HM TREASURY

Consultation on the discount rate used to set unfunded public service pension contributions

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1 Introduction and scope of consultation

Overview of chapter

1.1 This chapter introduces discount rates and their use in setting contribution rates in unfunded public service pension schemes. The scope of the consultation is explained and the implications of a lower discount rate are considered. It then sets out the questions on which responses are requested.

Discount rates and their use in pensions

The nature of pensions requires understanding of the value today of future payments

1.2 Pensions are important, complex and long-term financial commitments, providing people with income on which they rely during retirement. In order that people can make informed decisions and employers understand the implications of any pension provision offered, it is important to be able to understand the value today of future pension payments.

Discount rates can provide a value today for future expenditure commitments

1.3 In general, people prefer to receive goods and services now rather than later: this is known as time preference and is often taken into account when comparing costs and benefits that occur in different time periods. Discounting is a technique that takes account of time preference by "discounting" (or reducing) the amount of future payments, to express them in today's terms. A consequence of time preference is that investors demand a return on their investment, so that they will be able to consume a greater amount of goods or services in the future as compensation for giving up consumption today. Discount rates sometimes reflect the anticipated investment return on a portfolio of assets: the discounted value of future payments then represents the amount of money that needs to be invested today in order to meet those future payments. Box 1.A, taken from the interim report of the Independent Public Service Pensions Commission[1] (the Commission), provides a more detailed discussion of discount rates.

[1] *Independent Public Service Pensions Commission: Interim Report*, October 2010

Box 1.A: Discussion of discount rates

Pensions are long-term commitments. An employee joining a public service pension scheme at age 25 will probably receive pension payments between 40 and 70 years in the future.

One method used to understand the cost of pension promises made to date is to calculate the present value of expected pension payments in the future using an appropriate discount rate.

To explain discount rates in more detail, let us assume that a company promises an individual a payment of £100 in 10 years' time. What is the cost of that promise now to the company?

The cost to the company could be considered to be the amount of money needed now in order to pay £100 to this individual in 10 year's time.

Let us assume that the company decides that it will invest in government bonds and it expects that these will give a return of 4 per cent (nominal) per year. The cost to the company of providing £100 in 10 year's time is therefore:

$$£100 \div 1.04^{10} = £67.56$$

Effectively, the 'discount rate' used is 4 per cent[a], which is equal to the expected return on government bonds.

Alternatively, the company may decide to invest in equities, where it expects a return of 8 per cent[b] (nominal) per year. The cost to the company of providing £100 in 10 years' time (using a discount rate of 8 per cent) will then be:

$$£100 \div 1.08^{10} = £46.32$$

So it may appear as though the company should invest in equities. This isn't necessarily the case, because equities are more risky than government bonds and so if the company invests in equities there is an increased chance that the £46.32 they invest now may be less than £100 in 10 years time and they may need to make up the difference.

The concept of a discount rate becomes more difficult with unfunded public service pensions as there are no assets to back the pension promises.

A final point to note is that the individual may put an entirely different value on the £100 which may reflect how much they value money now rather than later, how much they think £100 will buy in 10 years and how certain they think they are to get the £100.

a 4 per cent nominal, so not adjusted for prices

b 8 per cent nominal, so not adjusted for prices

Source: Independent Public Service Pensions Commission: Interim Report, October 2010

Role of discount rates in unfunded defined benefit public service pension schemes

Public service pension schemes

1.4 The majority of public services pension schemes are unfunded defined benefit pension schemes, including those covering the NHS, teachers, civil servants and armed forces[2].

1.5 In a defined benefit pension scheme, the level of pension benefit is defined, usually in relation to the member's salary. If the eventual costs of these benefits are higher than anticipated, then additional money will be needed to meet the benefits. For private sector schemes this additional money would generally come from the employer; for public service schemes it would generally come from the taxpayer. So in defined benefit pension schemes, the risk is with the employer or the taxpayer.

1.6 In contrast, in defined contribution pension schemes the contributions are defined and the accumulated contributions are used to purchase benefits at retirement. If the costs of these benefits are higher than anticipated, the benefits that the member can purchase will be lower than expected. So in defined contribution pension schemes, the risk is with the individual.

Setting contribution rates for unfunded public service pension schemes using the SCAPE discount rate

1.7 In defined benefit pension schemes, contributions are set to meet the level of benefits through a process called a scheme valuation, which is outlined in paragraph 2.3.

1.8 For funded defined benefit schemes in the private sector, contributions are used to purchase assets that form a fund from which pension benefits are paid. If investment returns prove to be lower than anticipated and the fund of assets is insufficient to pay the benefits, then higher contributions are necessary to make up the shortfall. Conversely, if investment returns prove to be higher than anticipated, the fund of assets would be more than enough to pay the benefits and it may be possible to pay lower contributions in the future.

1.9 Unfunded public service pension schemes do not have a fund of assets from which pension benefits are paid. Instead the benefits are paid out of tax revenue. The fact that the Exchequer ultimately stands behind these pension promises does not change the importance of setting contributions at a level which reflects expected benefits so that:

- the value of benefits being earned today is recognised and total contributions reflect this;
- employers pay a charge that is appropriate for public service pension schemes, just as private sector employers must pay contributions that are appropriate for funded pension schemes; and
- today's decisions by Government and public service employers about how many people to employ, as opposed to other forms of expenditure, take into account the full future cost of employing people today.

