

Financial Conduct Authority

Technical Report accompanying the British Steel Pension Scheme Redress Calculator - PS22/14

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Background

All members of the old British Steel Pension Scheme (“OBSPS”) were asked to decide whether they wanted to remain in the OBSPS and default into the Pension Protection Fund (“PPF”) on 29 March 2018 or transfer their benefits into a new BSPS (“BSPS2”) with different benefits. Those who did not make any decision were defaulted into the PPF. OBSPS exited the PPF assessment period in November 2021 and the Trustees of OBSPS are now in the process of insuring the benefits with Pension Insurance Corporation (“PIC”). As PIC policyholders, OBSPS members may receive higher benefits than they would under the PPF.

Some OBSPS members were given advice in relation to the transfer of their benefits from the OBSPS into a defined contribution arrangement between 26 May 2016 and 29 March 2018. A proportion of members received transfer advice that was unsuitable and may now be due redress.

The objective of the redress methodology is to put the consumer back into the position they would have been had they not been advised to transfer from the OBSPS due to non-compliant advice.

The Calculator has therefore been produced to calculate the redress due to each consumer. This technical report details the methodology underlying the Calculator.

Limitations on scope

1. The Calculator has been built using benefit information in relation to the OBSPS, BSPS2 and PPF benefits.
2. The Calculator is consistent with the relevant rules and guidance in DISP App 4 and CONRED 4.
3. The Calculator outputs are dependent on the inputs provided by the User including certain judgements they make.
4. The Calculator does not make any allowance for the redress to be paid as an augmentation into the DC arrangement, with calculations undertaken on the assumption that redress will be paid to the consumer as a cash lump sum.
5. The Calculator does not calculate tax implications for consumers.
6. The Calculator does not calculate any increase due to GMP equalisation.
7. The Calculator has been prepared in accordance with Technical Actuarial Standards (TAS 100 and TAS 300) but is dependent on the inputs provided by the User.

Please note that this report is guidance only and, if there are any discrepancies with DISP App 4 or CONRED 4 in the FCA’s handbook, the FCA handbook will take precedence.

General comments

The following comments apply to the derivation of all economic assumptions:

- The Valuation Date used is the first day of the quarter for which the assumption are applicable.
- The assumptions applied in the calculations are derived at the last business date of the quarter immediately before the Valuation Date.
- The Calculator is set up to identify and exclude bank holidays when determining the last business day.
- The term to retirement ("TTR") is taken as the integer number of years to retirement where relevant.
- The discounted mean term has been calculated as set out on page 25.

A set of economic assumptions is derived for each tranche of pension which the individual would have accrued in either BSPS2 or the PPF, allowing for the different retirement ages and increases in payment and deferment which apply to each tranche. This enables the Calculator to calculate the capitalised value of each tranche of pension at the Valuation Date.

As all transfers in scope of CONRED 4 and the Calculator occurred after April 2016, no SERPS adjustment is applied.

Situations in which the calculator will require additional actuarial support

As set out in DISP App 4.2.6, a firm must use an actuary or an approach approved by an actuary to calculate:

- (1) the valuation of the benefits in a defined benefit occupational pension scheme given up by a consumer; and
- (2) the value of the consumer's DC pension arrangement, where adjustments are necessary to obtain the current value.

The type of adjustments where firms should confirm their approach with an actuary includes removing the effect of contributions into the consumer's DC pension arrangement that were not part of the cash equivalent transfer value. The Calculator requires the User to enter the DC value which only relates to the original OBSPS transfer, any adjustments will need to be undertaken outside of the Calculator.

Firms using the Calculator should therefore consider if any inputs to the Calculator fall under this requirement and obtain the necessary confirmation from an actuary before using the Calculator.

Glossary

Term/abbreviation	Description
Assessment Date	The date the OBSPS entered into the PPF Assessment Period - 29 March 2018
BSPS	British Steel Pension Scheme
BSPS2	The new British Steel Pension Scheme
Calculator	The 'BSPS calculator' as defined in CONRED 4.1.1R(3)
DMT	Discounted mean term as set out on page 25
FCA	Financial Conduct Authority
Normal Pension Age (NPA)	Age of consumer at Normal Retirement Date
Normal Retirement Date	The date the DB benefit is due to be paid unreduced
OBSPS	Old British Steel Pension Scheme
PIC	Pension Insurance Corporation
PPF	Pension Protection Fund
PPF Scheme	The scheme that members who remained in the OBSPS entered on the Assessment Date
Retirement Date	The date the Consumer retired as determined by the User in line with DISP App 4.1
"Time to Choose" letter	A letter sent to members remaining in the OBSPS between 9 October 2017 and 11 October 2017, asking them to decide whether they wanted to remain in the OBSPS and default into the PPF or transfer their benefits into BSPS2 with different benefits
TTR	Integer term to retirement from Valuation Date
User	Representative of the organisation inputting information into the Calculator for a consumer redress calculation
Valuation Date	The first day of the quarter for which the redress assumptions are applicable.

Data inputs

Instructions to use Calculator

Purpose

The purpose of the Calculator is to calculate the appropriate level of redress due to the consumer to place them back into the position that they would have otherwise been in had they not transferred out of the OBSPS due to non-compliant advice.

Inputs

In order to calculate redress, a number of data items are required, which are separated into the following areas:

- Information about the consumer and their personal circumstances
- Information about the consumer's former benefit entitlement in the OBSPS, before they transferred out of the arrangement
- Information about the consumer's current defined contribution pension scheme, including details of any withdrawals made or crystallisations.

The following pages detail the data items that the User is required to input, based upon the consumer's position. These pages provide information on the data type, a description of what is to be entered and whether the input is mandatory or not.

Where an input is mandatory, the Calculator will not provide an output unless a data item is inputted.

Where the data item is not mandatory, the Calculator will still function, with a default value used as an alternative. Default items are set out in this paper.

The Calculator provides a summary of all inputs alongside the redress outputs. Where a default value has been used, this will be shown.

The Calculator is in Microsoft Excel. Macros must be enabled in order to navigate through the Calculator. This may require you to change your 'Trusted Documents' settings within Excel. You can view or change Trusted Documents settings in the Trust Center. To access this:

- Click the File tab.
- Click Options.
- Select Trust Center, and then Trust Center Settings.
- Click Trusted Locations.
- Select the Calculator's location on the Computer as a Trusted Location.

To navigate through the Calculator, use the arrows at the bottom of each section.

Note that each Calculator will only be valid for the quarter starting at the Valuation Date. Once the end of the quarter is reached, the Calculator will become locked for editing and a new Calculator with updated assumptions should be downloaded from the website at the following link www.fca.org.uk/firms/british-steel-pension-scheme-tools-firms

Note that the Calculator is intended to be single use only and a fresh Calculator should be downloaded for each individual.

Landing page

Screenshot of landing page

The Calculator will open on the landing page shown below. Users should read the information on this page and click on the arrow at the bottom to move on to data entry.

BSPS - Redress calculator



Validity of calculator

The calculator is currently valid between 01/04/2023 and 30/06/2023.

Instructions for use

In order to calculate the redress, a number of data items are required, which are separated into the following areas:

- Information about the consumer and their personal circumstances
- Information about the consumer's former benefit entitlement in the OBSPS, before they transferred out of the arrangement
- Information about the consumer's current defined contribution pension scheme, including details of any withdrawals made or crystallisations.

The following tabs are where the user inputs the necessary data items, based upon the Consumer's position. These tabs provide information on the data type, a description of what is to be entered and whether the input is mandatory or not.

Where an input is mandatory, the Calculator will not provide an output unless a data item is inputted.

Where the data item is not mandatory, the Calculator will still function, with a default value used as an alternative.

The Calculator provides a summary of all inputs alongside the redress outputs. Where a default value has been used, this will be shown.

