

Consultation Document

**2014 Consultation on Assumptions to be used for
Valuations under Section 143 and Section 179 of
the Pensions Act 2004**

March 2014

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1. Introduction and summary

- 1.1 The Board of the Pension Protection Fund is responsible for keeping the assumptions used for valuations under sections 143, 152, 156, 158 and 179 of the Pensions Act 2004 in line with estimated pricing in the bulk annuity market. In the light of recent developments in the buy-out market the Board is considering, subject to consultation, making some changes to these assumptions.
- 1.2 The Board would like to receive responses to this consultation by 16 April 2014.
- 1.3 The proposed assumptions changes (applicable to valuations under all of sections 143, 152, 156, 158 and 179 except where indicated) are to:
- reduce the discount rate used to value level compensation in payment by 0.5% p.a.;
 - reduce the net discount rate used to value increasing compensation in payment by 0.1% p.a.;
 - increase the net discount rate used to value increasing compensation in deferment and accrued after 5 April 2009 by 0.4% p.a.;
 - update the base mortality assumptions to use the Continuous Mortality Investigations self-administered pension schemes "S1" tables adjusted for a factor of 0.9 to age-related probability of death in the next year;
 - update future mortality improvements to use the Continuous Mortality Investigation Mortality Projections Model CMI_2012 with mortality improvements converging to a single long-term rate of 1.5% p.a. for males and 1.0% p.a. for females, and
 - increase benefit installation / payment expenses by 100%.
 - Update adjustments based on an individual's benefit size (before application of the compensation cap and 90% reduction) to use S1 "Heavy" and S1 "Light" mortality tables and align the boundaries of benefit size to be in line with the thresholds of the data used for those tables (this change would not apply to valuations under section 179).

Other assumptions would be unchanged.

- 1.4 The Board proposes to introduce these changes for valuations with an effective date on or after 1 May 2014.

2. Background and recent developments

2.1 Developments since assumptions last updated

The Board is aware that the government has proposed that the PPF compensation cap will be increased for scheme members who have over 20 years of pensionable service with a company. The proposed change

does not affect the assumptions used for section 143 and section 179 valuations, nor is a new assumption required to implement the change. The guidance for undertaking section 143 and section 179 valuations will be amended to reflect the changes in due course.

2.2 Valuations carried out under sections 143, 152, 156, 158 and 179

Section 143 valuations

- 2.2.1 The intention behind **section 143** of the Pensions Act 2004 is that a scheme in an assessment period should not transfer to the Pension Protection Fund if benefits at least equal to the compensation provided by the Pension Protection Fund could have been secured with an insurer on the assessment date. The assets and liabilities for the section 143 valuation are established in accordance with section 143, the Pension Protection Fund (Valuation) Regulations 2005 (SI 2005 / 672), as amended, and guidance issued by the Board. The valuation is carried out by an actuary appointed by the Board and the valuation is approved by the Board.
- 2.2.2 The section 143 valuation is therefore essentially a tool used to answer the question, does the scheme have sufficient funds to buy-out levels of benefit at least equal to PPF compensation in the market. For a large number of schemes this position will be relatively clear cut. This is a key consideration for keeping the assumptions used for section 143 valuations as simple as possible. This is particularly true now that schemes have the opportunity to use more detailed assumptions where this may affect the outcome of the section 143 valuation.

Section 152, 156 and 158 valuations

- 2.2.3 A valuation is carried out under **section 152** following an application for reconsideration under section 151 of the Pensions Act 2004. Such an application must be made during the Authorised Period and so a scheme never becomes a closed scheme as defined by the Pensions Act 2004. Closed scheme valuations are carried out under **section 156** and **section 158** of the Pensions Act 2004.
- 2.2.4 All of these valuations are required to be conducted on similar principles to a s143 valuation for determining the scheme's funding position in respect of protected liabilities. Closed schemes operate under the provisions applicable to schemes that are winding-up. Schemes applying for reconsideration and closed schemes will have tried to secure levels of benefits at least equal to PPF compensation in the market and failed.

Section 179 valuations

- 2.2.5 The Board calculates the Pension Protection Levy quantum and individual schemes' levies based on **section 179** valuations conducted by the scheme actuary. A section 179 valuation is in principle very similar to a section 143 valuation but contains some simplifications. A section 179 valuation is justifiably simpler than a section 143 valuation because consistency and simplicity matter more for section 179 purposes than a high level of precision. Also many schemes will never need to undertake the more precise calculations entailed by a section 143 valuation.

