Developing a Framework for the use of Discount Rates in Actuarial Work: summary, final recommendations and the way forward

Note from the Discount Rates Steering Committee (DRSC)

Summary:

This note sets out the direction Management Board would like to see future developments take, following the discussion this year of the DRSC's discussion paper *Developing a framework for the use of discount rates in actuarial work*. A separate note and appendices collect together the output from the various discussions on the DRSC's paper together with consultations with a number of selected stakeholders outside the actuarial profession - of necessity this is a relatively brief summary of all the discussions.

Introduction

The exam question the Discount Rates Steering Committee was set by Management Board was to try to create a framework by which actuaries, in whatever area of work, might better understand why they use a particular approach to deriving a discount rate. This would then create a structure by which actuaries might better explain to their client what they have done. The framework as defined in the paper achieves this aim, is appropriate for much of the work actuaries do, and we do not believe that there is a need to amend the framework as set out in sections 3, 4, and 5 of the paper. Much of the feedback on the framework itself was positive both at the sessional research events and in the exercise of collecting broader views.

The Board's second objective was to initiate debate on this subject, both among actuaries and outside the profession. Over this year there have been many discussions on the points brought out in the paper, and on a number of the specific suggested recommendations included. The sessional research events in January had record attendances and our request for further comment made through the Profession's publications prompted further input. The paper was also discussed at a number of venues around the country to ensure a wide audience for the proposed framework and recommendations. In addition, the Profession commissioned Chris Daykin and Chinu Patel to seek views from stakeholders outside the profession.

Some of the recommendations have sparked much greater debate than others. However, there is one important and much debated point that must be made – whether the framework set out in the paper constitutes "technical guidance"? The DRSC views the framework as providing a common language by which actuaries (and others) can communicate the reasons behind the construction of a discount rate and the risks/potential consequences of employing a particular rate, for any actuarial application. The DRSC has always emphasised that the framework for discount rates in actuarial work **does not constitute "technical guidance"** (which is the preserve of the Board for Actuarial Standards (BAS) in the UK, not the Profession) but is an aid for understanding the potential consequences of following actuarial advice. Using the framework does not lead to requiring a particular discount rate for a particular purpose. However, we hope, the framework is a useful addition to the actuary's toolkit. The DRSC has always been clear that it was not seeking to provide guidance nor suggesting that the Profession should set standards in this area. How the framework links to the BAS's Technical Actuarial Standards (TASs) is set out in Appendix 2 of the final update produced by the DRSC on the feedback discussions that took place (as this was often requested in the discussions).

One continuing theme in the feedback has been the desirability for better communication between actuaries and non-actuaries on the implication of using a particular discount rate for a particular purpose. The proposed framework is an aid to such consistent communication, but individual actuaries will continue to recognise that professional judgement is needed to reflect client circumstances for any particular piece of actuarial advice.

In the following paragraphs we summarise a number of conclusions and lessons that can be drawn from the discussions to date and set out the direction of future developments.

The framework

We have not revisited the framework developed in chapters 3, 4 and 5 of our discussion paper but have repeated below the summary given in section 5.5. In the opinion of the DRSC:

a. Both matching and budgeting style discount rate derivations can be relevant in actuarial work.
b. Where objectivity and fairness between parties is paramount, and the assets and liabilities in question are essentially already contractual commitments then a matching, i.e. market consistent, approach is nearly always likely to be preferable.
c. Where assets and liabilities are more malleable, e.g. when they have not yet crystallised, and particularly when actuaries are specifically advising just one party (an extreme example being when actuaries are asked to advise on whether the current market price of an asset or liability represents good or bad “value” to that party) then budgeting/planning style computations become more applicable.
d. When assets and liabilities are more malleable but actuaries' advice will, in effect, be relied upon by multiple parties then some blend between matching and budgeting style approaches may be deemed most desirable. This blend may be more objectively achieved by specifying matching calculation constraints on the budgeting approach. In the interests of comparability, standardised assumptions, if they can be defined by a suitable industry-wide body, may have merit (e.g. as is the case with embedded value type computations).
e. Where some liabilities are more contractual and some are less, e.g. as with a UK Defined Benefit pension scheme where certain benefits are discretionary, then some blend of matching versus budgeting style approaches may also be appropriate. Again this will be more objectively achieved by specifying matching calculation constraints on the budgeting approach.

In summary, our views can be presented in matrix form as follows:

Cash flow Purpose	**Guaranteed**	**Constructive**	**Discretionary**
Solvency	Matching	- *(Note 1)*	- *(Note 1)*
Transaction	Matching	Matching	Matching
Funding *(Note 2)*	Budgeting	Budgeting	Budgeting

Notes: *1. A matching framework may be appropriate for projections of future solvency*
2. It may be necessary to introduce matching framework constraints in budgeting calculations. The need for such constraints will be greater if the liabilities / cash flows are predominantly guaranteed rather than constructive or discretionary.

Solvency calculations typically implicitly involve multiple points of view (e.g. shareholder, customer and regulator and, in extremis, government or industry sponsored investor protection arrangements) and place a premium on objectivity, putting them squarely into (b) above. However, overlaid on any purely market derived discount rate elements will be some implicit yield spread versus risk free as described in Section 5.3 of the DRSC paper. This might vary within an individual entity's own policyholder or beneficiary base, depending on e.g. the liquidity characteristics of the relevant liability.

To aid transparency we believe that, where practical, any material divergence between the values placed on contractual asset or liability cash flows and their corresponding market or market consistent values should be highlighted in actuarial work, together with an explanation of the main contributors to this divergence.