1.10 The Government has developed a methodology for setting contributions in the absence of a fund of assets and this is called the Superannuation Contributions Adjusted for Past Experience (SCAPE) methodology and the discount rate used in this valuation methodology is called the SCAPE discount rate. Chapter 2 sets out how the SCAPE discount rate is used, with more detail on the SCAPE methodology in Annex D.

[2] There are also a few funded public service pension schemes, of which the Local Government Pension Scheme is the largest.

Reason for reviewing the discount rate

1.11 Initial work by the Commission, as set out in its interim report, suggests that the current discount rate is at the high end of what is appropriate and the Commission recommended that it should be reviewed.

Scope of this consultation

The SCAPE discount rate

1.12 The focus of this consultation is the discount rate used to set contribution rates for the unfunded public service pension schemes through valuations following the SCAPE methodology – this is known as the SCAPE discount rate.

1.13 This is a consultation across the unfunded public service pension schemes. Where there is a specific consultation requirement within these schemes this consultation constitutes the consultation on the discount rate for the purposes of these scheme requirements. A list of the regulations setting out the consultation requirements for the largest schemes is provided at Annex C.

1.14 Discount rates are used in public service pension schemes for a variety of purposes other than setting contributions. The following sections set out how these relate to this consultation.

Other uses of discount rates in public service pension schemes

1.15 Public service pension schemes also use discount rates for other purposes such as: scheme annual resource accounts; individual[3] and bulk transfers[4] into and out of schemes[5]; calculation of the value of pension benefits in divorce proceedings; and production of various actuarial factors for member options, such as actuarially reduced early retirement benefits.

1.16 In some, but not all, of these calculations the public service pension schemes currently use the SCAPE discount rate. Discount rates that are currently related to SCAPE include those used for:

- individual transfers into and out of schemes (Cash Equivalent Transfer Values);
- calculation of the value of pension benefits in divorce proceedings or the dissolution of civil partnerships; and
- for some cases, the production of various actuarial factors for member options.

1.17 Should the SCAPE discount rate change, the Government will take advice from actuaries about whether it remains appropriate to use the SCAPE discount rate for these purposes.

[3] Individual transfers, known as Cash Equivalent Transfers (CETVs) are the amount which can be taken to another pension scheme instead of a deferred pension which the member holds within their pension scheme. A CETV includes an adjustment to allow for the market conditions at the time the transfer takes place.

[4] Bulk transfers occur when a group of scheme members are transferred from one pension scheme to another.

[5] In the cases where there are movements of staff in and out of schemes, the value of the pension benefits earned is either transferred out of a public service pension scheme or transferred in to a public service pension scheme. This is a choice open to those with occupational pension benefits.

The SCAPE discount rate and cap and share reforms

1.18 The four largest public service pension schemes[6] have introduced reforms which limit taxpayer exposure to the cost pressures associated with the rising cost of providing pension scheme benefits (such as improvements in life expectancy). The cap and share policy is designed to ensure that these cost pressures are shared between employers and employees up to an agreed employer contribution cap, beyond which all further increases will be the responsibility of employees. This sets a maximum limit for employer contributions thus protecting the public finances and the taxpayer[7].

1.19 The valuations to implement these reforms use the SCAPE discount rate. These valuations have been suspended while this review is undertaken and while the Commission considers what risk-sharing arrangements might be appropriate for public service pension schemes in the future. The role of any new discount rate in the cap and share policy is therefore out of the scope of this consultation.

Balance of contributions between employer and employee

1.20 In many public service pension schemes, contributions are paid by both employers and employees. This consultation seeks views on the discount rate used to set the total contribution rate that will be paid by employers and employees combined. The split in respect of how these contributions are shared between employers and employees is a question of pension scheme design that is beyond the scope of this consultation.

Consultation on Fair Deal policy to be taken forward separately

1.21 At the Spending Review[8] the Government announced its intention to undertake a review of the Fair Deal policy[9], reporting by summer 2011. This will be taken forward separately from this consultation although it will be informed by this review of the discount rate and the final report from the Commission.

Pension schemes covered by this consultation

1.22 The pension schemes covered by this consultation are the unfunded public service pension schemes. The largest schemes are National Health Service Pension Scheme, Teachers Pension Scheme and the Principal Civil Service Pension Scheme and a full list is provided at Annex B.

1.23 The discount rates used for setting employer contributions in the funded public service pension schemes such as the Local Government Pension Scheme are outside the scope of this consultation.

General impact of lowering the SCAPE discount rate

1.24 In determining contribution rates, scheme valuations generally look at two sorts of cost pressures. Firstly, the cost of future pension benefits being earned by current employees (future service); and secondly whether further contributions are required because past contributions were insufficient to meet current estimates of the value of promises already made (past service).

[6] These are the Principal Civil Service Pension Scheme, Teachers Pension Scheme, National Health Service Pension Scheme and the Local Government Pension Scheme.