- 2.2.6 It should be noted that, for levy calculation purposes, a section 179 valuation is rolled forward from its valuation date to the date used in the calculation for assessing underfunding. Part of this roll-forward methodology serves to adjust for changes in section 179 assumptions between the two dates.
- 2.2.7 The Pensions Regulator may take account of a scheme's section 179 valuation result when reviewing a scheme's technical provisions.

2.3 Legal background

- 2.3.1 In setting assumptions for valuations carried out under the Pensions Act 2004 the Board must have regard to:

Section 143 valuation	Regulation 6 of the Pension Protection Fund (Valuation) Regulations 2005 (SI 2005 / 672), as amended
Section 152 valuation	Subsection (10) of section 152 of the Pensions Act 2004
Section 156 valuation	Paragraph 5(1) of the Pension Protection Fund (Closed Schemes) Regulations 2007 (SI 2007/865) as amended
Section 158 valuation	Subsection (3) of section 158 of the Pensions Act 2004
Section 179 valuation	Regulation 6 of the Pension Protection Fund (Valuation) Regulations 2005 (SI 2005 / 672), as amended

(i) The relevant documents define the calculation of total protected liabilities as follows:

(a) for a **section 143 valuation**, the estimated cost of securing scheme benefits calculated in accordance with Schedule 7 of the Act (pension compensation provisions) to the member by means of an annuity purchased at the market rate at the **relevant time**;

(b) for a **section 152 valuation**, the estimated cost of securing scheme benefits calculated in accordance with Schedule 7 of the Act (pension compensation provisions) to the member by means of an annuity purchased at the market rate at the **reconsideration time**;

(c) for a **section 156 valuation**, the estimated cost of securing scheme benefits calculated in accordance with Schedule 7 of the Act (pension compensation provisions) to the member by means of an annuity purchased at the market rate at the **effective date**;

(d) for a **section 158 valuation**, the board must, as soon as is reasonable practicable, obtain an actuarial valuation (within the meaning of section 143) of the scheme at the **relevant time**;"

(e) for a **section 179 valuation**, the estimated cost of securing scheme benefits in accordance with any guidance issued by the Board in accordance with section 179(4) of the Act, for the member by means of an annuity purchased at the market rate at the **relevant time**.

(ii) The “relevant time” referred to above is the effective date of the valuation. For each type of valuation this is defined as follows:

Section 143 valuation	the day before the assessment date
Section 152 valuation	the time immediately before the end date of the period to which the reconsideration application accounts relate
Section 156 valuation	a date of the scheme trustees’ choosing (within certain specified time constraints)
Section 158 valuation	the day before the application to the Board (under section 157 of PA2004) for them to assume responsibility for the scheme
Section 179 valuation	a date of the scheme trustees’ choosing (within certain specified time constraints)

- (iii) This does not mean that the actuary conducting these valuations has to obtain quotes from the market. Rather it means that liabilities must be assessed using assumptions that the Board sets having regard to the bulk annuities market.
- (iv) Assumptions used have to be appropriate for the relevant time, and therefore need to be kept under regular review as market conditions change.
- (v) As the assumptions for determining protected liabilities under section 152, section 156 and section 158 are defined in similar terms to those under section 143 the remainder of this document just refers to section 143 and section 179 assumptions.

2.4 Current section 143 and section 179 assumptions

- (i) The assumptions outlined in this consultation document were derived after discussions with insurers who were active in the buy-out market in December 2013.
- (ii) Further reviews have since taken place half-yearly in the summer and winter. Although these reviews concluded that there has been increasing evidence from insurers that our assumptions were becoming too weak it was decided to leave them unchanged until after 31 March 2014 as the 2014/15 levy is the last to be set under the first three year period of the new levy framework implemented

in 2012/13. We propose to make changes to our assumptions from 1 May 2014.

