eng., FIET, FIMechE, NPDP.

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