[7] *Long Term Public Finance Report: An Analysis of Fiscal Sustainability,* HM Treasury, December 2010

[8] *Spending Review 2010,* HM Treasury, October 2010

[9] This policy requires that when public sector workers are compulsorily transferred from the public sector under TUPE, the new employer is required to provide "broadly comparable" benefits to public service pension schemes. For more information go to http://www.hm-treasury.gov.uk/d/staff_transfers_145.pdf

1.25 Keeping all other assumptions unchanged, a lower discount rate would result in higher contribution rates at the next scheme valuations. The effect of changing the discount rate on contribution rates will vary between different schemes due to the different generosity of scheme designs and the different profiles of each workforce.

1.26 It is important to note that some other changes to public service pensions would provide offsetting pressure on contribution rates at the next scheme valuations. The change in uprating of public service pensions from RPI to CPI from April 2011[10] will reduce cost pressures, reducing total contribution rates. The increase in employee contribution rates of an average of three percentage points across the public service pension schemes[11], to be phased in over three years from 2012-13, will decrease employer contribution rates in the absence of other changes.

Impact on contributions for future service

1.27 The Commission have estimated that for the unfunded schemes as a whole, the effect of reducing the discount rate by 0.5 per cent per annum could increase the calculated total contribution required for pension benefits being earned by an average of about 3 per cent of pay bill or £3 billion to £4 billion a year.

Impact on contributions for past service

1.28 A change in discount rate would also affect the value placed on the pension benefits accrued relating to past service. The Government has decided that it is not appropriate for this to be reflected in future contribution rates as a result of any change in the discount rate following this review.

Impact on different types of employers

1.29 This section considers the potential impact of a lower discount rate on employers. Initial work by the Commission, as set out in its interim report, suggests that the current discount rate is at the high end of what is appropriate. This suggests that organisations that currently participate in the public service pension schemes have access to public service pension schemes at a lower contribution rate than would otherwise be the case. A lower discount rate would, in the absence of other changes, result in a higher level of contribution rates being charged. The employers currently in unfunded public service pension schemes are:

- Government departments and other public service employers such as the NHS, state schools and police and fire services;
- independent providers[12] that either have:
    - right of access to public service pension schemes, such as General Practitioner businesses[13], dental practices and independent schools; or
    - staff who retained access to their public service pension scheme when they transferred into the organisation at its inception[14], as is the case for some social enterprises.

[10] *Budget 2010*, HM Treasury, June 2010

[11] *Spending Review 2010,* HM Treasury, October 2010

[12] This includes private sector businesses and non-profit making organisations such as charitable bodies and social enterprises.

[13] Although General Practitioners provide health services, they are not employed as public sector workers but have access to the National Health Service Pension Scheme. The same applies to dental practices.

[14] In the NHS pension scheme, it is possible to allow staff transferring to an non-profit making external body to remain in the pension scheme while undertaking the same duties; this is called a closed direction. It does not allow new staff in the external body to join the scheme.

Independent providers with access to public service schemes

1.30 In the absence of other changes, a lower discount rate would increase the contribution rate at which independent providers have access to public service pension schemes. This would mean increased contributions for such organisations as General Practitioner businesses, social enterprises and independent schools. But as noted above, other changes to public service pensions, such as the change of indexation and the increase in employee contributions will provide offsetting pressure on contribution rates at the next valuations.

Impact on employers within the public sector

1.31 Any change in the discount rate would have an impact on the contributions paid by public service employers, but the Government's intention is that departmental budgets set in the Spending Review will not come under additional pressure due to a change in the discount rate.

Impact on potential new independent providers of public services

1.32 The current level of employer contribution rates in the unfunded public service pension schemes is cited as a key barrier to greater plurality of public service provision, potentially reducing efficiencies and innovation in public service delivery from independent providers. A reduction in the discount rate may, in the absence of other changes, reduce the cost advantage of public service providers when bidding against independent sector organisations to provide public services. As explained in paragraph 1.21, consultation on the Fair Deal policy will be taken forward separately.

Impact on employees of changing the discount rate

Contributions

1.33 As set out in paragraph 1.20, the split in respect of how much of these contributions are paid by employers and how much are paid by employees is a question of pension scheme design that is beyond the scope of this consultation.

Other impacts

1.34 As noted in paragraphs 1.15 to 1.17, there are various circumstances in which it has been the practice of the public service pension schemes to use the SCAPE discount rate for other purposes, some of which directly affect individual scheme members (or other beneficiaries). Any change to the discount rate used will have an impact on these calculations and, as explained, should the SCAPE discount rate be changed the Government would take advice from actuaries on whether the SCAPE discount rate remains appropriate for these other purposes.

Impact on future Government expenditure

1.35 The discount rate used to determine contribution rates does not have a material impact on the annual cost to the taxpayer[15] of unfunded public service pension schemes.

Timing and implementation

1.36 Following this review, any new SCAPE discount rate would be used in upcoming scheme valuations, including those currently on hold, for the unfunded public service pension schemes. The Government will also review its guidance on individual transfers in and out of schemes, such as Cash Equivalent Transfer Values. Implications for other activities (as discussed in paragraphs 1.15 to 1.17) will be assessed based on advice from actuaries.

[15] Annual taxpayer costs are the amount of benefits paid to recipients by government each year less contributions received from employees by Government each year.