2.5 Insurers' pricing of bulk annuities business

- (i) Insurers when pricing bulk annuities business adopt a sophisticated cash-flow model and it is very important to them to make the best cash-flow estimates that they can. This leads them to analyse mortality very carefully, using data from a number of different sources, for example,
 - their own experience,
 - the Office for National Statistics,
 - the Continuous Mortality Investigation (part of the Actuarial Profession),
 - organisations that can help them rate scheme members according to rating factors such as post-code, pension size, geography, occupation.
- (ii) They will also think very hard about future mortality improvements, using techniques that project past experience forwards as well as analysis of potential future medical improvements.
- (iii) They use term-dependent discount rates, having regard to the type of investments that they will hold which could be a mixture of gilts, corporate bonds and swaps.
- (iv) Crucially, the price quoted will depend on the required return on capital.
- (v) Also commercial considerations can lead to quotations being adjusted downwards in the interests of improving the likelihood of winning business.
- (vi) The best price obtainable by pension fund trustees for the buy-out of their scheme members' benefits fluctuates considerably from day to day. This is attributable not only to the effect of daily yield changes, but also to the changing appetites for new business amongst insurers.
- (vii) In the interests of proportionality, it would not be appropriate for the Board to specify assumptions with the same sophistication as insurers use. Instead, the Board has specified assumptions that readily available actuarial valuation software can handle with little difficulty. This would seem appropriate for the many smaller eligible pension schemes which would otherwise have to bear a disproportionately high actuarial valuation cost overhead. It is proposed to continue with this simplified approach particularly in the light of the ability to adopt a different approach where this will clearly impact on the outcome of the s143 valuation.

3. Policy principles around setting assumptions for section 143 and section 179 valuations

- 3.1 The Board has adopted the following ten principles to underlie the setting of assumptions for section 143 and section 179 valuations:
- a. Compliance with the regulations (see section 2.4 above).
 - b. Seeking evidence from confidential dialogue with market participants.
 - c. Seeking anecdotal evidence from consultants of the state of the market; a significant shift would indicate the need for a review of assumptions.
 - d. If the need for a review under principle (c) has not been invoked, nonetheless reviewing the market by speaking to market participants every year to eighteen months.
 - e. Proportionality (balancing the degree of precision with the cost, taking into account the purpose of the valuation).
 - f. Adoption of new tables and techniques as appropriate, having regard to the principle of proportionality.
 - g. Reasonable stability in the assumptions over time; i.e. frequent changes are undesirable.
 - h. Deliberately erring on the side of understating liabilities; i.e. assessing section 143 liabilities at a level that is believed for most schemes to be somewhat below the best market price.
 - i. Consulting with the pensions industry to check proposals.
 - j. Providing sufficient notification of changes.
- 3.2 Principle (h) needs some further elaboration. Erring on the side of understating liabilities is appropriate given that market prices fluctuate significantly with varying supply and demand, and given principle (g) regarding the desirability of reasonable stability. Erring on the optimistic side therefore means that for section 143 valuations we mitigate the risk of taking schemes into the PPF that, as at the assessment date, actually could have bought out better benefits in the market. Moreover, the availability of the reconsideration process under section 151 of the Pensions Act 2004 means that a scheme unable to buy at least PPF levels of benefits in the market should generally be able to transfer into the PPF.
- 3.3 The Board's primary responsibility is to maintain section 143 and section 179 assumptions in accordance with Regulation 6 of the Pension Protection Fund (Valuation) Regulations 2005 (SI 2005 / 672), as amended, (set out in section 2.4 of this paper). Nonetheless the Board is aware that any decision to change assumptions has a wider impact; for example, on the Pension Protection Levy and the Pensions Regulator's technical provisions triggers.

- 3.4 Regulation 6 requires similar assumptions for section 179 valuations as for section 143 valuations. Currently section 143 assumptions are indeed very similar to section 179 assumptions, although not identical in that section 143 mortality assumptions are differentiated according to compensation size whereas section 179 mortality assumptions are not. The wording of sections 152, 156 and 158 implies that valuations carried out in accordance with them should use assumptions that are closely linked to assumptions for section 143 valuations.

4. Discussions around modifying the present assumptions

- 4.1 During December 2013 structured discussions about pricing assumptions were held with six currently active participants in the bulk annuities market. This evidence base is believed to be sufficient for the purpose of resetting the section 143 and section 179 valuation assumptions.

5. Proposed new section 143 and section 179 assumptions

- 5.1 Discussions with the insurers took place on the basis that any pricing information disclosed by insurers would be kept confidential by the PPF.
- 5.2 There was a wide range for each of the key assumptions, i.e. discount rates and mortality. Following policy principle (h) in section 3.1, the assumptions proposed have been set by trying to position the Board's assumptions towards the end of the spectrum that produces the lowest value of the liabilities.

