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Developing a Framework for the use of Discount Rates in Actuarial Work

Final update from the Discount Rates Steering Committee (DRSC) on the January 2011 recommendations and subsequent discussions

Summary:

This note and appendices summarise briefly the discussions and commentary on the DRSC's January 2011 discussion paper and indicates the direction of future developments in this area.

The two appendices are:

- **Appendix 1 sets out summarised feedback from stakeholders within and outside the actuarial profession;**
- **Appendix 2 sets out the initial January 2011 DRSC recommendations together with conclusions reached as a result of subsequent discussion plus cross references to the Technical Actuarial Standards (TASs)- such a summary was a much repeated request during the recent discussions.**

The Management Board of the Actuarial Profession commissioned a research project to develop a framework for considering and analysing discount rates. This project resulted in the production of a research paper last year - *Actuaries and Discount Rates* by Chris Daykin and Chinu Patel and earlier this year the publication of a sessional research meeting paper *Developing a Framework for the use of Discount Rates in Actuarial Work* from the Discount Rates Steering Committee (DRSC) set up to oversee the project. This paper was discussed at sessional research meetings in Edinburgh and London in January 2011 and subsequently at many other meetings around the country.

As well as meetings held with actuaries, Management Board also commissioned Chris Daykin and Chinu Patel to conduct a consultation process with users of actuarial advice. Following this period of consultation the DRSC reviewed the recommendations and proposed a way forward to Management Board. The Management Board have accepted many of the recommendations from the DRSC. Management Board supported the framework in that it provides a clarity of communication and a more disciplined way of thinking, in addition to providing actuaries with a framework which they could use to present their work.

Next Steps

1. The DRSC has produced a more detailed note setting out their final recommendations and the way forward that were agreed by Management Board entitled *Developing a Framework for the use of Discount Rates in Actuarial Work: summary, final recommendations and the way forward.*
2. A layman's note will be drafted on the proposed discount rate framework for the benefit of users of actuarial advice.
3. The Actuarial Profession will consider further research in the following areas:
   - In the preparation of accounts, the adjustment, if any, for sponsor default linked to the nature of the accounts being prepared and the requirement to hold assets against liabilities.
   - Sovereign risk and illiquidity premium.
   - Stochastic frameworks and risk

Discount Rates Steering Committee, September 2011

Summarised feedback from stakeholders within and outside the actuarial profession on the original recommendations

Recommendations 1-3 (Generic)

These recommendations were broadly welcomed and generally supported.

The framework for the approach to discount rates was recognised as an aid for actuaries to communicate the risks and attributes associated with discount rates using clear and consistent language.

Whilst there was much support for recommendation 2, concerns were raised that such a comparison with a market or market consistent value would not be appropriate in all circumstances and this type of additional analysis would depend on the relevance to the context of the actuarial advice. The difficulty of deriving a market consistent value in some situations was recognised.

There was general support for recommendation 3, encouraging the building blocks approach to determining a discount rate and highlighting the need for support to users of actuarial advice to aid understanding.

The framework could be particularly useful if its use prompts discussions that might not otherwise have happened. However, feedback also emphasised that there are other approaches than a single discounted figure towards communicating the risk and uncertainty in future cashflows. Discount rates are only one tool in the actuarial toolkit – but they still have a role to play.

Recommendations 4-8 (Pensions)

There was a mixed response to recommendations 4, 5 and 6. Whilst generally accepted by actuaries, they were not always accepted by non-actuaries. The interaction between the budgeting calculation underlying the Technical Provisions of a UK pension scheme, the contingent financial backing from the scheme's sponsor and the liabilities that might have to be met were that financial backing to disappear is clearly an area where discussions between actuaries and their clients are difficult - possibly highlighting a key area of potential confusion and misunderstanding.

Recommendation 7 relating to using a matching framework to assess the obligation in the event of sponsor default was broadly supported.

However the response to recommendation 8 was more mixed, with some believing that whilst solvency is an important measure, funding advice from actuaries should cover wider aspects of the likelihood of benefit delivery.