The Calculator is in Microsoft Excel. Macros must be enabled in order to navigate through the Calculator.

Terms and Conditions

Use of this BSPS Redress Calculator is subject to the **BSPS Redress Calculator Terms and Conditions** provided to you by email at the same time as this calculator and by clicking on the calculator to proceed you agree to those terms and conditions of use.

Proceed to next section



Inputs - information about the consumer

Screenshot of model inputs

See next page for details on inputs shown.

Data input - information about the Consumer



The valuation date is 01/04/2023

The calculator is currently valid between 01/04/2023 and 30/06/2023.

Instructions for use

Please enter information about the Consumer who transferred out of the Original British Steel Pension Scheme ('OBSPS').

Several of the fields are mandatory and must be completed before proceeding to the next section of the calculator.

Where fields are not mandatory and an entry is not inputted, a standard assumption will be adopted.

Further guidance is provided by selecting each cell.

For further detail, please refer to the technical report - www.fca.org.uk/firms/british-steel-pension-scheme-tools-firms

Inputs

Name of firm

Name of Consumer

Date of Birth ("DOB")

Gender

Marital status

Spouse's/Civil Partner's DOB

Date Joined Scheme ("DJS")

Relevant comparator scheme

Reason for selection of comparator scheme

Assumed or actual retirement date

Reason for selection of retirement date

Date of Death ("DOD"), if applicable

Marginal rate of tax applied to past amounts

Liability for consequential losses claimed for

Mandatory entry

Input the name of the Firm the calculator inputs are completed for.

Warning - an entry must be provided before proceeding

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Warning - an entry must be provided before proceeding

Warning - an entry must be provided before proceeding

Please complete all mandatory inputs

Inputs - information about the consumer

Input	Type	Description	Mandatory?
Name of firm	Text	Name of the firm the Calculator inputs are completed for.	Yes
Name of consumer	Text	Name of consumer the assessment is being completed for.	Yes
Date of birth	dd/mm/yyyy	Date of birth of the consumer.	Yes
Gender	Text	The gender that benefits were accrued under by the consumer - this impacts on the treatment of some of the pension tranches eg Pre 88 GMP.	Yes
Marital status	Text	Whether the consumer is single, married / civil partnered or undetermined.	Yes
Spouse's / civil partner's date of birth	dd/mm/yyyy	Where the consumer is married, input the date of birth of the consumer's spouse / civil partner where known. Default - If the date of birth of the spouse / civil partner is unknown, the Calculator will assume this is equal to the consumer's date of birth	No
Date joined scheme	dd/mm/yyyy	The date that the consumer joined the OBSPS and started to accrue benefits.	Yes
Relevant comparator scheme	Text	Select from the list whether the Comparator Scheme is the PPF or BPS2.	Yes
Reason for selection of comparator scheme	Text	Free text input to provide further details as to why the User has chosen the comparator scheme in the above box - this will be displayed in the output to the consumer.	Yes
Assumed or actual retirement date	dd/mm/yyyy	The date at which it is assumed that the consumer would have taken retirement benefits from the comparator scheme. In the absence of any other information, this should be aligned with the consumer's Normal Pension Age in the comparator scheme.	Yes
Reason for selection of retirement date	Text	Free text input to support the choice of Retirement Date and whether the selected date is earlier or later than the Normal Pension Age of the comparator scheme. This will be displayed in the information to share with the consumer.	Yes
Where the original consumer has died, the consumer's date of death	dd/mm/yyyy	The date the consumer died if this was before the Valuation Date. Default - member still alive.	No
Marginal rate of tax applied to past amounts	%	The marginal rate of income tax to apply to any past payments that have been made. This input will not impact on the calculation where the Retirement Date is after the Valuation Date and the consumer has not made any withdrawals from their DC arrangement or purchased an annuity. Default - 20%.	No
Liability for consequential losses claimed for	£	The amount of any consequential loss incurred by the individual that the firm will need to redress, excluding any amount due for the initial advice charge. Please refer to CONRED 4 Annex 21 13.30R(6) for more information. Default is £0.	No

Inputs - consumer's former benefit entitlement in the OBSPS

Screenshot of model inputs

See next page for details on inputs shown.

Data input - Consumer's former OBSPS pension



The valuation date is 01/04/2023
 The calculator is currently valid between 01/04/2023 and 30/06/2023.
Instructions for use
 Please enter information relating to the benefits the Consumer had in the OBSPS.
 Several of the fields are mandatory and must be completed before proceeding to the next section of the calculator.
 Where fields are not mandatory and an entry is not inputted, a standard assumption will be adopted.
 Further guidance is provided by selecting each cell.

Inputs

Section of the OBSPS	Main Section
Date that the Consumer left active service in the OBSPS ("DOL")	Warning - an entry must be provided before proceeding

Tranche Options

Tranche Options	Time to choose letter
-----------------	-----------------------

Annual OBSPS pension at DOL split by tranche:

Pre 88 GMP	Please enter a value for this tranche
Post 88 GMP	enter a value for this tranche
Pre 1997 XS pension	enter a value for this tranche
1997 to 2005 pension	enter a value for this tranche
2005 to 2006 pension	enter a value for this tranche
2006 to 2012 pension	enter a value for this tranche
2012 to 2016 pension	enter a value for this tranche
Post 2016 pension	Please enter a value for this tranche

Note: A tooltip indicates: "Input the amount of annual pension in each tranche of benefit that the Consumer had accrued at the date of leaving active service in £ format."

View extended inputs?	No
-----------------------	----

DB Contributions paid

Total contributions paid into scheme	Warning - an entry must be provided before proceeding
Date contribution figure applicable from	

[Return to the previous section](#) ←

Please complete all mandatory inputs

Inputs - consumer's former benefit entitlement in the OBSPS

Input	Type	Description	Mandatory?
Section	Text	Which section of the OBSPS it has been judged that the consumer previously belonged to.	Yes
Date that the consumer left active service ("DOL")	dd/mm/yyyy	The date the consumer left active service in the OBSPS.	Yes
Tranche Options	Text	Whether the data source is the 'Time to choose' letter or the pension tranches are inputted based on 'User choice'.	Yes
User Chosen Tranches	Multiple	Where 'User choice' is selected, input the start and end date that each tranche of pension was accrued. Where a member has had two or more periods of service and therefore has two membership records and transfer values, separate calculators should be completed for each period of service. Further guidance is provided on page 14.	Yes if 'User choice' is selected
Annual OBSPS pension at date of leaving, split by tranches	£ p.a.	The amount of annual pension in each tranche of benefit that the consumer had accrued at the date of leaving active service. Once the section has been selected, the Calculator will enable Users to specify the different tranches that are applicable or will use the 'User Chosen Tranches' as applicable.	Yes
Extended inputs			
Automatic lump sum entitlement due on retirement at Date of Leaving	£	The amount of lump sum in each tranche of benefit that the consumer had accrued at the date of leaving active service. Note that as this only applies to a small proportion of members, this is an 'Extended' input and will need to be expanded to input information.	No
Bridging pension	£ p.a.	The amount of annual bridging pension in each tranche of benefit that the consumer had accrued at the date of leaving active service. Note that as this only applies to a small proportion of members, this is an 'Extended' input and will need to be expanded to input information.	No
Details of any lower unreduced retirement ages that applies	Integer	Details of whether the consumer had a right to take any of their benefits unreduced at a lower age than the Normal Pension Age. If any inputs are provided, a further box will appear to provide further details as to why this has been inputted. If no inputs are provided, the Calculator will assume the standard NPA for that section	No