Discount rates

- 5.3 Most of the insurers said that they had been producing prices that were more expensive than under our basis during 2013. It is always difficult to compare insurance company pricing, based as it is on swaps curves or corporate bond yield curves, with our pricing which is based on gilt yields which are not term-dependent. However, the message from the insurers who were obtaining most business was that the yields we are using for pensioners are too high.
- 5.4 The Board has previously considered the introduction of term-dependent yields. The Board concluded that though it is becoming more acceptable to actuaries doing valuations to use term-dependent yields it is important to balance such a change carefully with the principle of proportionality (principle (e) in Section 3.1). The Board will therefore consider introducing term-dependent discount rates for section 143 valuations and possibly section 179 valuations at some point in the future. For the time being yield will not be term-dependent.
- 5.5 For discount rates, the Board's proposals are to effectively reduce the existing rates by 0.5% p.a. for level compensation in payment.
- 5.6 In isolation the change to the assumption for level compensation in payment would be expected to increase section 143 and section 179 liabilities for pensioners and deferred pensioners by just over 8% where members have only level compensation in payment.

- 5.7 The insurers who were obtaining most business also commented that they considered that the net discount rate assumption for compensation increasing in payment was slightly too high.
- 5.8 For compensation that increases in payment, the Board's proposals are to reduce the net discount rate by 0.1% p.a.
- 5.9 In isolation the change to the assumption for the net discount rate for compensation that increases in payment would be expected to increase section 143 and section 179 liabilities for pensioners and deferred pensioners by around 1%-2% where members have only compensation that increases in payment.
- 5.10 In combination, the changes to the assumptions for compensation in payment would be expected to increase section 143 and section 179 liabilities for pensioners and deferred pensioners by just over 4%.
- 5.11 In line with the change to the change to the net discount rate for compensation increasing in payment, the Board proposes to increase the net discount rate for compensation increasing in deferment and accrued after 5 April 2009 by 0.4% p.a.
- 5.12 Due to the relatively small proportion of scheme liabilities accrued after 5 April 2009 the change in the net discount rate for compensation increasing in deferment accrued after this date is not expected to have a material impact on section 143 or section 179 liabilities.

Mortality assumptions and assumptions for future improvements to mortality

- 5.13 All the insurers commented that they would set mortality assumptions on a case-by-case basis using as much information as possible; e.g. postcodes, industry, location, average size of pension. The Board has consulted on introducing an element of scheme-specific mortality in the assumptions in the past. Although this may still be relevant for section 179 valuations as there is now the facility for schemes to use scheme-specific mortality in cases where this would change the outcome of the section 143 valuation the Board proposes to retain the current simple approach. The Board believes for the time being that introduction of such an assumption is not be appropriate on proportionality grounds.
- 5.14 Whilst there was consensus on our assumptions for current mortality being broadly in line with assumptions that the insurers would use, the majority of insurers commented that our assumptions for current mortality could be updated to reflect more up-to-date data. The Board proposes to adopt the Continuous Mortality Investigation's (CMI) self-administered pension schemes (SAPS) "S1" series baseline mortality tables, adjusted to apply a factor of 0.9 to the age-related probabilities of death in the next year.
- 5.15 On future mortality improvements, most of the insurers suggested that our allowance for future improvements was also outdated. To address this, the Board proposes to introduce the CMI Mortality Projections Model CMI_2012. The mortality improvements will be CMI_2012_M [1.50 per cent] and CMI_2012_F [1.00 per cent] for men and women respectively (from 2002).

- 5.16 It is anticipated that the changes to the assumptions for current mortality and future improvements will not have a material affect on section 143 or section 179 liabilities.
- 5.17 As a result of updating the assumptions for current mortality and future improvements the Board proposes also to make adjustments for section 143 valuations based on an individual's benefit size (before application of the compensation cap and 90% reduction). The Board's proposal to adopt the Continuous Mortality Investigation's (CMI) self-administered pension schemes (SAPS) "S1" series "Heavy" and "Light" mortality tables and align the boundaries of benefit size used for the adjustment to be in line with the thresholds of the data used for the same tables. The proposed boundaries are:

Males:

< 10% x compensation cap at age 65	S1PMA_H
10% - 50% x compensation cap at age 65	S1PMA
> 50% x compensation cap at age 65	S1PMA_L

Females:

< 5% x compensation cap at age 65	S1PFA_H
5% - 20% x compensation cap at age 65	S1PFA
> 20% x compensation cap at age 65	S1PFA_L

- 5.18 Taken together the changes to the mortality and mortality improvement assumptions are expected to marginally reduce section 143 liabilities. It should be noted that the effect at scheme level will be dependent on size of members' benefits.

