The Actuarial Profession
making financial sense of the future

Consultation response
HM Treasury
Consultation on the discount rate used to set up unfunded public service pension contributions

March 2011

About the Actuarial Profession

The Institute and Faculty of Actuaries is the chartered professional body for actuaries in the United Kingdom. A rigorous examination system is supported by a programme of continuous professional development and a professional code of conduct supports high standards, reflecting the significant role of the Profession in society.

Actuaries' training is founded on mathematical and statistical techniques used in insurance, pension fund management and investment and then builds the management skills associated with the application of these techniques. The training includes the derivation and application of 'mortality tables' used to assess probabilities of death or survival. It also includes the financial mathematics of interest and risk associated with different investment vehicles – from simple deposits through to complex stock market derivatives.

Actuaries provide commercial, financial and prudential advice on the management of a business' assets and liabilities, especially where long term management and planning are critical to the success of any business venture. A majority of actuaries work for insurance companies or pension funds – either as their direct employees or in firms which undertake work on a consultancy basis – but they also advise individuals and offer comment on social and public interest issues. Members of the profession have a statutory role in the supervision of pension funds and life insurance companies as well as a statutory role to provide actuarial opinions for managing agents at Lloyd's.

Public Service Pensions Discount Rate Consultation
Workforce, Pay and Pensions Team
Public Services and Growth Directorate
HM Treasury
1 Horse Guards Road
London SW1A 2HQ

3 March 2011

Dear Sirs

I am writing on behalf of the Actuarial Profession in response to HM Treasury's consultation on the discount rate used to set unfunded public service pension contributions.

The Actuarial Profession represents the members of the Institute and Faculty of Actuaries, the chartered professional body for actuaries in the UK. Approximately 2,000 of our 6,000 Fellows advise the sponsors or trustees of pension schemes either in the public or private sector.

With this in mind, it is important to recognise that there could be a wide range of views across the profession on the question of discount rates, all of them perfectly defensible depending on the different objectives that are being targeted. It is likely, therefore, that there isn't a single, definitive answer to some of the questions posed. Instead, we have sought to focus on the areas of the consultation where we hope our observations and commentary will be helpful to the development of HM Treasury's thinking.

There are two general points that have framed our responses to the consultation:

- The starting point for any process to choose what discount rate might be appropriate is an understanding of what the results of the analysis will be used for. The consultation document sets out the parameters for the views being sought.
- In responding to the different questions raised in this consultation we have kept in mind the particular purpose that the discount rate is to be used to set contributions in the unfunded public service pension schemes.

For the reasons outlined above we have chosen to respond only to the questions in the consultation where we believe our commentary can provide distinctive value. Our responses are set down below.

Q1 Chapter 1 sets out the expected impacts of a lower discount rate. Are there any other impacts arising from a change in the discount rate?

Paragraphs 1.24 – 1.35 cover a number of consequences of lowering the SCAPE discount rate but one area not addressed is any consequences for the cap and share policy introduced into certain public service pension schemes (paragraph 1.18 mentions this point). Despite the valuations of these arrangements having been suspended, any increase in overall total contribution rate resulting from using a reduced discount rate will inevitably alter the perspective on any cost sharing arrangements between employees and employers.

The statement is made that a change in the contribution rate is not to affect the overall financial position of public sector employers. However, as mentioned, there will be a consequential effect for any other employers whose staff have retained continuing membership of a public services pension scheme. Whilst the statement in paragraph 1.35 of the consultation document is true (that the discount rate chosen to determine the contribution rates does not have a material impact on the annual cost to the taxpayer of unfunded public service pension schemes), this only holds good at the current time. It is to be expected/hoped that over time a different annual cost will emerge as the consequences of adopting a different SCAPE discount rate unfolds, e.g. by management making different hiring/investment decisions.

Q2 Chapter 3 sets out objectives for the Government in setting the SCAPE discount rate. Are there other objectives that should be taken into account?

The observation is made in the consultation document that no single approach towards setting the discount rate will produce a result that satisfies all five of the objectives set out in chapter 3. We would agree absolutely that any single approach is incapable of satisfying all five objectives. Where objectives are in conflict, a decision is needed on which of the different objectives are the most desirable – for example, **stability** is desirable for long-term planning and the consistent allocation of the national resources, but this could conflict with any **fair reflection of costs** between public and private sector employers. Therefore some pragmatism will be needed in arriving at the best result. The judgement of the relative balance between these objectives is essentially a political decision.

One further objective that could guide the approach to be adopted would be whether the discount rate chosen should influence the extent of public sector pension provision - a sensitive issue but it is related to the relative size of the public sector. An objective of reducing the relative size of the public sector would be consistent with the adoption of a lower discount rate and the correspondingly higher contribution cost. Alternatively, adopting a higher discount rate/lower cost model could encourage the relative growth of the public sector. The removal of any disincentive to the development of a wider variety of providers of public services with an accompanying wider variety of pension provision could be seen as attractive. However, such a development needs to be tested for **transparency and simplicity**.

Q3 Chapter 3 sets out four options. What are the advantages and disadvantages of the four options identified by the Commission for the approach to setting the SCAPE discount rate?