Recommendation 9 (Pensions)

The response to this recommendation was mixed, with some still seeing marked-to-market accounting as undermining UK pension provision.

Recommendations 10-11 (Pensions)

The response to recommendation 10 suggesting that options and transactions should be assessed within a matching framework was mixed, with the common comment that the specific circumstances in different pension schemes will indicate whether a budgeting or matching approach is appropriate.

Possibly unsurprisingly there was some significant resistance to recommendation 11 relating to cash equivalent transfer values - to the extent that a number of discussions on the recommendations as a whole were often hijacked by this particular issue. The idea that the matter is now "resolved" and that the DWP legislation is "unambiguous" is a widely held view.

Recommendations 12-16 (Life Insurance)

There was general support for these recommendations with the use of a matching or budgeting framework appropriate for the different situations described.

Recommendations 17-19 (General Insurance)

There was general support for these recommendations with the use of a matching or budgeting framework appropriate for the different situations described.

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The Discount Rates Steering Committee (DRSC) believes that the very large majority of actuarial calculations that involve discount rates can be characterised as matching calculations or budgeting calculations but, in limited circumstances, a blend of matching and budgeting can be relevant. Its original recommendations were set out in the discussion paper *Developing a framework for the use of discount rates in actuarial work* and this note reconciles these original recommendations with the Management Board's final decisions on the way forward and with the Technical Actuarial Standards (TASs) set out by the Board for Actuarial Standards (BAS). As such it enables the user to move from the original paper to the final recommendations and how they work within the TASs.
The DRSC believes that encouraging actuaries to present their work in a matching or budgeting framework will aid communication and help users of actuarial advice. The aims behind many of the recommendations can be furthered through education and CPD. This may involve looking at exam syllabuses, textbooks and conference presentations. This will need liaison across the Actuarial Profession.

Generic Recommendations

Original recommendation	The way forward	Links to TASs
1 Actuaries should seek to determine discount rates (and be able to justify their choice of discount rate) within a matching framework and/or budgeting framework as described in Section 5 [of our discussion paper]. Footnote: the framework requires interpretation for Government unfunded liabilities suggesting further thought and discussion.	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. Possible future research, education and debate into Social Time Preference Rate and Government unfunded liabilities.	*This recommendation is covered (less prescriptively) by TASs:* *TAS R C.4.6: describe the rationales for assumptions.* *Pensions TAS D.2.13: explain the derivation of discount rates.* *Insurance TAS D.2.9: explain the derivation of discount rates.* *The frameworks described in the DRSC paper would provide good rationales – other frameworks could also provide good rationales.*
2 Where practical, any material divergence between the values placed on contractual asset or liability cash flows and their market or market consistent values should be highlighted in actuarial work, together with an explanation of the main contributors to this divergence.	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.	*This recommendation is covered (less prescriptively) by TASs:* *TAS M C.5.4: indicate relationship to neutral estimates.* *TAS M C.5.8: explain the limitations of any models and the implications of the limitations.*

3 In presenting advice based on the use of discount rates actuaries should communicate clearly the framework, building blocks and level of embedded risk they have used to determine the discount rate(s). Moreover, actuaries should take great care over the terminology they use making every effort to promote understanding by users.	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). Produce guide on terminology used in actuarial advice on discount rates for non-actuarial users of actuarial advice.	*This recommendation is covered (less prescriptively) by TASs:* *TAS R C.4.6: describe the rationales for assumptions.* *TAS R C.6.1: reports should be suited to the understanding of their users.* *TAS R C.6.4: provide clarification in the event of misunderstanding.* *TAS R C.6.8: explain meaning of descriptions that are not uniquely defined.* *TAS M C.5.4: indicate relationship to neutral estimates.* *Pensions TAS D.2.13: explain the derivation of discount rates.* *Insurance TAS D.2.9: explain the derivation of discount rates.*