Demographic assumptions other than mortality

- 5.19 Most insurers obtain full details of member's status and age of spouse / partner when quoting for business. Most insurers commented that our assumptions for the proportion of members who have relevant partners or legal spouses seemed appropriate based on national statistics.

Expenses and other assumptions

- 5.20 The majority of insurers did suggest that the benefit installation / payment expenses were out of line with their experience. The Board's proposal is to maintain the current structure of the expenses but to increase the per member amounts by 100%.
- 5.21 The Board proposes to keep all other existing assumptions unchanged.
- 5.22 The complete set of new assumptions is set out in Appendix 1.

Summary

- 5.23 Overall, based on model calculations, the changes that apply to both section 143 and section 179 valuations are expected to increase section 143 and section 179 liabilities by just under 4%. More detailed analysis may be seen in Appendix 2.

6. Effective date for changes to assumptions

- 6.1 It is proposed that changes are introduced with effect from 1 May 2014. The consultation on the changes in the assumptions closes on 16 April 2014. We hope to publish both the results of the consultation and the new assumptions guidance by the end of May 2014.
- 6.2 Although there will be a gap where new assumptions may apply but have not been published, in practice valuations are usually carried out some time after their effective date. We therefore do not consider this is likely to be an issue.
- 6.3 Section 179 valuations with an effective date on or after 1 May 2014 will be first used for calculating Pension Protection Levies for the year 1 April 2015 to 31 March 2016.

7. Effect of the assumptions changes on Pension Protection Levies

- 7.1 The Board has taken a decision to raise a Pension Protection Levy of £695m for 2014/15. The changes to the section 143 and section 179 bases discussed in this consultation document could not change this decision.
- 7.2 The proposed changes to the assumptions for section 143 valuations that are proposed will potentially lead to a small increase in the number of schemes transferring to the PPF, but we would not expect the financial effect to be particularly significant. We would not therefore expect the effect on future levies to be particularly significant either. Furthermore, should a new Levy Framework be adopted from April 2015, the Board will have to weigh the overall effect of several other changes when setting the Pension Protection Levy.
- 7.3 It should be noted that though no changes were made to the assumptions during the previous triennium the intention of the Levy Framework is not such that changes could not be made during a triennium where deemed necessary by the Board.

8. Questions

- 8.1 The Board would be grateful to receive responses to the following questions:
- Q1. Do you consider that the proposed new section 143 and section 179 valuation assumptions in Appendix 2 are reasonable? If not, what would you propose as an alternative set of assumptions?
 - Q2. What evidence do you have, in summary, to support your response to Q1?
 - Q3. Is it appropriate to introduce the new section 143 and section 179 assumptions with effect from 1 May 2014?
- 8.2 The Board would also be interested to receive your comments on any other matter in this consultation document which is not included in responses to the questions above.

9. Responding to the consultation

- 9.1 The consultation period begins on 5 March 2014 and will end on 16 April 2014. Please ensure that your response reaches us by that date. If you would like further copies of this document it can be found at the Valuation Guidance section of the Pension Protection Fund website at www.pensionprotectionfund.org.uk.
- 9.2 Please e-mail responses to assumptions@ppf.gsi.gov.uk
- 9.3 Please state whether you are responding as an individual or representing the views of an organisation. If you are responding on behalf of an organisation please make it clear who the organisation represents and, where applicable, how the views of members were assembled.
- 9.4 In the event of any queries, please contact:
- Stephen Rice
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- 9.5 The requirements of the Freedom of Information Act (2000) state that all information contained in the response, including personal information, may be subject to publication or disclosure. By providing personal information for the purpose of the public consultation exercise, it is understood that a respondent consents to its disclosure and publication. If this is not the case, the respondent should limit any personal information which is provided, or remove it completely. If a respondent requests that the information given in response to the consultation be kept confidential, this will only be possible if it is consistent with the Freedom of Information Act (2000) obligations and general law on this issue. Further information about the Freedom of Information Act (2000) can be found on the website of the Ministry of Justice.
- 9.6 The Board will publish a summary of responses on the PPF website at www.pensionprotectionfund.org.uk by the end of May 2014. At the same time it will also publish its decision about future assumptions for section 143 and section 179 valuations.
- 9.7 The Board would value any feedback on the effectiveness of this consultation process. If you have any comments then please contact:

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Appendix 1

Proposed new assumptions to use when undertaking a valuation in accordance with section 143 and section 179

Text in a green font is new.