Looking at each option in turn we would make the following comments:

- *a rate consistent with the private sector and other funded schemes* – this option suffers from the wide variation in the approach and resulting contribution rates that are used in such private sector schemes (the covenant strength of the sponsor is but one aspect of the different approaches taken by trustees that manage these pension schemes). A significant practical limitation is that there are now a much lower number of private sector schemes that could be seen as suitable comparators for the range of existing public sector pension schemes.

However, the public sector could borrow the private sector discipline of having to reflect not only the ongoing cost of the scheme in the rate it pays, but the cost of any deviations from experience. In unfunded schemes, these will largely emerge due to increases in longevity, which might be managed via the cap and share policy. However, other demographic changes could also be significant and there could be other experience gains or losses depending on the discount rate adopted (for example, if the GDP approach is adopted).

This option could satisfy the objective of a fair reflection of costs (if an appropriate solution to the discount rate can be found) but it would not be so transparent and simple.

- *a rate based on the yield on index-linked gilts* – This yield represents the marginal cost at which government can borrow against a series of cash flows with similarities with a series of pension payments. Whilst this might appear initially as an attractive approach, there are many influences that interact to produce this marginal rate that are not relevant to the question being addressed. As an example, pension cash flows are not transferrable in the way that index-linked cash flows are. In addition, the present perceived market imbalance between supply and demand is seen as one of the causes for the present levels of yield.

  Whilst linking the approach to the SCAPE discount rate to such a market could be seen as transparent and simple and would be close to the 'minimum risk' cost assessment used by some private sector entities, it would not assist the objective of stability nor the fair reflection of costs.

- *a rate in line with expected GDP growth* – There are parallels between the long-term nature of pension provision and many government projects. One needs to be clear whether one is looking at GDP growth in aggregate or on a per capita basis. The comments in Chapter 3 indicate an aggregate view but this is inconsistent with the approach underlying the STPR rate described in paragraph 2.10. This approach could arrive at a rate that could reflect the risks to Government income but again there is a question on the fair reflection on costs objective.

  It could also be argued (at least by reference to previous prudent private sector practice) that a modest reduction should be made to reflect potential adverse risks (e.g. that GDP may run below trend for a number of years).

- *a Social Time Preference Rate (STPR) that makes allowances for the particular context of pension provision* – The different elements used in the construction of the STPR are described in Chapter 2. This rate is used as a hurdle rate to assist the comparison of the costs/benefits of competing projects where available resources are limited. Such costs could include employment and the related pensions costs. In any such comparison it is important that the STPR is applied consistently. However, the analysis in paragraph 2.10 is more easily and readily understandable when applied to the consideration of capital projects.

If the elements that make up the STPR are examined separately, refinements should be made to allow appropriately for the context of pension provision. The adjustment for catastrophe risk leads to an increase in the discount rate to allow for the possibility that emerging benefits will be lower than anticipated. In the context of pensions, such catastrophe risk can be seen as being two-sided – it could be higher due to unexpected improvements in longevity resulting from medical advances for example, or lower due to the consequences of increasing prevalence of obesity within the retired population. Thus a nil effect for “catastrophe” could be more appropriate. A figure for pure time preference of 0.5% - a measure of the extent to which immediate consumption is preferred to delayed consumption – appears low in the context of pensions. Currently, both corporate bond and gilt yield curves are positive over terms of 1 to 10-20 years, with gilt spot yields increasing from about 1% to over 4% at longer durations; in previous years the yield curve has been flatter or even downward sloping, perhaps because of the market imperfections mentioned previously. Finally, how the allowance for future growth in consumption within the economy should translate into changes in the overall cost of public sector pension provision is a combination of a multitude of effects. Nevertheless, the conclusion from this analysis could be the same total rate as is used for STPR.

This approach could satisfy more of the potential objectives but there could be issues with the fair reflection of costs and whether this reflects the future risks to Government income.

Q5 Which approach to setting the SCAPE discount rate do you recommend, and why? Following your preferred approach, what actual discount rate do you consider to be appropriate?

Depending upon the relative importance of the stated objectives, an argument could be mounted for any of the four approaches covered in the consultative document. No single approach is actually correct and a pragmatic solution will evolve. Whatever conclusion might arise from the more theoretical analysis of the issues behind the selection of the SCAPE discount rate, any substantial change could result in some dislocation for both the public and private sector employers whose employees participate in public sector pension schemes. Having decided on the direction of travel, it may be desirable to reach the destination in stages.

The UK is not alone in having unfunded pension obligations for its public sector employees, and therefore having to grapple with the issue of the cost of such accruing pension benefits. An analysis of how other economies have addressed the issue of measuring the growing costs might be instructive.

Q6 Do you consider that there should be a regular review of SCAPE discount rate? If so, how often should this take place?

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The simple answer is yes there should be a regular review of the SCAPE discount rate but that such reviews need not necessarily lead to any change. The adoption of the STPR may have been an appropriate approach, but conditions (and the objectives that the SCAPE discount rate is aiming to achieve) will evolve and therefore the rate itself will need to change. As far as the frequency of such reviews, a three (or possibly five) yearly review should produce the benefit of having to make only a small adjustment, should one be required.

We hope you find these comments helpful. We would be happy to answer any questions you may have on our observations and, of course, provide any further assistance on this matter that you think would be useful.

Yours faithfully,

Ronnie Bowie
President
Institute and Faculty of Actuaries