Friends Provident's response to the BAS Discussion Paper - Actuarial Mortality Assumptions

We are responding to this paper, mainly from the point of a life insurance company rather than as a sponsor of a pension scheme. While we have a pension scheme, we are unusual in that we are able to benchmark our pension scheme mortality assumptions against those used in valuing the company's policies, and ensure that, where appropriate, they are consistent. In addition the trustees and the Scheme sponsor have a greater understanding of actuarial issues than most pension schemes, so the impact of introducing the standards would be considerably less than if the Trustees had not had the knowledge to challenge the Scheme Actuary.

Friends Provident carries out valuations of its policies on various different bases (i.e for regulatory returns, IFRS accounts, embedded value and ICA reporting). Currently the Actuarial Function Holder or Finance Director (as appropriate) recommend bases in advance of the valuation date, in a paper to the Board. The paper includes the estimated impact of changes to the basis. When the results are subsequently presented to the Board after the valuation date, the focus is on the results, rather than the basis, although the impact of basis changes is shown. If new standards are introduced we would still prefer to segregate the setting of the assumptions from the results, in order that proper focus can be given to both.

Therefore we see the standards as mainly affecting the way that the basis recommendations are presented to the Board. We agree that the introduction of standards should be beneficial. With clearer information on how the basis has been derived, the Board will be in a better position to challenge the advice that they are given. However, we do have some misgivings regarding the detail of the paper, which are included in the response below. We also believe that similar conclusions could be reached in respect of assumptions other than mortality, and that standards should be set more widely to include morbidity and persistency bases. The paper focuses too much on annuitant mortality, without even fully considering term assurance mortality issues, such as pandemic risk.

The estimation of future mortality improvements is highly subjective. BAS appear to accept this point, and the fact that they are not in a position to stipulate boundaries in which mortality rates must lie. However this conclusion should be applied consistently. Therefore we should not be introduce benchmarks which will give addition credence to a particular basis (3.59 to 3.61). The standards should not disallow mortality improvements that tail off (6.66) if a justification for such a basis can be provided.

Response to the specific questions in section 7

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?*

Sections 2.10 to 2.15 describe the adverse effects on life insurers of inaccurately estimating future mortality. Both over and under estimating mortality can have significant adverse effects, in respect of both annuity and assurance contracts. However the parties that are adversely impacted and the severity of the impact may vary, depending on a number of factors, such as:

- How an individual company's expectations compared with its peers. For example, a company which correctly predicts future experience can still suffer (by being uncompetitive), if other companies had over optimistic expectations.
- Amount of the error in expectations
- Volumes of business written on 'incorrect' assumptions

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 that it important for the users of the information to understand the uncertainty in the mortality assumptions. We think that showing the sensitivity of the result in the format presented (e.g as a cash value) is in most cases the most appropriate means of presenting the impact. To express the impact as a difference in discount rate would in most cases be unhelpful.

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?

We strongly 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?

The presentation of uncertainty in the assumptions is not an issue peculiar to mortality and the impact of uncertainties in other assumptions may be greater. We believe that the user of the actuarial information should always be made aware of the main areas of uncertainty and that the impact of alternative assumptions on the information presented, is normally the best way of presenting the impact. Ideally the alternative assumptions should be based on a specified probability level, although this will often be very subjective.

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?

Given the wide range of base tables, future projections, and adjustments to those tables and projections that are used by companies and pension schemes, the implied life expectation at a particular age can, in certain circumstances, be an effective way of presenting a set of mortality rates. In a life company context this is a useful way of presenting the mortality basis to the outside world. However quoting the implied life expectation does not in itself give the reader an indication of the level of prudence within the basis, and therefore there will often be more helpful ways of presenting the mortality basis.

The mortality basis is a function of both the perceived underlying current experience of the portfolio and assumptions about how this will change in future. The latter incorporates both the future mortality improvement factors and any margin of prudence within the base rates. The underlying current experience may vary considerably from one company or pension scheme to another or for groups of policies sold by an individual company. Mortality tables with the same life expectation could represent very different levels of prudence, depending on the cohort of policies to which it is applied.

For example, a company may have two distinct groups of annuitants experiencing different mortality but reserve with the same margin of prudence for each group compared with best estimates. To illustrate the bases using life expectations would not make it clear that there is estimated to be equal prudence in the bases for the two groups. It would be more useful to say, for example, that it represents a prudent margin of 10% compared with recent experience and the future projection is

based on long cohort, subject to a 1% minimum rate of improvement in any year. If the directors are unfamiliar with the projection tables then the projection could alternatively include a suitable summary statistic for changes in mortality rates.

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

The current period life expectation could be compared with the current cohort life expectation (either as a difference or as a percentage) as a measure of the impact of the allowance for future improvements. This is better than comparing period life expectancies at two different dates, which is only a measure of mortality improvements assumed between the two dates.

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?

Section 3.60 describes the advantages of benchmarks, which are subject to the caveat that the benchmarks need to be appropriate. We believe that for the reasons set out in 3.61, the benchmarks described are not appropriate and therefore we do not support their introduction. However, there is possibly a case for publishing summary statistics for commonly used mortality projections to ease comparison, rather than to give greater authority to those projections

If anyone were to set benchmarks we believe that it should be the regulator and not BAS.

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?

We agree that BAS should set standards for assumptions. These should relate to how they are determined and how they are presented to the user but should not prescribe specific bases or maximum or minimum bases. Furthermore we believe that BAS should be looking to create standards should that apply to assumptions in general and not just focusing on mortality.

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?

In respect of life companies they would probably help, although the benefits of standards will probably be greatest for trustees of pension schemes who will normally have less understanding of actuarial issues than the directors of life companies.

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

We believe that the main impact on life companies is that it will assist in ensuring that directors have full ownership of the actuarial assumptions. However, we do not believe that it would cause them to change the assumptions in many cases. The standards should be sufficiently flexible to avoid information overload. That would be counterproductive as it would make it more difficult to focus directors' minds on the main issues.

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 believe that this would be unhelpful. We have had experience where the shape of an old table was a better fit to our data than a newer table. As a result we have continued to use a percentage of the old table. Therefore we don't believe that there should be a restriction on the table that can be used, although if it is not the most recent one, it is reasonable that the standards should require an explanation.

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.

Regarding paragraph 5.47, we would not expect reinsurance to affect the experience of the portfolio being reinsured and therefore would not expect it to impact the assumptions.

Otherwise the standards reflect knowledge that the directors need to agree to a basis. Given that similar standards should also be applied to other assumptions as well, a large amount of information will need to be provided for directors to agree a basis. The standards should be flexible about how this should be presented. For example a report recommending a valuation basis could focus on the main changes to the previous basis , cross referring to another document, which contains all the up to date detailed information on basis setting, required by the standards.

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 that there is no objective basis for differentiating future changes in mortality of a small group of lives compared with the population as a whole. This is not surprising given that there is no objective basis for determining future mortality improvements. However, there have been significant differences between historic insurance and population mortality in the past and that the rate of improvement has not been the same.

There are subjective ways of estimating future mortality improvements and there may be subjective ways of assessing the improvement in mortality of the group relative to the population. In particular, we may expect mortality to continue to improve for a number of reasons. Some of these reasons may affect the small group to a greater or lesser extent than the population as a whole. These reasons would include the impact of the impaired life annuity market.

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.*

We just have one additional comment, which is that the standards should not require the availability of data that companies may not have found it necessary to obtain in the past.