Text in a red font is new and applies for a section 143 valuation but would not apply for a section 179 valuation. This maintains the existing difference between section 143 assumptions and section 179 assumptions.

Yield in deferment

Compensation increasing in deferment and accrued prior to 6 April 2009

For each non-pensioner, where compensation which accrued prior to 6 April 2009 increases in deferment, the liability for the period of deferment must be obtained by discounting the benefit at normal pension age at the adjusted net index-linked gilt yield shown below. As this yield implicitly allows for increases to normal pension age no allowance should be made for increases to benefits between the relevant date and normal pension age.

Adjusted net index-linked gilt yield = **Yield A (i) – 0.3%**

(i) Yield A should be determined daily as 50% of the sum of the FTSE Actuaries' Government Securities Index-Linked annualised Real Yields over 15 years assuming:

a 5% inflation; and

b 0% inflation.

Compensation increasing in deferment and accrued after 5 April 2009

For each non-pensioner, where compensation which accrued after 5 April 2009 increases in deferment, the liability for the period of deferment must be obtained by discounting the benefit at normal pension age at the adjusted yield shown below. As this yield implicitly allows for increases to normal pension age no allowance should be made for increases to benefits between the relevant date and normal pension age.

Adjusted yield = higher of **(Yield A (i) – 0.3%)** and **(Yield B (ii) – 2.2%)**

(ii) Yield B should be determined daily as the annualised yield on the FTSE Actuaries' Government 20 year Fixed Interest Index.

Compensation not increasing in deferment

For a non-pensioner, where compensation does not increase in deferment the liability for the period of deferment must be obtained by discounting the benefit at normal pension age at the adjusted gilt yield shown below.

Adjusted gilt yield = **Yield B (ii) – 0.1%**

Yield in payment

For both a pensioner and a non-pensioner, for the period from which payments are assumed to commence, the liability must be obtained by reference to the following (adjusted) yields:

Compensation with no increases in payment

Adjusted Yield = **Yield C (iii) - 0.1%**

(iii) Yield C should be determined daily as the annualised yield on the FTSE Actuaries' Government 15 year Fixed Interest Index.

Compensation increasing in payment

Adjusted yield = higher of (Yield D (iv) + 0.1%) and **(Yield C (iii) – 2.2%)**

(iv) Yield D should be determined daily as 50% of the sum of the FTSE Actuaries' Government Securities Index-Linked annualised Real Yields over five years assuming:

a 5% inflation; and

b 0% inflation.

For the avoidance of doubt, (Yield C (iii) – 2.2%) should be calculated as an arithmetic difference and not a geometric difference.

For any dates where yields are not available the yields for the nearest preceding date should be used. Yields should be calculated to the nearest 0.01%.

Mortality for use when undertaking valuations

The mortality baseline in respect of a member and the member's dependant, pre and post retirement, shall be S1PMA (men) and S1PFA (women), adjusted to apply a factor of 0.9 to q_x s, with future changes in line with CMI_2012_M [1.50 per cent] and CMI_2012_F[1.00 per cent] for men and women respectively (from 2002).

These mortality tables are published by the Continuous Mortality Investigation. For each individual, the set of mortality rates used shall be those applicable to that individual's year of birth.

The derived rates shall be subject to an age rating based on an individual's benefit size as follows:

Pension size*

"S1" table

Males:

< 10% x compensation cap at age 65

S1PMA_H

10% - 50% x compensation cap at age 65

S1PMA

> 50% x compensation cap at age 65

S1PMA_L

Females:

< 5% x compensation cap at age 65	S1PFA_H
5% - 20% x compensation cap at age 65	S1PFA
> 20% x compensation cap at age 65	S1PFA_L

* For non-pensioners include revaluation to the relevant time only, where appropriate, and include the pension equivalent of any lump sum entitlement using the annualised value of a lump sum factors available on the PPF website.

Other assumptions for use when undertaking valuations

Assumptions for contingent benefits

a) Proportions married

Where the scheme provides for survivor pensions:

For pensioners

Where the scheme makes provision (including discretionary provision) for survivor pensions for "relevant partners", an assumption consistent with 85% (males) or 75% (females) at normal pension age.