1.37 The Commission expressed a preference for a review of the SCAPE discount rate in time for the findings to inform their final report. We would therefore like to share responses to this consultation with the Commission as appropriate.

Questions for this consultation

1.38 This consultation seeks views on the six questions below.

- Question 1: 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?
- Question 2: Chapter 3 sets out objectives for the Government in setting the SCAPE discount rate. Are there other objectives that should be taken into account?
- Question 3: 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?
- Question 4: Are there further approaches to setting the SCAPE discount rate that the Government could consider? If so, what are their advantages and disadvantages?
- Question 5: Which approach to setting the SCAPE discount rate do you recommend, and why? Following your preferred approach, what actual discount rate do you consider would be appropriate?
- Question 6: Do you consider that there should be a regular review of the SCAPE discount rate? If so, how often this should take place?

1.39 In providing your responses to these questions, it would be helpful if you could:

- keep in mind the purpose of the discount rate is to set contributions in the unfunded public service pension schemes and note those issues that are not within the scope of this consultation as set out in Chapter 1;
- explain your rationale for favouring or rejecting options, with reference to the objectives for the discount rate:
    - fair reflection of costs;
    - reflect future risks to Government income;
    - support plurality of provision of public services;
    - transparent and simple;
    - stability; and
    - any other objective you identify.
- specify whether the actual discount rate you consider would be appropriate includes inflation (i.e. whether the discount rate is gross or net of inflation), which measure of inflation you are using, and if it is gross of inflation what your corresponding assumption for inflation would be. If your response does not include a view on the assumed long term average difference between CPI and RPI we will assume that discount rates expressed in terms of RPI will be increased by 0.75 percentage points to produce discount rates net of CPI; and
- include any analysis or evidence you have to support your proposals, drawing on experience of other sectors or countries as appropriate..

2 The SCAPE discount rate and the current approach to setting this rate

Overview of chapter

2.1 This chapter explains the approach used for choosing a discount rate for setting contributions for unfunded public service pension schemes, which differs to the approach taken by funded pension schemes. It sets out the rationale for the current discount rate (called the Superannuation Contributions Adjusted for Past Experience – SCAPE – discount rate), which is based on the Government's Social Time Preference Rate. This is followed by a summary of the four options for alternative approaches to setting the SCAPE discount rate identified by the Independent Public Service Pensions Commission.

The SCAPE discount rate

Approach to choosing a discount rate for setting contribution rates in unfunded public service schemes

2.2 As set out in Chapter 1, it is important to set unfunded public service pension contributions at a level which reflects expected benefits so that:

- the value of benefits being earned today is recognised and total contributions reflect this;
- employers pay a charge that is appropriate for public service pension schemes, just as private sector employers must pay contributions that are appropriate for funded pension schemes; and
- today's decisions by Government and public service employers about how many people to employ, as opposed to other forms of expenditure, take into account the full future cost of employing people today.

2.3 For funded pension schemes in the private sector the discount rate used to set contribution rates for pension accrual is normally set equal to the discount rate used to value existing pension liabilities[1]. The discount rate is generally set with reference to the return expected from the assets held by the pension scheme, adjusted to allow for the employer's financial strength and long term commitment to the scheme (this is known as the employer's covenant). Given its importance, the process used to set the discount rate for technical provisions is governed by funding legislation[2].

2.4 Unfunded public service pension schemes do not hold assets, therefore the discount rate cannot be based on investment returns. Furthermore, the process for setting the discount rate differs from the private sector funded schemes because:

- the Government has a unique risk-bearing profile compared to private sector employers because of its ability to raise funds from future taxpayers; and

[1] This is known as technical provisions.

[2] Part III of the Pension Act 2004

- the Government's choices about whether to make commitments on public service pensions require comparisons with other forms of future public, rather than private, spending.

2.5 A different approach is therefore needed to choose a discount rate for the unfunded public service pension schemes. A different methodology is also needed to calculate contribution rates for unfunded public service pension schemes. The current methodology, introduced in the late 1990s, is called the Superannuation Contributions Adjusted for Past Experience (SCAPE) methodology and the discount rate for setting contributions is therefore known as the SCAPE discount rate. This methodology is explained at Annex D.

The current value of the SCAPE discount rate – 3.5 per cent above RPI inflation

2.6 The Government is responsible for setting the assumptions used in unfunded public service pension schemes valuations, including the discount rate.

2.7 The SCAPE discount rate has been a constant 3.5 per cent above inflation - as measured by the Retail Prices Index (RPI) - since the introduction of the SCAPE methodology.

Treatment of inflation

2.8 The SCAPE discount rate is expressed net of inflation. As announced at the Emergency Budget, from April 2011 public service pension increases will be set by reference to CPI inflation. Going forward, the discount rate will therefore be expressed in terms of CPI inflation. However, this consultation document expresses discount rates net of RPI inflation to aid comparison with the current rate.

Rationale for the current SCAPE discount rate following the Social Time Preference Rate

2.9 The discount rate was set at 3.5 per cent plus RPI inflation to be in line with the Government's "Social Time Preference Rate" (STPR). This is an estimation of society's preference for consumption sooner rather than later, used in the Government's investment appraisals of different projects that involve spending money in the short term to deliver future welfare benefit. For example, building a new school or hospital has upfront costs but will provide future welfare benefit to society. The use of the STPR in the appraisal and evaluation of all policies, programmes and projects by Government is set out in guidance[3].