Pensions Recommendations

Funding and Reserving

Original recommendation	The way forward	Links to TASs
4 Actuaries and the Actuarial Profession should be clear (to their clients and to regulators) that the use of a budgeting calculation alone in the assessment of Technical Provisions will not provide adequate information on the assessment of the security of members' benefits.	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 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. *Footnote: There are problems with the term "Technical Provisions" which is used both in UK pensions and UK insurance applications but it represents a rather different quantity in these two areas.*	*This recommendation is covered (less prescriptively) by TASs:* *TAS R C.5.1: include all material matters.* *TAS R C.5.8: explain the objective of calculations.* *TAS R C.6.10: explain what the results are intended to represent.* *TAS M C.5.8: explain the limitations of any models and the implications of the limitations.* *Pensions TAS D.2.2: assumptions should be appropriate for the purpose.* *Pensions TAS D.2.7: any opinion on assumptions should include an opinion on appropriateness for purpose.*
5 In assessing what is a "prudent" discount rate for the purposes of calculating Technical Provisions under UK regulations, consideration should be given primarily to the current or evolving pension scheme investment strategy, it being noted that there may then need to be other explicit elements of prudence included in the liability calculation if the overall result is to be sufficiently prudent as far as the Pensions Regulator is concerned.	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 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. *Footnote: more focus on understanding the purpose of the calculations.*	*This recommendation is covered (less prescriptively) by TASs:* *Pensions TAS D.2.16: explain how discount rates compare with returns expected from investment strategy.*

Original recommendation	The way forward	Link to TASs
6 For the purposes of establishing a recovery plan to restore pension scheme funding up to the level of Technical Provisions a budgeting framework may be used with a realistic assessment of the expected investment return that can be anticipated during the recovery period**.** However, actuaries should be clear, as per recommendation 4, that such a framework will not provide adequate information on the assessment of the security of members' benefits during and at the end of the recovery period.	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**.**	*This recommendation is covered (less prescriptively) by TASs:* *TAS R C.3.3: state the purpose of reports.* *Pensions TAS D.2.2: assumptions should be appropriate for the purpose.* *Pensions TAS D.2.16: explain how discount rates compare with returns expected from investment strategy.*
7 For the purposes of calculating an estimate of pension scheme solvency a matching framework should be used (making no adjustment for sponsor default on the pension obligations on the assumption that members' benefits are settled in full).	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.	*This recommendation is covered (less prescriptively) by TASs:* *Pensions TAS D.2.2: assumptions should be appropriate for the purpose.*
8 For the purposes of disclosing pension scheme funding information to members, trustees and regulators should be encouraged to focus on the solvency position and how it is expected to develop under the agreed funding plan.	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.	*This recommendation is covered (less prescriptively) by TASs:* *TAS R C.5.20: indicate projected results from future calculations.*

Accounting for Pension Benefits

Original recommendation	The way forward	Link to TASs
9 The Actuarial Profession should call for pension liabilities in company accounts to be calculated in a matching framework (making no adjustment for sponsor default), subject to this principle being consistent with all long-term financial liabilities (including insurance liabilities).	The Actuarial Profession should support the use of a matching framework for reserving for long-term financial liabilities in company accounts. Consider further research into the adjustment, if any, for sponsor default linked to the nature of the accounts being prepared and the requirement to hold assets against liabilities. See also #13 and #18	

Member Options and 'Transactions'

Original recommendation	The way forward	Link to TASs
10 Actuaries should advise on member options and transactions within a matching framework. Even where an alternative approach is indicated by other considerations (e.g. legislation or pension scheme rules) the matching framework calculations should be considered in any advice given.	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). See also #15	*This recommendation is covered (less prescriptively) by TASs:* *Pensions TAS D.2.2: assumptions should be appropriate for the purpose.* *Pensions TAS D.2.7: any opinion on assumptions should include an opinion on appropriateness for purpose.*
11 Actuaries should encourage trustees to consider cash equivalent transfer values in a matching framework and the Actuarial Profession should encourage regulators to revisit the regulations on cash equivalent transfer values from a matching framework perspective.	If action 10 is achieved, recommendation 11 is no longer required.	*This recommendation is covered (less prescriptively) by TASs:* *Pensions TAS D.2.2: assumptions should be appropriate for the purpose.* *Pensions TAS D.2.7: any opinion on assumptions should include an opinion on appropriateness for purpose.*