Inputs - consumer's former benefit entitlement in the OBSPS

Input	Type	Description	Mandatory?
Child pension	£ p.a.	For cases where the consumer has died and there would have been a child in receipt of a pension, input the annual amount of the child's pension. Note that as this only applies in death cases and hence is an 'Extended' input that will only appear if a date of death is entered.	No
Child pension start age	Integer	Enter the age of the child when the child pension would have started. This will typically be the age at the date of death. Note that as this only applies in death cases and hence is an 'Extended' input that will only appear if a date of death is entered.	No
Child current age	Integer	Enter the child's current age. Note that as this only applies in death cases and hence is an 'Extended' input that will only appear if a date of death is entered.	No
Age child pension ceases	Integer	Enter the age of the child at which the child's pension would cease. Note that as this only applies in death cases and hence is an 'Extended' input that will only appear if a date of death is entered.	No
Total contributions paid into scheme	£	Enter the amount of contributions paid by the consumer into the OBSPS that would have been refunded on death in deferment. Note that this only applies in death in deferment cases (either actual or potential).	No

Inputs - consumer's former benefit entitlement in the OBSPS

Guidance on inputting pension tranches

- Pensions are to be inputted based upon their annual level at the point of leaving active service.
- Pensions are to be inputted after adjusting for any Pension Sharing Orders (PSOs) where they applied to benefits before the DB pension was transferred.
- Through selecting the 'Time to Choose' option, the pension tranches will be pre-populated with those that were set out in the Time to Choose letters.
- Alternatively, through the 'User choice' option, you are able to define the dates associated with the tranches of pensions for which you information available and the level of pension for each of these tranches.
- It is recommended that pensions are to be inputted to the greatest level of granularity available.
- Where a consumer has a transfer-in within their OBSPS benefits, the pensions are to be inputted in line with how they were awarded by the transfer-in. It is recommended that the 'User choice' option is selected where transfers-in exist and there is disjointed service as a result.
- Any added years AVCs should be added to the tranches to which they were awarded.
- The calculator will automatically retransche the pension into the appropriate tranches for valuing the benefits based on dates of service. More detail on the methodology used to retransche the benefits is included on page 84

Guidance on ill health cases

- Ill-health cases may result in a consumer being able to retire from an earlier age on an unreduced basis.
- If this is the case, the age at which the benefit was paid unreduced from can be inputted into the "Details of any lower unreduced retirement ages that applies" section.
- An additional text box will appear, through which it should be entered that the rationale for applying a lower retirement age is due to 'Ill-health retirement'.
- The User should satisfy themselves that the benefits being valued are in line with the scheme benefits.

Guidance on death cases

- All pensions are to be entered as they were due to the original consumer, regardless of whether the consumer has died or not.
- The Calculator will automatically calculate any spouse pension due, whether this be on a past death or future death of a consumer.
- Where the death occurred before the Valuation Date, additional inputs can be provided in respect of a child pension due and a refund of contributions that would have been paid to the consumer's estate on death.

Inputs - consumer's DC pension (as it relates to the OBSPS)

Screenshot of model inputs

See next page for details on inputs shown.

Data input - Consumer's DC Pension (as it relates to funds from the OBSPS transfer)



The valuation date is 01/04/2023
 The calculator is currently valid between 01/04/2023 and 30/06/2023.
Instructions for use
 Please enter information relating the Consumer's DC arrangement.
 Several of the fields are mandatory and must be completed before proceeding to the next section of the calculator.
 Where fields are not mandatory and an entry is not inputted, a standard assumption will be adopted.
 Further guidance is provided by selecting each cell.

Data relating to the Consumer's transferred DC pension arrangement (relating to funds from the OBSPS transfer)

Date of transfer	<input type="text"/>	
Fund value of the liquid funds attributable to the original OBSPS transfer value	<input type="text"/>	
Fund value of the illiquid funds attributable to the original OBSPS transfer value	<input type="text"/>	
Date at which the value of the liquid funds have been stated	<input type="text"/>	
Can you confirm that the DC fund value originates exclusively from the BSPS transfer value?	<input type="text"/>	Warning - an entry must be provided before proceeding
Consumer receiving advice on a regular basis	<input type="text"/>	Warning - an entry must be provided before proceeding
Current advice fees above 0.5% pa?	<input type="text"/>	Warning - an entry must be provided before proceeding
Initial advice charge to be applied	<input type="text"/>	
Current advisor charge (%)	<input type="text"/>	Warning - an entry must be provided before proceeding
Current product charge (%)	<input type="text"/>	Warning - an entry must be provided before proceeding

Mandatory entry
 Input the date that the Consumer transferred out of the BSPS.

Additional information where the Consumer has already commenced taking their DC pension benefits (where these relate to funds from the OBSPS)

Amount of any PCLS taken which originates exclusively from the BSPS transfer value	<input type="text"/>	Click to enter details
Amount of any other withdrawals which originates exclusively from the BSPS transfer value	<input type="text"/>	Click to enter details
Has the Consumer purchased an annuity?	<input type="text"/>	No

Return to the previous section

Please complete all mandatory inputs

Inputs - details of the consumer's defined contribution pension scheme

Input	Type	Description	Mandatory?
Date of transfer out of the OBSPS	dd/mm/yyyy	The date the consumer transferred out of the OBSPS.	Yes
Fund value of the liquid funds attributable to the original OBSPS transfer value	£	The £ amount of any liquid funds at the Valuation date. Any illiquid funds will require a separate input (see next page).	Yes
Date at which the value of the liquid funds has been stated	dd/mm/yyyy	The date at which the liquid funds has been stated. This must be equal to the Valuation Date and Users are to refer to DISP App 4.5.6(1)(b) where an up-to-date valuation is not available.	Yes
Does the consumer currently receive advice on a regular basis?	Yes / No	Whether the consumer currently receives advice on a regular basis in respect of their transferred funds.	Yes
Are the current advice fees above 0.5% p.a.?	Yes / No	Whether the advice fees for any advice detailed above are above 0.5% p.a. of the defined contribution fund	Yes
Does an initial advice charge need to be applied?	Yes / No	Whether the consumer is eligible for an initial advice charge. Note that the response may be overridden to 'Yes' in the calculator, depending on earlier answers. Please see DISP 4.3.32 for more information.	Yes
Current adviser charge (%)	%	Record the current % based adviser charges incurred.	Yes
Current product charge (%)	%	Record the current % based product charges incurred.	Yes
Has the consumer purchased an annuity?	Yes / No	Whether the consumer has made an annuity purchase with their transferred funds.	Yes
Amount of annuity purchased	£ p.a.	The annual amount of annuity pension that was paid at the purchase date.	
Annual annuity increase index	Text	Whether the annuity increases in line with RPI inflation, CPI inflation or a fixed rate.	
Minimal annual % increase	%	The floor applied to any annual pension increases that are inflation linked.	
Maximum annual % increase	%	The cap applied any annual pension increases that are inflation linked.	If annuity option selected - Yes
Fixed % increase	%	The level of fixed increase that applies to any pension increases.	Otherwise - No
Spouse pension - proportion on death	%	The % of the consumer's pension that their spouse / nominated person would be entitled to on retirement.	
Guarantee period for the annuity at the commencement date	Numerical	The guarantee period of the annuity at inception.	
Annuity commencement date	dd/mm/yyyy	What date the first pension payment was made from the annuity purchase.	

Inputs - consumer's DC pension (as it relates to the OBSPS)



Screenshot of model inputs

See next page for details on inputs shown.