2.10 The current STPR of 3.5 per cent per annum net of price inflation is broadly made up of three components:

- Catastrophe risk: 1.0 per cent - the likelihood that there will be some event so devastating that all returns from policies, programmes or projects are eliminated or at least radically and unpredictably altered;

- Pure time preference: 0.5 per cent - this reflects the preference of individuals for consumption now, rather than later, assuming an unchanging level of consumption per capita over time; and

- Growth in per capita consumption: 2.0 per cent - this reflects an assumption that future consumption will be plentiful compared to the current position with corresponding lower marginal utility.

2.11 Using a discount rate in line with the STPR reflects the unfunded nature of public service

[3] *The Green Book: Appraisal and Evaluation in Central Government,* HM Treasury, 1991

pension schemes by treating the schemes as inter-temporal transfers within the public sector, in line with other public investment projects. It reflects the delay between the pension promises being made today and the actual pensions expenditure required by the taxpayer. Using the same discount rate – the STPR – gives consistency with other decisions about the costs and benefits over time considered by Government.

2.12 It also has the benefit of being stable, rather than referenced to a specific set of investments. This means that contribution rates only increase due to actual effects on scheme costs (such as pay and workforce restructuring, or changes in life expectancy) without subjecting contributions to effects such as fluctuations in market rates, which would not affect the actual cost of pension benefits. A stable discount rate also reduces administration costs for public service schemes.

Possible approaches for setting the discount rate

2.13 The Commission has identified four alternative approaches to setting the discount rate:

- a rate consistent with private sector and other funded schemes:
- a rate based on the yield on index-linked gilts;
- a rate in line with expected GDP growth; and
- a Social Time Preference Rate that makes allowances for the particular context of pension provision.

These four options and their implications are discussed in the next chapter.

3 Options for a new SCAPE discount rate

Overview of chapter

3.1 This chapter sets out objectives against which different approaches to setting the SCAPE discount rate can be evaluated, and presents four alternative approaches for setting the discount rate identified by the Independent Public Service Pensions Commission.

Objectives for the SCAPE discount rate

3.2 In considering the different approaches to setting the SCAPE discount rate it is useful to evaluate them against objectives. Five potential objectives for the SCAPE discount rate are suggested below. Respondents are invited to offer additions or comment on their relative importance. There are tensions between these objectives and it is unlikely that any one approach will satisfy all of them.

- Fair reflection of costs – this is relevant so that:
    - the value of benefits being earned today is recognised and total contributions reflect this;
    - employers pay a charge that is appropriate for public service pension schemes, just as private sector employers must pay contributions that are appropriate for funded pension schemes; and
    - today's decisions by Government and public service employers about how many people to employ, as opposed to other forms of expenditure, take into account the full future cost of employing people today. When comparing with other forms of expenditure, consistency with other long-term spending may be desirable.
- Reflect future risks to Government income – unfunded public service pensions are paid from future tax revenues, which may turn out to be different to what is expected. It may be appropriate for the discount rate to reflect this risk.
- Support plurality of provision of public services – the level of employer contribution rates, calculated using the current discount rate, is cited as a barrier to greater plurality of public service provision. A discount rate more in line with those used in funded schemes could promote a more level playing field for independent sector organisations when bidding to provide public services.
- Transparent and simple – a transparent and simple approach to setting the discount rate would assist with wider understanding of the mechanism for budgeting for public service pensions.

- Stability – an approach to setting the discount rate that avoids fluctuations in employer charges that do not reflect actual changes in the expected future cash costs could be better for Government in taking long term expenditure decisions. Minimising unnecessary changes would reduce administration costs for the public sector.

Four options for a new approach to setting the discount rate

3.3 The Commission identified four alternative approaches to setting the SCAPE discount rate:

- a rate consistent with private sector and other funded schemes;
- a rate based on the yield on index-linked gilts;
- a rate in line with expected GDP growth; and
- a Social Time Preference Rate (STPR) that makes allowances for the particular context of pension provision.

Option (a) – a discount rate consistent with private sector and other funded schemes

3.4 As explained in Chapter 2, the discount rate used for setting contributions in private sector schemes is typically set with reference to the assets held and their expected returns and the strength of an employer's covenant (the ability and willingness of the employer to support the pension scheme in the long term).

3.5 Unfunded schemes do not hold assets. Nonetheless, the Commission highlights that one approach to setting the discount rate could be to consider the discount rates used by a private employer of the strongest covenant (though it should be noted that the Government's ability to bear risk cannot be replicated in the private sector) or a Local Government employer.

3.6 Using the most recent data published by the Pensions Regulator and analysis of the 31 March 2007 English Local Government Pension Scheme valuations, the Commission estimates a discount rate based on this approach[1] could be in the region of 2.5 per cent to 3.0 per cent above RPI inflation.

Option (b) – a discount rate based on the yield on index-linked gilts

3.7 It is sometimes argued that as pension contributions are being used to finance current Government spending, pension liabilities should be discounted at the market rate of Government borrowing, as measured by the yield on index-linked gilts.