We recognise however, the tension between showing a single discounted liability figure and the uncertain timing and volatility that there may be in the underlying cashflows. Other approaches (stochastic or otherwise) can be better at communicating the risk and uncertainty associated with future cashflows.

Terminology

The issue of terminology was considered at great length by the DRSC and specifically how the framework would sit with the terminology used for the purposes of calculations used in the TASs. The TAS "valuation"/"planning" distinction defines the purpose of calculations from the perspective of users of actuarial information; whereas the "matching"/"budgeting" distinction in the framework proposed by the DRSC classifies the rationale advanced (i.e.the method used) by those doing the calculations,

Actuaries may commonly use a matching calculation to fulfil a valuation purpose and a budgeting calculation to fulfil a planning purpose. However the DRSC thought of a number of examples where that would not hold true. This distinction between purposes and methods required a different terminology for each. The DRSC was therefore happy to adopt the matching/budgeting terminology introduced by Daykin and Patel in their May 2010 paper, *Actuaries and Discount Rates*, for the methods used by actuaries and develop this into a fuller framework. It is important that actuaries understand the link between the TAS purposes and the framework's methodology and this will be covered thoroughly in educational and CPD material.

The original recommendations

Some of the recommendations set out in section 6 of our paper were intentionally somewhat controversial. Nevertheless, the broad acceptance of the framework should encourage and equip actuaries to make use of it in communicating with the users of actuarial advice. A brief summary of the feedback from actuaries and various stakeholders outside the actuarial profession is set out in Appendix 1 of the final update from the DRSC). On a number of occasions during the discussions comparisons were drawn between our original recommendations and the guidance that has already been issued by the BAS and to meet a repeated request, we have included as Appendix 2 to the note setting out the final update from the DRSC a list of the original recommendations with cross references to the TASs.

The final recommendations

Following the consultation process, the final recommendations which have been accepted by the Management Board are as follows:

1. Encourage and equip actuaries (through education and CPD) to determine discount rates (and be able to justify their choice of discount rate) within a matching framework and/or budgeting framework.

2. Where relevant to the context of the actuarial advice being given, actuaries should be encouraged (through education and CPD) to highlight in their work any material difference between the values placed on contractual asset or liability cash flows and their corresponding market or market consistent values, and explain the main contributors to this difference.

3. Encourage and equip actuaries (through education and CPD) when presenting advice involving the use of discount rates to communicate clearly the framework, building blocks and level of embedded risk they have used in assessing the discount rate(s).

4. Encourage and equip actuaries (through education and CPD) to highlight to their clients the limitations of a budgeting calculation in the assessment of Technical Provisions under UK pensions regulations which in isolation does not provide adequate information on the assessment of the certainty of delivery of members' benefits. A more complete view needs assessment of the reliance on the scheme sponsor's covenant.

5. Encourage and equip actuaries (through education and CPD) in assessing what is a "prudent" discount rate for the purposes of calculating Technical Provisions under UK pensions regulations, to give primary consideration to the current or evolving pension scheme investment strategy. However, in support of the BAS requirement to explain the limitations of any models, actuaries to be encouraged (again through education and CPD) to help their clients understand what is "prudent" in the assessment of Technical Provisions by considering the extent to which the sponsor covenant is able to support the difference between a solvency assessment of the liabilities and the proposed level of Technical Provisions.

6. Equip actuaries (through education and CPD) to use a budgeting framework for advising on recovery plans for restoring pension scheme funding up to the level of Technical Provisions (as calculated under UK regulations). Further, encourage and equip actuaries (through education and CPD) to highlight the limitations of this approach in isolation for providing adequate information on the assessment of the security of members' benefits during and at the end of the recovery period.

7. Where such a comparison is required or appropriate, to encourage and equip actuaries (through education and CPD) to calculate estimates of pension scheme solvency using a matching framework making no adjustment for sponsor default on the pension obligation.

8. Encourage and equip actuaries (through education and CPD) where it is appropriate to have a wider aspect covered by their advice - to encourage, through their advice, more understanding on the likelihood of benefit delivery in the communication of funding information to members and trustees.

9. The Actuarial Profession should support the use of a matching framework for reserving for long term financial liabilities in company accounts.

10. Encourage and equip actuaries (through education and CPD) in giving advice on member/ policyholder options/transactions (including cash equivalent transfer values and surrender values) to help users understand the implications of their advice within a matching framework (this may need to be through supplementary information when legislation or other considerations dictate adoption of an alternative approach in practice).

11. The Actuarial Profession should support the apparent move to a matching framework for liability valuation under Solvency II and encourages the UK regulator to preserve this principle in implementing the measures.

12. Encourage actuaries (through education and CPD) to promote understanding of insurance policy/product pricing in a matching framework.

13. Encourage actuaries (through education and CPD) that where the benefits payable under an insurance policy are linked to the performance of a defined pool of assets, projections of benefits payable should be based on a budgeting framework.

The way forward

It is an accepted position that additional technical guidance should not emerge from the Profession as a conclusion of the discussions on the DRSC's paper. However, application of the framework can assist actuaries in fulfilling their obligations under the Open Communication principle of The Actuaries' Code. The instruction from Management Board is for the profession to look at how wider promulgation of the use of this framework should help with its acceptance and with the delivery of transparent actuarial advice. The aims behind many of the DRSC's initial recommendations should be developed through education and CPD initiatives. The DRSC will work with the Profession's existing structures and committees (mainly the Qualification Executive and Member Support Executive Committees and the various practice areas) as required to further Management Board's conclusions.

Discount Rates Steering Committee, September 2011