Data input - Consumer's DC Pension (as it relates to funds from the OBSPS transfer)



The valuation date is 01/04/2023
 The calculator is currently valid between 01/04/2023 and 30/06/2023.
Instructions for use
 Where the Consumer has illiquid funds and/or has made withdrawals from their DC funding, please specify the amounts and dates.
 For withdrawals, please split these by Pension Commencement Lump Sums or other withdrawals. Figures should be provided gross of tax

Add row 
 Number of rows 15
 Remove row 

Value of illiquid fund

Fund value	Valuation date	Justification for the value of illiquid fund
<input type="text"/>		


Enter the value of the illiquid fund in £ terms

Pension commencement lump sums ('PCLS') paid

PCLS amount	Date of payment

Other withdrawals made

Withdrawal amount	Date of payment

Return to the previous section 

Inputs - details of the consumer's defined contribution pension scheme

Input	Type	Description	Mandatory?
Value of illiquid fund - Fund Value	£	The value of any illiquid funds that the consumer currently holds. Default is £0.	No
Value of illiquid fund - Date	dd/mm/yyyy	The date the illiquid fund value was calculated at - this will be increased up to the Valuation Date in line with CPI inflation.	Yes if Fund Value entered
Justification for the value of illiquid fund	Text	Free text to provide further details on why the stated fund value has been used within the Calculator.	Yes if Fund Value entered
Pension Commencement Lump Sums ('PCLS') - Amount	£	The amount of any PCLS taken. Default is £0.	No
PCLS - Date	dd/mm/yyyy	The date that each PCLS was taken. This will be used to roll up the PCLS in line with the Bank of England base rate.	Yes if PCLS is entered
Other withdrawals - Amount	£	The amount of any other withdrawals made from the defined contribution pension scheme. This should be provided gross of tax. Default is £0.	No
Other withdrawals - Date	dd/mm/yyyy	The date that each withdrawal was made. This will be used to roll up the withdrawal in line with the Bank of England base rate.	Yes if withdrawal is entered

Calculator outputs

Summary of outputs

The output summarises the inputs made, whether the input has been determined by the User or if the default assumption has been used and the output from the Calculator.

The Calculator requires the User to enter the payment date when this is known and the amount of the redress due after any adjustments have been made to the gross redress.

If the User accesses the Calculator after the date that the Calculator is valid for, all inputs will be frozen, however the User will still be able to specify the Payment Date and the Redress due after any adjustments have been made on the output page. Similarly, if the 'Print to PDF' button is pressed on the Consumer Output page, all inputs in the Calculator will be frozen.

The following buttons are included on the output page for ease of printing, saving and to extract the consumer outputs.



Print output



Copy datastring



Save output



Generate Consumer Output

The following buttons are included on the Consumer Output page to generate the detailed report or to print to PDF.

Generate detailed report



Print to PDF

Outputs (1/3)

Screenshot of Calculator outputs

Output

Description

Set out below is a summary of the inputs into the calculator and the redress that is due.

Valuation date:	01/04/2023
Market conditions date:	31/03/2023
Calculator valid for redress calculated between:	01/04/2023 to 30/06/2023
Formal date:	
Today's date:	20/04/2023

Summary of inputs

About the consumer

Name of firm	ABC Ltd	User Input
Name of Consumer	Mr J Smith	User Input
Date of Birth ("DOB")	01/01/1960	User Input
Gender	Male	User Input
Marital status	Married	User Input
Spouse's/Civil Partner's DOB	01/01/1960	Default
Date Joined Scheme ("DJS")	01/01/1985	User Input
Relevant comparator scheme	BSPS2 by default as no evidence on file	User Input
Reason for selection of comparator scheme	N/A	User Input
Assumed or actual retirement date	01/01/2025	User Input
Reason for selection of retirement date	Normal Retirement Date	User Input
Date of Death ("DOD"), if applicable	N/A	Default
Marginal rate of tax applied to past amounts	20%	User input
Liability for consequential losses claimed for	£0.00	User Input

Key assumptions

Pre retirement discount rate	2.20%
Post retirement discount rate	3.65%
Pre retirement RPI	3.20%
Post retirement RPI	3.60%
Pre retirement CPI	2.20%
Post retirement CPI	3.20%

About the OBSPS pensions

Section of the OBSPS	Main Section	User Input
Date the Consumer left active service in the OBSPS	31/05/2016	User Input

Annual OBSPS pension at DOL split by tranche:

Pre 88 GMP	£400.00	User Input
Post 88 GMP	£1,000.00	User Input
Pre 1997 XS pension	£2,000.00	User Input
1997 to 2005 pension	£2,000.00	User Input
2005 to 2006 pension	£400.00	User Input
2006 to 2012 pension	£2,000.00	User Input
2012 to 2016 pension	£1,000.00	User Input
Post 2016 pension	£100.00	User Input

About the Consumer's DC arrangement

Latest fund value of the liquid funds attributable to the original OBSPS transfer	£200,000.00	User Input
Fund value of the illiquid funds attributable to the original OBSPS transfer value	£0.00	User Input
Date at which the value of the liquid funds have been stated	01/04/2023	User Input
originates exclusively from the BSPS transfer value?	Yes	User Input
Consumer receiving advice on a regular basis	No	User Input
Current advice fees above 0.5% pa?	Yes	User Input
Initial advice charge to be applied	Yes	Default
Current advisor charge (%)	0.60%	User Input
Current product charge (%)	0.50%	User Input

Benefits already taken

Amount of any PCLS taken which originates exclusively from the BSPS transfer value	£0.00	User Input
Amount of any other withdrawals which originates exclusively from the BSPS transfer value	£0.00	User Input
Has the Consumer purchased an annuity?	No	User Input



Print output



Copy datastring



Save output



Generate Consumer Output



Return to inputs



Outputs (2/3)

Screenshot of Calculator outputs

Summary of redress payable

Redress assessment

Under the PPF benefits

A. Value of past DB benefits	£0.00
B. Value of future DB benefits	£226,839.19
C. Value of DC benefits	£200,000.00
D. Value of initial advice fee to be applied and any amount for consequential loss	£3,000.00
adjustments):	
A. + B. - C. + D.	£29,839.19

Under the BSPS2 benefits

A. Value of past DB benefits	£0.00
B. Value of future DB benefits	£230,369.81
C. Value of DC benefits	£200,000.00
D. Value of initial advice fee to be applied and any amount for consequential loss	£3,000.00
adjustments):	
A. + B. - C. + D.	£33,369.81
Scheme Consumer is determined to have transferred from	BSPS2 by default as no evidence on file
Gross redress due (before adjustments)	£33,369.81

Redress payable as a cash lump sum

Before adjustments

Past redress payable	£0.00
Future redress payable	£30,369.81
Value of initial advice and consequential loss	£3,000.00
Total redress payable as a cash lump sum	£33,369.81

After adjustments - for the User to input

Total redress payable	£28,814.34
Have any adjustments been made for means tested benefits?	No
Is any of the redress paid by augmentation?	No

Additional compensation sum

Before adjustments

An additional compensation sum to compensate the consumer for the lapse	
Compensation rate	2.20%
Period between valuation date and payment date (years)	Enter the payment date
Redress Payable	Enter the payment date

After adjustments - for the User to input

Final redress payable	
Have any adjustments been made for means tested benefits?	
Is any of the redress paid by augmentation?	
Enter the amount to be paid into the Consumer DC pot	
Enter the amount claimed as tax relief	
Enter the total amount added to the Consumer's DC pot after claiming tax relief	
Enter the amount paid as a cash lump sum	

Outputs (3/3)