3.8 The Commission in their interim report suggest a discount rate based on the current yield on index-linked gilts would be around 0.8 per cent above RPI inflation.

Option (c) – a discount rate in line with expected GDP growth

3.9 Setting the discount rate in line with GDP growth would reflect the fact that pensions from the unfunded public service pension schemes will be paid for out of future tax revenues, as opposed to a fund of assets. Pensions could therefore be valued by discounting at the rate at which tax revenue is expected to grow. Over the long term, an appropriate guide to the growth rate of tax revenues is the long-term future rate of GDP growth.

3.10 The Commission suggested that a discount rate based on this approach might be around 2 per cent to 2.5 per cent above RPI inflation, based on recent forecasts.

[1] Scheme Funding Analysis 2008, The Pensions Regulator, http://www.thepensionsregulator.gov.uk/docs/scheme_fundinganalysis_2008.pdf

Option (d) – a Social Time Preference Rate

3.11 As explained in Chapter 2, the rationale for setting the discount rate in line with the Government's STPR is that it represents the alternative public investment opportunities for the funds used to pay for public service pensions. This is the current approach and so continuing with this approach is one possible option.

3.12 However, the Commission questioned whether some of the elements that make up the current rate are suitable for public service pensions. In particular, the Commission has questioned the application of catastrophe risk and the relevance of pure time preference. The Commission also noted it might be appropriate for public service pensions to have a lower discount rate due to their very long-term nature.

3.13 Taking into account the elements which the Commission have questioned above, a discount rate based on adjustment to the STPR would be around 2 to 3 per cent above RPI inflation.

Reviewing the SCAPE discount rate

3.14 There is currently no mechanism for regular reviews of the SCAPE discount rate. This consultation seeks views on whether this would be appropriate and, if so, how often this should be undertaken.

4 Summary of questions

4.1 This consultation seeks views on the following questions in order to inform the Government's approach to setting the discount rate used to determine contribution rates for the unfunded public service pension schemes.

- Question 1: 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?
- Question 2: Chapter 3 sets out objectives for the Government in setting the SCAPE discount rate. Are there other objectives that should be taken into account?
- Question 3: 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?
- Question 4: Are there further approaches to setting the SCAPE discount rate that the Government could consider? If so, what are their advantages and disadvantages?
- Question 5: Which approach to setting the SCAPE discount rate do you recommend, and why? Following your preferred approach, what actual discount rate do you consider would be appropriate?
- Question 6: Do you consider that there should be a regular review of the SCAPE discount rate? If so, how often this should take place?

4.2 In providing your responses to these questions, it would be helpful if you could:

- keep in mind the purpose of the discount rate is to set contributions in the unfunded public service pension schemes and note those issues that are not within the scope of this consultation as set out in Chapter 1;
- explain your rationale for favouring or rejecting options, with reference to the objectives for the discount rate:
  - fair reflection of costs;
  - reflect future risks to Government income;
  - support plurality of provision of public services;
  - transparent and simple;
  - stability; and
  - any other objective you identify.

- specify whether the actual discount rate you consider would be appropriate includes inflation (i.e. whether the discount rate is gross or net of inflation), which measure of inflation you are using, and if it is gross of inflation what your corresponding assumption for inflation would be. If your response does not include a view on the assumed long term average difference between CPI and RPI we will assume that discount rates expressed in terms of RPI will be increased by 0.75 percentage points to produce discount rates net of CPI; and
- include any analysis or evidence you have to support your proposals, drawing on experience of other sectors or countries as appropriate.

A The consultation process

How to respond

A.1 This consultation document is available on the Treasury website at www.hm-treasury.gov.uk.

A.2 Responses are requested by 3 March 2011. Please ensure that responses are sent in before the closing date. The Government will also engage directly with interested groups.

A.3 Responses can be sent by email to: discountrateconsultation@hmtreasury.gsi.gov.uk. Alternatively, they can be posted to:

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

A.4 When responding, please state whether you are doing so as an individual or on behalf of an organisation.

Confidentiality

A.5 Information provided in response to this consultation, including personal information, may be published or disclosed in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA), the Data Protection Act 1998 (DPA) and the Environmental Information Regulations 2004).

A.6 If you want the information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence. In view of this it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on HM Treasury.

A.7 HM Treasury will process your personal data in accordance with the DPA and in the majority of circumstances; this will mean that your personal data will not be disclosed to third parties.

A.8 In addition to our obligations under FOIA and DAP, we would like to share responses to this consultation with the Independent Public Service Pensions Commission as appropriate. Where you have asked that your response is treated as confidential, please indicate whether you are willing for it to be shown to the Commission.

The Government's Consultation Code of Practice

A.9 This consultation is being conducted in accordance with the Government's Code of Practice on Consultation. A copy of the Code of Practice can be found on the Business Innovation and Skills website: http://www.bis.gov.uk/policies/better-regulation/consultation-guidance.