Where the scheme does not make provision for survivor pensions for "relevant partners" other than legal spouses, an assumption consistent with 75% (males) or 65% (females) at normal pension age.

Using a proportion married assumption consistent with 85%/75% (males) or 75%/65% (females) at normal pension age may require mortality rates for calendar years before 2000 for a "strictly correct" calculation of the proportion married assumption to apply for older pensioners. In such circumstances prudent assumptions should be used.

For non-pensioners

Where the scheme makes provision (including discretionary provision) for survivor pensions for "relevant partners" the assumption must be, at the assumed date of retirement or earlier death, 85% (males) or 75% (females).

Where the scheme does not make provision for survivor pensions for "relevant partners" other than legal spouses the assumption must be, at the assumed date of retirement or earlier death, 75% (males) or 65% (females).

Contracted-out schemes

Note that for schemes which are contracted out on a protected rights basis, statute requires payment of a survivor's pension to a wider category than just the legal spouse. Scheme rules should therefore be treated as

including these statutory requirements i.e. assume 85% (males) or 75% (females).

b) Age difference between member and dependant

Females are assumed to be 3 years younger than males.

c) Children's pensions

No specific additional allowance is to be included for prospective children's pensions.

Children's pensions already in payment should be assumed to cease at age 18, or age 23 if currently aged over 17.

Expenses

The expenses specified in this section must be applied whatever the investment strategy of the scheme and, in particular, even if all scheme benefits are secured by immediate and deferred annuity policies.

a) Estimated wind-up expenses

3% of liabilities (excluding benefit installation / payment expenses) up to £50 million

plus

2% of liabilities (excluding benefit installation / payment expenses) between £50 million and £100 million

plus

1% of liabilities (excluding benefit installation / payment expenses) in excess of £100 million.

b) Benefit installation / payment expenses

Non-pensioners

An allowance of **£1,000** per member should be made.

Pensioners

An age-related allowance per member should be made, according to the table below:

Age (years)	Expense allowance per member (£)
< 60	900
60 – 70	800
70 – 80	600
80 +	500

If a member has two or more records, e.g. a pension and a deferred pension, then only one expense allowance (the highest) should be calculated.

Appendix 2

A. Assumptions to illustrate effect of changes to the section 179 basis

	<i>Old S179 assumptions</i>	<i>New S179 assumptions</i>
Yield in deferment for increasing pensions (pre 6 April 2009)	-0.47%	-0.47%
Yield in deferment for increasing pensions (post 5 April 2009)	0.38%	0.38%
Yield for non-increasing pensions	2.99%	2.49%
Yield for increasing pensions	0.49%	0.39%
Mortality male	PCMA00	S1PMA adjusted to apply a factor of 0.9 to q_xs
Mortality female	PCFA00	S1PFA adjusted to apply a factor of 0.9 to q_xs
Improvement male	mc with a 1.5% underpin (from 2000)	In line with CMI_2012_M [1.50 per cent] for men (from 2002)
Improvement female	mc with a 1% underpin (from 2000)	In line with CMI_2012_F [1.00 per cent] for women (from 2002)
Proportion married male	85%	85%
Proportion married female	75%	75%
Age difference	3	3
Age rating	0	0
Assumed ages (years)		
Pensioner age now	66	66
Deferred age now	46	46
Pensioner NPA	66	66
Deferred NPA	63	63

Yields are as at 27 January 2014.

Excludes non-increasing yield in deferment as applies to very few schemes.

B. Effect of changes to the section 179 basis

Increases in s179 liabilities for various types of benefit

Accrual	Deferred Pensioners		Pensioners	
	Pre-97	Post-97, pre-09	Pre-97	Post-97
Effect of changes in financial assumptions	107.2%	101.7%	106.2%	101.5%
Effect of change in mortality improvement assumption	98.0%	99.2%	100.8%	100.5%

Effect of s179 assumptions changes on schemes' liabilities for schemes with varying proportions of membership (assumes all membership is male)

Deferred Pensioner proportion		Pensioner proportion		Increase in s179 liabilities
Pre-97	Post-97, pre-09	Pre-97	Post-97	
				n/a
25%	25%	25%	25%	103.7%
12.5%	12.5%	37.5%	37.5%	104.1%
37.5%	37.5%	12.5%	12.5%	103.3%
12.5%	37.5%	12.5%	37.5%	102.3%
37.5%	12.5%	37.5%	12.5%	105.2%