Output	Description
Summary of inputs	A summary of all inputs made in the Calculator. Where information was not mandatory and has not been provided, the default assumption is displayed instead.
Outputs	
Under the PPF benefits	Summary of the gross redress payable under the PPF benefits.
Under the BSPS2 benefits	Summary of the gross redress payable under the BSPS2 benefits.
A. Value of past DB benefits	The value of any past DB benefits which would have been paid, plus interest, under the respective benefit structures.
B. Value of future DB benefits	The capitalised value of future DB benefits under the respective benefit structures.
C. Value of DC benefits	The value of any uncrystallised funds, capitalised value of any annuities purchased plus past payments with interest.
D. Value of any initial advice fee to be applied and any amount for consequential loss	Where the consumer is considered eligible for additional advice, this is the value of the initial advice to be added to the redress amount, plus any amount for consequential loss inputted.
Gross redress due (before adjustment)	The value of the past DB benefits, plus the value of the future DB benefits, less the value of DC benefits plus the value of any initial advice fee and consequential loss to be applied.
Scheme consumer is determined to have transferred from	Based upon the inputs provided.
Gross redress due (before adjustments)	The gross redress applicable to the set of benefits redress is paid from.
Redress payable as a cash lump sum - Before adjustments	
Past redress payable	The difference in past DB and DC payments, net of tax.
Future redress payable	The difference in future DB benefits less the value determined in C. above where this relates to the current fund value or future payments due from annuity purchases.
Value of initial advice and consequential loss	The value determined in D. above.
Total redress payable as a cash lump sum	The sum of the past redress payable, future redress payable and the value of initial advice and consequential loss.
Redress payable as a cash lump sum - After adjustments	
Input	For the User to input the appropriate values, after making appropriate adjustments (eg tax).
Additional compensation sum	
Compensation rate	The pre- or post-retirement discount rate as appropriate.
Period between valuation date and payment date	The period for which the compensation rate applies.
Redress payable	The redress payable after adjustments, increased in line with the compensation rate for the appropriate period.
Final redress payable	
Input	For the User to input the appropriate value for the final redress payable, after making appropriate adjustments
Means tested benefits	For the User to confirm whether they have made any adjustments for means tested benefits
Augmentation	For the User to supply further information if the augmentation route has been used

Economic assumptions

Term calculations

Prerequisite inputs

- Date of birth
- Valuation Date
- Retirement Date

Frequency of update

- Quarterly

Overview

Many of the assumptions are derived depending on either the term to retirement (TTR), the post-retirement term, also known as the discounted mean term (DMT), or both.

Assumption

TTR

- Where the Retirement Date is after the Valuation Date, the TTR is derived as the time between the Valuation Date and the Retirement Date
- Where the Retirement Date is on or before the Valuation Date, the TTR is nil.

DMT

- The discounted mean term is dependent on the assumed retirement age as set out in the table below:

Assumed retirement age	55	60	65	70	75
DMT	23	20	16	13	11

- For assumed retirement ages not shown in the table above, the assumed retirement age is based on linear interpolation and rounded to the nearest integer.

RPI inflation

Economic data used

- Implied inflation forward curve

Calculated data used

- TTR
- DMT

Frequency of update

- Quarterly

Overview

The RPI inflation assumption is used as a reference index to set a number of other assumption in the methodology, namely the CPI inflation assumption, deferred revaluation and pension increases. The methodology varies for the pre- and post-retirement phases, as detailed below.

Methodology

For periods prior to the Retirement Date

The pre-retirement RPI inflation assumption is derived by:

$$a = \text{Spot rate on the implied inflation forward curve at term equal to TTR} - 0.2\%$$

The final assumption is then rounded to the nearest 0.05%.

For periods from the Retirement Date

The post-retirement RPI inflation assumption is derived by:

$$b = \frac{(1 + \text{Spot rate on implied inflation forward curve at term (TTR+DMT)})^{(TTR+DMT)}}{(1 + \text{Spot rate on implied inflation forward curve at term (TTR)})^{(TTR)}}$$

$$c = b^{(1/DMT)} - 1$$

The final assumption, c, is then rounded to the nearest 0.05%.

Comments

- The implied inflation forward curve is the 'UK instantaneous implied inflation forward curve (gilts)' published by the Bank of England.
- 0.2% reflects the Inflation Risk Premium applied.
- If the term to retirement is shorter than the terms published on the curve (currently 2.5 years), the next available rate is adopted (including non-integer terms if this is the next available rate).
- For periods greater than 40 years, the 40 years rate is used.
- The RPI inflation assumption is not rounded where it is used to derive another assumption, eg where the RPI inflation assumption is used to derive the CPI inflation assumption.

CPI inflation

Calculated data used

- Pre-retirement RPI inflation assumption
- Post-retirement RPI inflation assumption
- TTR
- DMT

Prerequisite inputs

- Valuation Date

Frequency of update

- Quarterly

Overview

The CPI inflation assumption is used as a reference index to set a number of other assumption in the methodology, namely deferred revaluation and pension increases. The methodology varies for the pre- and post-retirement phases, as detailed below.

Methodology

The pre-retirement and post-retirement CPI inflation assumptions are derived by deducting an RPI-CPI gap from the relevant RPI inflation assumption as derived on the previous page.

For periods prior to the Retirement Date

The pre-retirement CPI inflation assumption is derived by:

If sum of the year of Valuation Date and the TTR is less than or equal to 2030:

$$i = 1\% \text{ p.a.}$$

If sum of the year of Valuation Date and the TTR is greater than 2030:

$$i = \frac{[1\% \times (2030 - \text{year of Valuation Date})] + 0.5\%}{\text{TTR}}$$

Pre-retirement CPI = unrounded pre-retirement RPI (as derived on the previous page) - unrounded i , rounded to the nearest 0.05%.

For periods from the Retirement Date

The post-retirement CPI inflation assumption is derived by:

If sum of the year of Valuation Date and the TTR is less than or equal to 2030:

$$j = \frac{[1\% \times (2030 - \text{year of Valuation Date} - \text{TTR})] + 0.5\%}{\text{DMT}}$$

If sum of the year of Valuation Date and the TTR is greater than 2030:

$$j = 0\%$$

Post-retirement CPI = unrounded post-retirement RPI (as derived on the previous page) - unrounded j , rounded to the nearest 0.05%.

Comments

- The RPI-CPI gap will reduce over time, as the period to 2030 shortens.

Pre-retirement discount rate

Economic data used

- Average dividend yield
- Growth in dividends
- Charges

Calculated data used

- Pre-retirement CPI inflation

Frequency of update

- Quarterly

Overview

The pre-retirement discount rate is used to calculate the present value, as at the date of the redress calculation, of the benefits that would have been payable by the consumer's DB scheme.

Methodology

Before adjustment for charges

The pre-retirement discount rate is derived in line with the following:

$$i = ((1 + \text{CPI spot inflation rate}) \times (1 + \text{average dividend yield}) \times (1 + \text{growth in dividends}) - 1)/2$$

Where:

- The CPI spot inflation rate is based on the unrounded pre-retirement CPI inflation assumption (see page 27).
- Average dividend yield = The arithmetic average of the dividend yield on the FTSE All Share Index on the last business date over the last four quarter ends
- Growth in dividends = Fixed 1% p.a.

The final assumption is then rounded to the nearest 0.05%.

Adjustment for charges

The pre-retirement discount rate is then adjusted for charges using the following formula:

$$\text{Pre-retirement discount rate (adjusted for charges)} = [(1 + i\%) \times (1 - c\%)] - 1$$

Where i is the pre-retirement discount rate (unadjusted for charges) and c is the overall fixed charges.

Comments

- The pre-retirement discount rate is only used in cases where the Retirement Date is after the Valuation Date.
- Once calculated, the pre-retirement discount rate is adjusted for product charges and advice charges.
 - Product charges are set at 0.75% p.a. for all individuals.
 - Ongoing adviser charges are set at 0.50% p.a. for all individuals.
 - The overall fixed charges, c , is calculated as the sum of these charges, which equals 1.25% p.a.

Post-retirement discount rate

Economic data used

- Nominal gilt liability curve

Calculated data used

- DMT
- TTR

Frequency of update

- Quarterly

Overview

The post-retirement discount rate assumption is used to calculate a capitalised value at the point of retirement of the future DB pension benefits that the consumer and their dependants would have received after they have retired/died.

Methodology

If the Retirement Date is before the Valuation Date

The post-retirement discount rate assumption is set equal to

a = spot rate on nominal gilt liability curve at term (DMT)

b = a, rounded to the nearest 0.05%; then

c = b - 0.6% p.a.