The consultation criteria

1. When to consult - Formal consultation should take place at a stage when there is scope to influence the policy outcome.
2. Duration of consultation exercises - Consultations should normally last for at least 12 weeks with consideration given to longer timescales where feasible and sensible.
3. Clarity of scope and impact - Consultation documents should be clear about the consultation process, what is being proposed, the scope to influence and the expected costs and benefits of the proposals.
4. Accessibility of consultation exercise - Consultation exercises should be designed to be accessible to, and clearly targeted at, those people the exercise is intended to reach.
5. The burden of consultation - Keeping the burden of consultation to a minimum is essential if consultations are to be effective and if consultees' buy-in to the process is to be obtained.
6. Responsiveness of consultation exercises - Consultation responses should be analysed carefully and clear feedback should be provided to participants following the consultation.
7. Capacity to consult - Officials running consultations should seek guidance in how to run an effective consultation exercise and share what they have learned from the experience.

A.10 If you feel that this consultation does not satisfy these criteria, or if you have any complaints or comments about the process, please contact:

Better Regulation Unit at HM Treasury

0207 270 4867/4517

B Schemes covered by this consultation

Scheme coverage

B.1 This consultation seeks to establish the appropriate discount rate (i.e. the SCAPE discount rate) to use in actuarial valuations for setting contribution rates under SCAPE methodology for the unfunded public service pension schemes.

B.2 The unfunded public service pension schemes covered by this consultation include:

- For civil servants:
    - Principal Civil Service Pension Scheme
    - Principal Civil Service Pension Scheme (Northern Ireland)
- Armed Forces Pension Scheme
- For NHS employees:
    - NHS Pension Scheme
    - NHS Superannuation Scheme (Scotland)
- Health and Personal Social Services Northern Ireland Superannuation Scheme
- For teachers:
    - Teachers' Pension Scheme (England and Wales)
    - Scottish Teachers' Superannuation Scheme
    - Northern Ireland Teachers' Superannuation Scheme
- Police Pension Scheme (administered locally)
- Firefighters' Pension Scheme (administered locally)
- United Kingdom Atomic Energy Authority Pension Schemes
- Judicial Pensions Scheme
- Research Councils' Pension Schemes

In addition to the schemes mentioned above, there are a number of smaller schemes and many established to cover only one senior appointment which do not specifically need to form part of the review but which will be required to act on the recommendations.

C Public service pension schemes: consultation requirements

C.1 The following statutory provisions set out the consultation requirements for individual public service pension schemes:

Firefighters' Pension Scheme 1992/New Firefighters' Pension Scheme 2006 (England & Wales, Scotland):
Section 34 of Fire and Rescue Services Act 2004

Firefighters' Pension Scheme (Northern Ireland)
Fire and Rescue Services (Northern Ireland) Order 2006

Health and Personal Social Services Superannuation Scheme (Northern Ireland)
Article 12(4) of the Superannuation (Northern Ireland) Order 1972

NHS Pension Scheme 1995/2008 (England & Wales):
U3 Accounts and Actuarial Reports of the NHS Pension Scheme Regulations 1995
1.B.1 Actuarial Reports and Accounts of the NHS Pension Scheme Regulations 2008
Superannuation Act 1972 Section 10

NHS Pension Scheme (Scotland):
Regulation U3 of the National Health Service Superannuation Scheme (Scotland Regulations) 1995
Regulation 1.B.1 of the National Health Service Pension Scheme (Scotland) Regulations 2008
Superannuation Act 1972 Section 10

Northern Ireland Teachers Superannuation Scheme
Superannuation (Northern Ireland) Order 1972 Article 11(5)

Police Pension Scheme (England & Wales, Scotland):
Police Pensions Act 1976 1 (1)

Police Pension Scheme (Northern Ireland)
Police Northern Ireland Act 1998 Section 33

Principal Civil Service Pension Scheme
Section IV of the PCSPS(NI) rules: the 2008 Section
Section 1(3) of the Superannuation Act 1972

Principal Civil Service Pension Scheme (Northern Ireland)
Article 2(2) of the Superannuation (Northern Ireland) Order 1972

Teachers' Pension Scheme (England & Wales, Scotland)
Superannuation Act 1972 Section 9(5)
Teachers' Pensions Regulations Schedule 3 Reg 5
Teachers' Pensions Regulations 2010 Regulation 128

D SCAPE: explanation of methodology

D.1 In Chapter 2, the use of the Superannuation Contributions Adjusted for Experience (SCAPE) discount rate and the current approach to setting this discount rate was discussed. This annex explains the SCAPE methodology and how it is used to set the contribution rates required for the unfunded public service pension schemes.

D.2 Regular scheme valuations of the unfunded public service schemes are carried out in order to set contribution levels. The process differs from that for private sector funded schemes because the unfunded public service schemes do not actually hold a fund of assets. An alternative approach to setting contribution levels must therefore be found. This is achieved through the construction and tracking of a notional fund. The methodology is called SCAPE and was introduced in the late 1990's.

D.3 The SCAPE methodology creates the concept of a notional fund – the "SCAPE fund" – in which the scheme "assets" provide a guaranteed rate of return in line with the SCAPE discount rate. In the absence of real assets the SCAPE fund:

- increases in line with the nominal amount of contributions made;
- increases with notional returns, in line with the current discount rate, at 3.5% per annum plus inflation; and
- decreases when pension benefit payments are paid.

D.4 The addition of actual experienced inflation to the notional returns has the effect that contributions are not affected by inflation being higher or lower than expected.

