



Consulting

Your ref:
Our ref: L BAS mort cons.doc

The Director
Board for Actuarial Standards
5th Floor, Aldwych House
71-91 Aldwych
London
WC2B 4HN

Briarcliff House
Kingsmead
Farnborough
Hampshire GU14 7TE
tel: 01252 768000
fax: 01252 522206

20 June 2008

Dear Sir

Actuarial Mortality Assumptions: Discussion Paper

I am writing on behalf of the actuarial practice of Aon Consulting in response to the Board for Actuarial Standards' invitation to comment on the discussion paper on mortality assumptions.

Our responses to the specific questions raised are listed below.

1. Do respondents have any views on the significance of the adverse effects that the over- or underestimation of future mortality may have on pension scheme members, scheme sponsors, life insurance policyholders and life insurance companies, as set out in section 2?

We think it is important to be as accurate as possible with our estimations of future mortality as the discussion paper quite rightly identifies that there are adverse effects from both under estimation and over estimation of future mortality. For our comments on the specific effects we have restricted our comments to the pension scheme related aspects.

We believe the major risk of overestimating future mortality is that members of pension schemes may not receive their full benefit entitlement, and this adverse effect has a high degree of significance. We believe the effect of pension liabilities being underestimated in companies' accounts and of insurance companies making losses is of less significance to the general public, but would of course be of very high significance to the companies concerned and their shareholders (which may include pension scheme members).

In our view the main risk of underestimating future mortality is that pension schemes may be closed by their sponsors due to the costs falsely appearing to be too high. Having said that, such a decision would be based on a wide range of factors and this would be only one of those factors. Again, we believe the impact on company accounts and insurance companies is of lower significance.

2. The BAS has discussed some of the issues surrounding mortality assumptions in section 3. In that context:

a) Do respondents have views on appropriate methods of communicating the extent and impact of the inherent uncertainty involved in mortality assumptions?

We agree with the statement in paragraph 3.9 that statements about future life expectancy are judgements about uncertainty rather than risk. As such, the most important issue is to ensure that users of actuarial advice understand that the future is uncertain and any model to project future mortality may prove to be inaccurate. Consequently, in our view it is the impact of uncertainty that should be the focus of the communication, and this can best be achieved by showing the impact on the results of particular scenarios, for example if life expectancy proves to be X years longer than assumed.

V:\Management\Actuarial General\Mortality issues\L Response to BAS consultation (TC comments).doc



Aon Consulting Limited

Registered Office: Briarcliff House, Kingsmead, Farnborough, Hampshire GU14 7TE
Registered No. 3127195 England • VAT Registration No. 480 8401 48
Aon Consulting Limited is authorised and regulated by the Financial Services Authority

AOR70000

We agree with the statements in the discussion paper that methods such as fan charts and other probabilistic projections can be helpful for some clients, but have limitations due to the inherent model risk.

The use of equivalent changes in discount rates may be helpful in some cases, but must be used with care as it introduces the possibility of causing further confusion. We do not see any particular advantage of this approach over that of showing the impact on the results directly.

b) Do respondents agree that the use of separate assumptions for base mortality and future changes in mortality, not taking the form of margins in other assumptions, would be desirable?

Yes, we do agree.

c) Do respondents have views on appropriate methods of communicating the significance of assumptions, both in absolute terms and relative to that of other assumptions?

As for our comments in question 2 a), in our view the best way to communicate the significance of assumptions is to show the impact on the overall results. Similar principles should be applied to all material assumptions, not just mortality, and if this is done the relative impact of different assumptions can be seen clearly.

3. Some proposals regarding the use of summary statistics and benchmarks in reporting on mortality assumptions are considered in section 3.

a) Do respondents foresee any practical difficulties in communicating the assumptions about subsequent changes in mortality rates underlying life expectancy statistics?

Practical difficulties could arise if actuaries are prevented from using whatever form of communication is best suited to their audience. Pension scheme trustees in particular have a varied range of experience and backgrounds so no single form of communication would be suitable for all trustee bodies. It is important for actuaries to have available a range of methods to communicate these issues and to apply their judgement to determine which is most suitable for their audience.

b) Do respondents have suggestions for summary statistics that can be used to describe changes in mortality rates?