The post-retirement discount rate is then set equal to c. Note the DMT is derived at the Valuation Date.

If the Retirement Date is on or after the Valuation Date

The post-retirement discount rate is derived by:

$$a = \frac{(1 + \text{spot rate on nominal gilt liability curve at term } (TTR+DMT))^{(TTR+DMT)}}{(1 + \text{spot rate on nominal gilt liability curve at term } TTR)^{(TTR)}}$$

b = $a^{(1/DMT)} - 1$, rounding to the nearest 0.05%; then

c = b - 0.6% p.a.

An adjustment is also made to the post-retirement discount rate assumption to allow for the option for the consumer to take a pension commencement lump sum. The final rate adjusts for the pension commencement lump sum by:

$$d = (75\% \times c) + 25\% \times (c + 1.6\% \text{ p.a.})$$

The post-retirement discount rate is then set equal to d.

Comments

- The nominal gilt liability curve at the relevant date is sourced from the Bank of England.
- The 0.6% p.a. adjustment is allowance for the margins built into annuity pricing.

Deferred revaluation (1/2)

Economic data used

- S52A orders
- GMP fixed rate revaluation orders
- S148 revaluation orders
- Outturn CPI inflation rate
- Outturn RPI inflation rate

Calculated data used

- Pre-retirement CPI inflation rate
- Pre-retirement RPI inflation rate

Prerequisite inputs

- Date of leaving active service

Frequency of update

- Quarterly

Overview

Pensions in the OBSPS, PPF and BSPS2 increase between the date of leaving active service and the Retirement Date. The rate of increase depends upon a number of factors including the type of pension accrued, the section, the scheme and the date of leaving active service.

Methodology

Pension in the Schemes increase in deferment at a variety of rates. Set out below is how statutory deferred revaluation will be derived. A similar approach is adopted where the increase is derived at above statutory levels (ie with known increases based upon actual outturn of the relevant inflation measure).

S52A orders (higher)

- **Known increases:** in line with the latest S52A orders (higher)
- **Future expected increases:** in line with pre-retirement CPI inflation for the number of complete years between date of leaving and the Retirement Date, less the number of complete years between date of leaving and the Valuation Date.
- **Assumption:** The lower of:
 - 5% compound for the number of complete years
 - Known increases multiplied by future expected increase

S52A orders (lower)

- **Known increases:** in line with the latest S52A orders (lower)
- **Future expected increases:** in line with pre-retirement CPI inflation for the number of complete years between date of leaving and the Retirement Date, less the number of complete years between date of leaving and the Valuation Date.
- **Assumption:** The lower of:
 - 2.5% compound for the number of complete years
 - Known increases multiplied by future expected increases

GMP fixed rate revaluation

- **Known increases:** in line with the GMP fixed rate revaluation orders
- **Future expected increases:** in line with the GMP fixed rate revaluation orders
- **Assumption:** GMP fixed rate revaluation rate for the number of 6 Aprils between date of leaving active service and the Retirement Date. Where the Retirement Date is on or after the GMP age, the final increase will be omitted.

Deferred revaluation (2/2)

Economic data used

- S52A orders
- GMP fixed rate revaluation orders
- S148 revaluation orders
- Pre-retirement CPI inflation rate
- Pre-retirement RPI inflation rate

Calculated data used

- Pre-retirement CPI inflation rate
- Pre-retirement RPI inflation rate

Prerequisite inputs

- Date of leaving active service

Frequency of update

- Quarterly

Methodology

S148 revaluation orders

- **Known increases:** in line with the S148 revaluation orders
- **Future expected increases:** in line with pre-retirement CPI inflation + 1% p.a.
- **Assumption:** in line with pre-retirement CPI inflation + 1% p.a. for the number of complete tax years between Valuation Date and the earlier of GMP age and the Retirement Date

Comments

- For all benefits, allowance will be made for changes to revaluation from the date the OBSPS entered into the Assessment Period (29 March 2018).
- Note that some deferred increases are capped annually, while others are capped on a compounding basis.

Future deferred revaluation pension increases

Calculated data used

- Pre-retirement CPI inflation

Prerequisite inputs

- Section

Frequency of update

- Quarterly

Overview

Pensions in the OBSPS and BSPS2 increase when in deferment in line with CPI inflation, with the majority of sections having different caps and collars applied on an annual basis. An assumption needs to be derived for future increases including an allowance for future inflation volatility that could cause the floor or cap to bite.

Methodology

Future deferred revaluation is derived in line with the Black Scholes model, set with reference to the appropriate inflation index and caps and floors.

I = Pre-retirement CPI inflation

V = Inflation volatility

C = Annual cap to apply to pension increases

F = Annual floor to apply to pension increases

$$d_1 = (\text{LN}((1 + I)/(1 + C)))/V + V/2$$

$$d_2 = (\text{LN}((1 + F)/(1 + I)))/V - V/2$$

$$d_3 = (\text{LN}((1 + I)/(1 + C)))/V - V/2$$

$$d_4 = (\text{LN}((1 + F)/(1 + I)))/V + V/2$$

$$a = I$$

$$b = -1 * (1 + I) * \text{NormalDist}(d_2) + (1 + F) * \text{NormalDist}(d_4)$$

$$c = (1 + I) * \text{NormalDist}(d_1) - (1 + C) * \text{NormalDist}(d_3)$$

Deferred revaluation assumption = a + b - c, rounding to the nearest 0.05%

Comments

- Inflation volatility is set at 1% p.a.
- Actual deferred revaluation awards to date are set in line with outturn RPI or CPI inflation as appropriate, subject to the relevant caps and floors.
- An underpin to the deferred revaluation rate will apply in line with the S52A orders (higher) and S52A orders (lower) rates, dependent on the tranche of benefit.

Future pension increases

Calculated data used

- Post-retirement RPI inflation
- Post-retirement CPI inflation

Prerequisite inputs

- Section

Frequency of update

- Quarterly

Overview

Pensions in the OBSPS and BSPS2 increase when in payment in line with either RPI or CPI inflation, subject to different caps and collars applied on an annual basis. An assumption needs to be derived with an allowance made for future inflation volatility that could cause the floor or cap to bite.

Methodology

The pension increase is derived in line with the Black Scholes model, set with reference to the appropriate inflation index and caps and floors.

I = Post-retirement RPI inflation or Post-retirement CPI inflation, as appropriate

V = Inflation volatility

C = Annual cap to apply to pension increases

F = Annual floor to apply to pension increases

$$d_1 = (\text{LN}((1 + I)/(1 + C)))/V + V/2$$

$$d_2 = (\text{LN}((1 + F)/(1 + I)))/V - V/2$$

$$d_3 = (\text{LN}((1 + I)/(1 + C)))/V - V/2$$

$$d_4 = (\text{LN}((1 + F)/(1 + I)))/V + V/2$$

$$a = I$$

$$b = -1 * (1 + I) * \text{NormalDist}(d_2) + (1 + F) * \text{NormalDist}(d_4)$$

$$c = (1 + I) * \text{NormalDist}(d_1) - (1 + C) * \text{NormalDist}(d_3)$$

Pension increase assumption = a + b - c, rounding to the nearest 0.05%

Comments

- Inflation volatility is set at 1% p.a.
- Where pension is already in payment, actual pension increase awards are set in line with outturn RPI or CPI inflation as appropriate, subject to the relevant caps and floors.

Demographic assumptions

Proportion married / in a civil partnership

Demographic data used

- Proportion married table by term to retirement

Calculated data used

- TTR

Prerequisite inputs

- Marital status

Frequency of update

- Periodic - as information received from the consumer

Overview

The proportion married assumption is used to calculate the value of any contingent benefits that the consumer's spouse will receive on the death of the consumer.