D.5 The SCAPE methodology can then ensure that contributions reflect the cost of ongoing pension promises plus any costs caused by past experience differing from that which was assumed at previous SCAPE valuations (for example people living longer than previously assumed).

D.6 When SCAPE was introduced each unfunded public service pension scheme was assumed to hold a SCAPE fund of 'notional' assets that exactly matched the scheme's liabilities. Going forward, to evaluate whether a shortfall or overpayment has been made in respect of past promises, subsequent SCAPE valuations then estimate the present value of all the pension promises that have been made by the scheme – the scheme's liabilities – up to the date of the valuation and seek to compare that with the 'assets' of the scheme. If any shortfall emerges between the value of assets and the calculated liabilities, contributions will be increased such that the shortfall is removed over a number of years. Similarly, if the calculations show that overpayments have been made in the past, contributions will be reduced.

E Glossary

Glossary of terms

E.1 **Active members:** These are current employees who are contributing (or have contributions made on their behalf) to an organisation's occupational pension scheme. They are distinct from deferred members and pensioners.

E.2 **Accrued liabilities:** A measure of the value, in today's money, of all pension entitlements to be paid in the future that have been earned to date.

E.3 **Actuarial valuation:** A report of the financial position of a defined benefit pension scheme usually carried out by an actuary every three or four years. The report typically sets out the scheme's assets and liabilities as at the date of the valuation; the rate at which the sponsoring employer must contribute to meet the liabilities accruing as they become due; and the additional rate at which the employer must contribute to eradicate any deficit (the excess of liabilities over assets) within a stated time period.

E.4 **Cap and share:** This is an arrangement applying to the pension schemes for the NHS, Teachers, Civil Service and Local Government, whereby increases or reductions in the costs of a scheme identified in a pension scheme actuarial valuation are shared between employees and employers up to the value of the cap. Above the cap the increases or reductions are borne by employees, either by changing employee contributions or future benefits or both.

E.5 **Cash Equivalent Transfer Value (CETV):** The value of accrued pension rights when any worker ceases to be an active member of a scheme before pension is payable. These are used for transfers in to and out of defined benefit pension schemes.

E.6 **Deferred members:** Deferred members are scheme members who have left employment, or ceased to be an active member of the scheme whilst remaining in employment, but retain an entitlement to a pension from the scheme which has not yet come into payment.

E.7 **Defined benefit (DB) pension scheme:** A pension scheme where the pension is related to the member's salary or some other value fixed in advance.

E.8 **Discount rate:** A discount rate is the rate at which a future payment or stream of payments is converted into a single value today.

E.9 **Employee contribution rates:** The percentage of their pensionable salary that employees pay as a contribution towards their benefits from a pension scheme.

E.10 **Employer contribution rates:** The percentage of the salary of employees that employers pay as a contribution towards the employees' pension.

E.11 **Fair Deal:** A non-statutory code of practice introduced in 1999 that protects the pension provisions of public sector workers who have their employment compulsorily transferred out of the public sector. In such a situation the transferring organisation is required to ensure that the pension provision for future service is "broadly comparable" after the transfer.

E.12 **Funded pension schemes:** Pension schemes in which pension contributions are paid into a fund that is invested and pension benefits are paid out of this fund.

E.13 **Independent Providers:** This includes private sector businesses and non-profit making organisations such as charitable bodies and social enterprises.

E.14 **Index linked gilt yields:** UK government bonds. Yields shown for index-linked gilts are based on an assumed inflation rate.

E.15 **Occupational pension:** A pension which is provided via an employer. In the private sector occupational pensions are provided from a pension scheme that takes the form of a trust arrangement and is legally separate from the employer.

E.16 **Pensioner members:** Individuals who now draw a pension and who are mainly former employees. However they may also include widows, widowers and other dependants of former active members.

E.17 **Independent Public Service Pensions Commission:** An independent commission undertaking a fundamental structural review of public service pension provision to report to Government by Budget 2011, chaired by Lord Hutton.

E.18 **Public service pension schemes**: Pension schemes authorised by statute provided for public service employees by the relevant employer. The main schemes are those for civil servants, the armed forces, NHS employees, teachers, local government employees, the police and firefighters. There are over 200 public service pension schemes.

E.19 **SCAPE discount rate:** The discount rate used to set contribution rates for the unfunded public service pension schemes under Superannuation Contributions Adjusted for Past Experience methodology and the focus of this consultation.

E.20 **SCAPE methodology:** Methodology used to set contribution rates for the unfunded public service pension schemes. See Annex D for details.

E.21 **Social Time Preference Rate (STPR):** An estimation of society's preference for consumption sooner rather than later, used in the Government's investment appraisals of different projects that involve spending money in the short term to deliver future welfare benefit.

E.22 **Standard contribution rate:** The total rate of contributions (employer plus employee) which would need to be paid in order to meet the cost of pension benefits accruing over a defined period, expressed as a percentage of payroll.

E.23 **Unfunded pension scheme:** Public service pension schemes which are not backed by a pension fund. Instead Exchequer income is used, along with contributions, to pay current pensions.

HM Treasury contacts

This document can be found in full on our website at:
hm-treasury.gov.uk

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