Pension scheme trustees do not often have a mathematical background so the use of mortality rates, or annual rates of change, may lead to confusion and fail to convey the full message.

Life expectancies are a concept that is easy to understand and that trustees can relate to. We agree with the BAS's concern about the misleading nature of period life expectancies and accept the shortcomings of cohort life expectancies. However, in practice the base table and future projection are not used independently so we do not believe the fact that cohort life expectancy combines the two is a significant problem.

It is important to use simple figures that will be easily understood and compared, so we suggest a suitable approach would be to show cohort life expectancy at a relevant age, or range of ages, and then show how this will change in the future, for example in 10, 20 and 30 years.

c) Do respondents think that the use of benchmarks is useful, and if so, should the development of standard benchmarks for future changes in mortality be encouraged?

The use of benchmarks could be useful, particularly those that show the effect of particular scenarios as described in paragraph 3.60. We agree that there could be difficulties associated with such benchmarks, and would add a further factor in terms of how the benchmarks would be maintained and kept up-to-date.

In order to reduce the risk of benchmarks being interpreted as standards we suggest that they could be described as illustrative scenarios, rather than benchmarks. Overall, this is an area that would need further consideration before it could be introduced.

4. The BAS would welcome any general comments that respondents may have on the various possibilities for standards set out in section 4. In particular:

a) Do respondents agree that the BAS should set some standards for mortality assumptions?

Yes, we agree that some form of standards for mortality assumptions would be helpful to ensure a minimum standard of information is provided to users of actuarial advice. In particular, reporting standards should ensure consistent use of terminology, for example by requiring the use of the terms set out in the CMI's library of mortality projections, and a minimum level of explanation about mortality assumptions for clients.

Given the differences in mortality rates for different subsets of the population we believe standards that impose the use of a particular mortality table or rate of future improvement to mortality would be inappropriate. This would introduce a risk that actuaries are required to use a mortality table that they have good evidence to be unsuitable for the purpose of the advice they provide. We therefore agree with the comments in paragraphs 4.21 to 4.26 that there are risks with imposing limits on assumptions and that it is unlikely that a criterion requiring assumptions to bear some relationship to an external benchmark would be broadly applicable.

b) Do respondents agree that reporting standards would play a significant role in increasing the transparency of assumptions and their comprehensibility to users of actuarial information?

As described in our response to 4 a) above, we believe reporting standards could play a significant role in assisting the user of actuarial information. This must be balanced against the requirement for clarity and brevity in communicating these issues with clients as providing too much information can be just as damaging as providing too little, if it leads to a lack of focus on the key issues.

c) Do respondents have any comments on how to assess the likely impact of possible BAS standards for mortality assumptions?

Our only comment on this is that it would be very difficult to assess the impact at all. As identified in paragraphs 4.27 to 4.30, there are many direct and indirect impacts that could result and it is impossible to measure the extent to which they have been directly attributable to any BAS standards.

5. In section 5 the BAS considers possible standards for assumptions about base mortality.

a) Do respondents believe that it would be desirable for a BAS standard to require the use the most recent applicable published tables, taking into account both the communication problems and the practicality of setting a limit on the tables to be used?

We have stated above that we believe reporting standards would be helpful but that we do not believe it is appropriate for limits to be imposed on the use of particular tables. Consequently, we do not believe it is desirable for a BAS standard to require the use of the most recent published tables.

We believe the reporting standards should require an explanation of why a particular table has been chosen, so that the user of the information can understand if it is not the latest table, why it is appropriate to take this approach.

We question exactly how such a requirement would be applied in practice since many actuarial projects take place over a period of time, for example, an actuarial valuation of a pension scheme will often take a year or more to complete. Is it the latest table at the valuation date, the date the actuarial advice is given or the date the final report is prepared?

Does the BAS envisage there would be a requirement to review any ongoing practices immediately once any new tables are published, for example, the assumptions used to calculate transfer values or for other pension scheme benefit calculations?