Methodology

The probability of being married or in a civil partnership at the Retirement Date is based on a combination of the term to retirement and the consumer's current marital / civil partnership status.

Term to retirement (years)	Current status: Married or in a civil partnership (%)	Current status Not married or in a civil partnership (%)
0	100	0
5	95	10
10	90	20
15	85	30
20	80	40
25	75	45
30	70	50
35	70	55
40	70	55

The rates are interpolated for terms in between and rounded to the nearest %.

Where the Retirement Date is before the Valuation Date, the actual marital status for the consumer will be used - if the consumer is married or in a civil partnership, it will be assumed that the proportion is 100%, otherwise the proportion will be 0%.

Comments

- Where the current marital status is not known, it is assumed that the consumer is not married or in a civil partnership.
- This is a gender neutral assumption.
- Where the consumer has died and the consumer's spouse is in receipt of the pension, no proportion married assumption is required.

Proportion married / civil partnership age difference

Prerequisite inputs

- Date of birth
- Spouse date of birth, if provided

Frequency of update

- Periodic - as information received from the consumer

Overview

When contingent benefits come into payment, the spouse or civil partner's age should be used in the annuity calculation instead of the consumer's - this is important for ensuring the correct mortality. This is derived using the below methodology.

Methodology

- Where the spouse or civil partner's date of birth is known, this is used in the calculation.
- Where the consumer is married or in a civil partnership, but the spouse or civil partner's date of birth is not known, it is set equal to the consumer's date of birth.
- Where the member is currently single, their spouse / civil partner's date of birth is set equal to the consumer's date of birth.

Pre-retirement mortality

Demographic data used

- Probability of death ('q(x)') based on unisex mortality, with an allowance for future mortality improvements

Prerequisite inputs

- Date of birth
- Valuation Date

Frequency of update

- Annually

Overview

When producing a capitalised value of the benefits that would have been payable from either the OBSPS or BSPS2, allowance should be made for the possibility of the consumer dying before they reach their retirement date.

Methodology

The probability of survival between the Valuation Date and Retirement Date needs to be calculated. In order to do this, we refer to the probability of death in each year between the date. This requires a view of the annual probability of death at each age, otherwise known as $q(x)$ which is the annual probability of death for a person aged x .

The pre-retirement probability of death at each age will be set in line with:

- The 'PxA16' mortality tables
- The core version of the industry CMI_20YY-2 mortality improvement projections, with a long-term rate of improvement of 1.25% p.a.
Where 20YY is the year of the Valuation Date starting from 1 April 20YY (eg for Valuation Dates between 1 April 2022 and 31 March 2023, use the CMI_2020 mortality improvements projections)

As open market annuities rates do not take account of the consumer's gender, these rates will be blended using equal parts of the male and female version of the base mortality tables and the mortality improvement projections.

The $q(x)$ rates will allow for:

- Partial year mortality, if the consumer's age at the Valuation Date is not an integer.
- Improvements based on the date of birth of the consumer, with an allowance for partial year improvements if the consumer's date of birth is part way throughout the year starting 1 April 20YY on a linear basis.

Comments

- The $q(x)$ rates have been obtained from the Continuous Mortality Investigation.
- No mortality is applied to the spouse / civil partner before the earlier of the consumer's Retirement Date or date of death.

Post-retirement mortality

Demographic data used

- Probability of death (' $q(x)$ ') based on unisex mortality, with an allowance for future mortality improvements

Prerequisite inputs

- Date of birth
- Valuation Date

Frequency of update

- Annually

Overview

When producing a capitalised value of the benefits that would have been payable from either the OBSPS or BSPS2, allowance should be made for how long we expect the consumer to live after the Retirement Date, and the probability of each pension payment being made.

Methodology

The probability of survival between the Retirement Date and each pension payment needs to be calculated. The mortality assumption used to calculate these probabilities is in line with the mortality assumption used for the pre-retirement mortality, as detailed in the previous page. That is:

- The 'PxA16' mortality tables
- The core version of the industry CMI_20YY-2 mortality improvement projections, with a long-term rate of improvement of 1.25% pa
Where 20YY is the year starting from 1 April 20YY (eg for Valuation Dates between 1 April 2022 and 31 March 2021, use the CMI_2020 mortality improvements projections)

As open market annuities rates do not take account of the consumer's gender, these rates will be blended using equal parts of the male and female version of the base mortality tables and the mortality improvement projections.

The $q(x)$ rates will allow for:

- Partial year mortality, if the consumer's age at the Valuation Date is not an integer.
- Improvements based on the date of birth of the consumer, with an allowance for partial year improvements if the consumer's date of birth is part way throughout the year starting 1 April 20YY on a linear basis.

Comments

- The $q(x)$ rates have been obtained from the Continuous Mortality Investigation
- Spouse / civil partner mortality is allowed for from the consumer's retirement date.
- Mortality is still allowed for during any guarantee period, although the probability of a pension payment during this period will always be deemed to be 100%.

Valuation factors

Calculation of single life annuities

Calculated data used

- Future pension increase
- Post-retirement discount rate

Demographic data used

- Post-retirement mortality rates

Prerequisite inputs

- Date of birth
- Valuation Date
- Retirement Date

Frequency of update

- Quarterly

Overview

Single life annuities are used to provide a capitalised value of the future benefit payments due to the consumer for the whole of their retirement, or the spouse where the consumer has already died.

Methodology

The single life annuity is calculated as

$$a-(x) = \sum tP_x * (1 + \text{future pension increase})^{(t - x)} / (1 + \text{post-retirement discount rate})^{(t - x)}$$

Where:

- x is the age at the Retirement Date or age at the Valuation Date if already retired
- t is each integer age following age x up to age 120
- tP_x is the probability of survival from age x to age x+t, based on the $q(x)$ mortality rates at each age.
- Future pension increases are derived for each tranche in line with the methodology set out on page 33.
- Post-retirement discount rate is the rate derived in line with the methodology set out on page 29

Comments

- Mortality is still allowed for during any guarantee period, although the probability of a pension payment during this period will always be deemed to be 100%.
- Annuities are calculated assuming they are paid on a continuous basis.

Calculation of reversionary annuities

Calculated data used

- Future pension increase
- Post-retirement discount rate

Demographic data used

- Post-retirement mortality rates

Prerequisite inputs

- Date of birth
- Spouse / civil partner date of birth
- Valuation Date
- Retirement Date

Frequency of update

- Quarterly

Overview

Reversionary life annuities are used to provide a capitalised value of the future benefit payments due to the consumer's Spouse / Civil Partner, following the death of the consumer.

Methodology

The reversionary annuity is calculated as

$$a\text{-rev}(x,y) = \sum (1-tP_x)^*(tP_{2y}) * (1+\text{pension increase})^{(t-x)} / (1+\text{post-retirement discount rate})^{(t-x)}$$

Where:

- x is the age of the consumer at the Retirement Date or age at the Valuation Date if older
- y is the age of the consumer's Spouse / Civil Partner at the Retirement Date or age at the Valuation Date if older
- t is each integer age following age x up to age 120
- tP_x is the probability of survival from age x to age $x+t$ of the consumer, based on the $q(x)$ rates at each age.
- tP_{2y} is the probability of survival from age y to age $y+t$ of the consumer's Spouse / Civil Partner, based on the $q(x)$ rates at each age.
- Pension increases are derived for each tranche in line with the methodology set out on page 33
- Post-retirement discount rate is the rate derived in line with the methodology set out on page 29

Comments

- Annuities are calculated assuming they are paid on a continuous basis.

Calculation of temporary annuities

Calculated data used

- Future pension increase
- Post-retirement discount rate

Demographic data used

- Post-retirement mortality rates

Prerequisite inputs

- Date of birth
- Valuation Date
- Retirement Date

Frequency of update

- Quarterly

Overview

Temporary annuities are used to provide a capitalised value of the future benefit payments due to the consumer for a set period of time, such as bridging pensions.