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Life Insurance

Reserving

Original recommendation	The way forward	Link to TASs
12 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 the UK implementing measures.	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. [Final recommendation 11] See also #17	

Accounting

Original recommendation	The way forward	Link to TASs
13 The Actuarial Profession should support a move to a matching framework for liability valuation under International Financial Reporting Standards provided that market valuation remains the approach for valuation of assets.	See #9	

Pricing

Original recommendation	The way forward	Link to TASs
14 In providing advice in relation to premium rates for life insurance an actuary should have regard to the specific needs and requirements of the firm proposing to sell the products. However, where the price is calculated other than using a matching framework or where the intention is to use the premium rates over a period of time, actuaries should provide sufficient information to enable the recipient to assess the continued appropriateness of the rates recommended as economic conditions vary over time.	Encourage actuaries (through education and CPD) to promote understanding of insurance policy/product pricing in a matching framework. [Final recommendation 12]	*This recommendation is covered (less prescriptively) by TASs:* *Insurance TAS D.2.2: assumptions should be appropriate for the purpose.* *Insurance TAS D.2.9: explain the implications of adopting the discount rates.*

Policyholder Calculations

Original recommendation	The way forward	Link to TASs
15 In providing advice in relation to modifying policy terms for life insurance an actuary should have regard to the specific needs and requirements of the policy including its conditions and any TCF implications. However, where the pricing is calculated other than using a matching framework or where the intention is to use the basis over a period of time, the actuary should provide information to enable the recipient to assess the continued appropriateness of the rates recommended as economic conditions vary over time.	See #10	*This recommendation is covered (less prescriptively) by TASs:* *Insurance TAS D.2.3: use sufficient relevant information.* *Insurance TAS D.2.2: assumptions should be appropriate for the purpose.* *Insurance TAS D.2.9: explain the implications of adopting the discount rates.*
16 Where a projection of benefits under a policy with the benefits payable are linked to the performance of a defined pool of assets, the projection should be based on a budgetary framework having regard for the specific assets to which the benefits are linked or are expected to be linked.	Encourage actuaries (through education and CPD) that where the benefits payable under a policy are linked to the performance of a defined pool of assets, projections of benefits payable should be based on a budgeting framework. [Final recommendation 13]	*This recommendation is covered (less prescriptively) by TASs:* *Insurance TAS D.2.3: use sufficient relevant information.* *Insurance TAS D.2.2: assumptions should be appropriate for the purpose.* *Insurance TAS D.2.9: explain the derivation of discount rates.*

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General Insurance
Reserving

Original recommendation	The way forward	Link to TASs
17 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 the UK implementing measures.	See #12	

Accounting

Original recommendation	The way forward	Link to TASs
18 The Actuarial Profession should support a move to a matching framework for liability valuation under International Financial Reporting Standards provided that market valuation remains the approach for valuation of assets.	See #9	

Pricing

Original recommendation	The way forward	Link to TASs
19 In providing advice in relation to pricing GI products an actuary should have regard to the relative importance of investment returns on assets to the cost of providing those products. However, where the price is calculated other than using a matching framework or where the intention is to use premium rates over a period of time, the actuary should provide sufficient information to enable the recipient to assess the continued appropriateness of the rates recommended as economic conditions vary over time.	Encourage actuaries (through education and CPD) to promote understanding of insurance policy/product pricing in a matching framework. [Final recommendation 12]	*This recommendation is covered (less prescriptively) by TASs:* *Insurance TAS D.2.3: use sufficient relevant information.* *Insurance TAS D.2.2: assumptions should be appropriate for the purpose.* *Insurance TAS D.2.9: explain the implications of adopting the discount rates.*