How would BAS define "published tables"? This may have been well defined in the past, but the CMI will soon publish mortality tables based on the experience of occupational pension schemes, so we assume these would classify as the latest published table, but clarification would be required.

We support the concept that the latest tables should be used, provided other tables can be used with suitable explanation as to why it is appropriate to do so, and provided the practical issues set out above can be overcome.

b) Do respondents have any comments on the proposals for possible requirements for reporting on assumptions about base mortality, criteria that assumptions should meet, or limits that should be observed when setting assumptions? Respondents are asked to focus on:

- any practical problems that might arise in complying with them; and
- whether they would further the BAS's aim of increasing the transparency of assumptions and their comprehensibility to users of actuarial information.

Reporting

We support the suggestions made and we believe they would further the BAS's aims.

Criteria

Subject to our comments above about the use of the latest published tables, on the whole we believe the criteria suggested are reasonable and practical.

Limits

We have already described above why we do not believe it is appropriate to set limits on the assumptions.

6. In section 6 the BAS considers possible standards for assumptions about future changes in mortality.

a) Do respondents agree there is no objective basis for differentiating the future changes in mortality likely to be experienced by a particular small group of lives from those likely to be experienced by the population as a whole? If respondents disagree, the BAS would be interested in examples to the contrary, together with supporting evidence.

We agree with the BAS's statement in paragraph 6.38 that mortality is likely to change in different ways for different groups of people. In particular, we are familiar with the various arguments put forward in paragraphs 6.22 and 6.23 and we believe it is important for users of actuarial information to be aware of these arguments.

We also agree with the BAS's statement that it is less clear what the differences will be. We are not aware of any objective basis that includes strong supporting evidence for differentiating the future changes in mortality for small sub-groups of the population from the population as a whole.

Any projection of future mortality rates includes at least some degree of subjective judgement so we do not believe the lack of an entirely objective measure should prevent the use of different rates of future improvement for different sub-groups of the population. Rather, we agree with the BAS's previous proposal described in paragraph 6.39 that subjective judgement can be appropriate, provided the user of the information understands that it is a subjective judgement.

b) Do respondents have any comments on the proposals for possible requirements for reporting on assumptions about future changes in mortality, criteria that assumptions should meet, or limits that should be observed when setting assumptions? Respondents are asked to focus on:

- any practical problems that might arise in complying with them; and
- whether they would further the BAS's aim of increasing the transparency of assumptions and their comprehensibility to users of actuarial information.

Reporting

We generally agree with the proposed reporting requirements, although we have particular comments on the following two aspects:

- The comparison to benchmark projections could only be made if the proposal for the development of such benchmarks is adopted; and
- 6.58 requires a statement about whether the assumption is prudent or best estimate, but the BAS states earlier in the paper that future improvements are inherently uncertain, so the assessment of prudence can only be a subjective assessment. Our clients will clearly look to us for guidance in these matters, but there is the risk that different actuaries would form differing opinions about what constitutes a best estimate assumption in any particular situation, which may lead to a lack of comprehensibility for the user.

Criteria

We believe the proposals made are broadly reasonable.

Limits

As the BAS states in its paper, future improvements to mortality are inherently uncertain, so any judgement on the future is subjective. For this reason we believe that it would be inappropriate to set any form of limit for future improvements. In particular we question the suggestion in 6.66 that a limit could be used over a short time period to impose some form of allowance for improvements where

there is a requirement for prudent assumptions. In our view this would have a negative impact on the comprehensibility of assumptions as this merely ensures the assumption is not significantly imprudent, but users of actuarial information might expect the limit to ensure prudence.

In addition to the specific questions listed above, the BAS invites respondents' views on any other aspects of possible standards for mortality assumptions in actuarial calculations. To ensure that the significance of their point is fully appreciated by the BAS, respondents are encouraged to indicate how their comments address the BAS's aim of increasing the transparency of assumptions and their comprehensibility to users of actuarial information.

We have no further comments.

Yours sincerely



Martin Stark FIA
Senior Consultant & Actuary

Direct Dial 01252 768507
Direct Fax: 01252 372485
Email: martin.stark@aonconsulting.co.uk