Methodology

The temporary annuity is calculated as

$$a(x, N) = \sum tP_x * (1 + \text{pension increase})^{(t - x)} / (1 + \text{post-retirement discount rate})^{(t - x)}$$

Where:

- x is the age at the Retirement Date or age at the Valuation Date if older
- t is each integer age following age x up to age $x + N$
- N is the length of the temporary period
- tP_x is the probability of survival from age x to age $x+t$
- Pension increases are derived for each tranche in line with the methodology set out on page 33
- Post-retirement discount rate is the rate derived in line with the methodology set out on page 29

Comments

- Annuities are calculated assuming they are paid on a continuous basis.

Early retirement factors

Prerequisites inputs

- Section
- Date of Birth
- Date of Retirement

Frequency of update

- Periodic

Overview

If the Retirement Date is before the date that the DB benefit is due to be paid unreduced (“Normal Retirement Date”), the pension will be subject to an early retirement factor. These differ by the tranche of pension and the number of years early that the pension is being paid.

Methodology

The current early retirement factors to be applied where the NPA is 65 are set out in the below table:

Term between Retirement Date and NPA (years)	BSPS2 - pre 5 April 1997	BSPS2 5 April 1997 - 5 April 2005	BSPS2 post 5 April 2005	PPF Scheme - all benefits
0	1	1	1	1
1	0.97	0.97	0.97	1
2	0.95	0.93	0.93	0.992
3	0.93	0.90	0.90	0.963
4	0.91	0.87	0.88	0.938
5	0.89	0.85	0.85	0.915
6	0.87	0.82	0.82	0.894
7	0.85	0.80	0.80	0.874
8	0.83	0.77	0.78	0.855
9	0.82	0.75	0.76	0.838
10	0.80	0.73	0.74	0.823

Comments

- These or previous factors are applied to the consumer’s DB pension at assumed Retirement Date.
- Factors are interpolated for non-integer ages
- GMP is due at the consumer’s GMP age - therefore Gender can influence the term to retirement
- Where known, actual factors in force are used where a consumer’s Retirement Date is before the Valuation Date.
- For consumers who retired earlier than 10 years prior to their Normal Retirement Date, a default early retirement factor of 4% p.a. compound is applied for each additional year retired early, eg for a BSPS2 consumer with pre 5 April 1997 service, the early retirement factor to be applied if they retired 11 years early is $0.80 \times (1 - 4\%) = 0.768$.

Late retirement factors

Overview

If the Retirement Date is after the date that the DB benefit is due to be paid, the pension will be subject to a late retirement factor. These differ by the tranche of pension and the number of years late that the pension is being paid.

Methodology

The current late retirement factors at NPA of 65 to be applied are set out in the below table:

Term between NPA and Retirement Date (years)	BSPS2 pre 5 April 1997	BSPS2 5 April 1997 - 5 April 2005	BSPS2 post 5 April 2005	PPF Scheme – Pre 97	PPF Scheme – Post 97
0	1	1	1	1	1
1	1.05	1.05	1.05	1.062	1.069
2	1.10	1.10	1.10	1.127	1.126
3	1.16	1.16	1.16	1.197	1.205
4	1.22	1.22	1.22	1.271	1.295
5	1.28	1.28	1.28	1.351	1.394
6	1.34	1.34	1.34	1.437	1.470
7	1.41	1.41	1.41	1.530	1.551
8	1.48	1.48	1.48	1.630	1.661
9	1.55	1.55	1.55	1.738	1.799
10	1.63	1.63	1.63	1.856	1.950

Comments

- These factors are applied to the consumer's revalued DB pension at assumed Retirement Date.
- Factors are interpolated for non-integer ages.
- GMP has a statutory late retirement factor applied to benefits that are paid after the GMP age, regardless of the retirement age of benefits accrued alongside the GMP pension. This statutory late retirement factor is $(1 + [\text{Number of weeks after GMP age}] / 700) * (1 + \text{pension increases due})$.
- Where known, actual factors in force are used where a consumer's Retirement Date is before the Valuation Date.
- For consumers who retired more than 10 years after their DB benefit is due, a default late retirement factor of 5% p.a. compound is applied for each additional year retired early, eg for a BSPS2 consumer with pre 5 April 1997 service, the late retirement factor to applied if they retired 11 years late is $1.63 * (1.05) = 1.72$.

Demographic data used

- Current late retirement factors

Calculated data used

- TTR
- Outturn pension increases (GMP)
- Future pension increases (GMP)

Prerequisites inputs

- Section
- Date of Birth
- Date of Retirement

Frequency of update

- Periodic for late retirement factors
- Quarterly for GMP statutory late retirement factors

Commutation factors BPS2

Demographic data used

- Current commutation factors

Prerequisite inputs

- Date of Birth
- Valuation Date
- Retirement Date
- Section

Frequency of update

- Quarterly

Overview

Where the Retirement Date is before the Valuation Date, allowance should be made for where a consumer is considered to have commuted pension for cash. The terms on how much cash is received for every £1 of the consumer's pension exchanged are known as commutation factors. These vary by age and tranche of pension.

Methodology

The commutation factor to be applied are set out in the below table:

Age	BPS2 pre 5 April 1997	BPS2 5 April 1997 - 5 April 2005	BPS2 post 5 April 2005
65	12.6	16.1	14.9
64	12.9	16.6	15.4
63	13.2	17.1	15.8
62	13.5	17.6	16.2
61	13.8	18.1	16.7
60	14.1	18.6	17.1
59	14.4	19.1	17.5
58	14.6	19.5	17.9
57	14.9	20.0	18.3
56	15.1	20.5	18.6
55	15.3	20.9	19.0
54	15.5	21.4	19.4
53	15.7	21.8	19.7
52	15.9	22.2	20.0
51	16.1	22.6	20.4
50	16.3	23.0	20.7

Comments

- Factors are interpolated for non-integer ages.
- Where known, actual factors in force are used where a consumer's Retirement Date is before the Valuation Date.
- GMP cannot be commuted for cash.

Commutation factors PPF Scheme

Demographic data used

- Current commutation factors

Prerequisite inputs

- Date of Birth
- Valuation Date
- Retirement Date
- Section

Frequency of update

- Quarterly

Overview

Where the Retirement Date is before the Valuation Date, allowance should be made for where a consumer is considered to have commuted pension for cash. The terms on how much cash is received for every £1 of the consumer and their spouse's pension exchanged are known as commutation factors. These vary by age and tranche of pension.

Methodology

The commutation factor to be applied are set out in the below table:

Age	PPF Scheme pre 5 April 1997	PPF Scheme Post 5 April 1997
65	16.74	21.71
64	17.19	22.50
63	17.64	23.28
62	18.08	24.07
61	18.50	24.85
60	18.91	25.64
59	19.32	26.41
58	19.71	27.19
57	20.08	27.95
56	20.45	28.71
55	20.79	29.46
54	21.19	30.29
53	21.58	31.13
52	21.97	31.97
51	22.35	32.83
50	22.73	33.69

Comments

- Factors are interpolated for non-integer ages.
- Where known, actual factors in force are used where a consumer's Retirement Date is before the Valuation Date.

Valuation of benefits

Valuation of benefits - PPF Scheme

Defined Benefits - Applying deferred revaluation to benefits in the PPF Scheme (1/2)

Calculated data used

- Outturn RPI inflation
- Outturn CPI inflation
- S52A orders
- GMP fixed rate revaluation
- S148 orders
- Pre-retirement CPI inflation

Prerequisites inputs

- Date of leaving active service
- Valuation Date
- Retirement Date
- Section
- Gender

Frequency of update

- Quarterly

Overview

Deferred revaluation in the PPF Scheme will be split depending upon the tranche of pension accrued. In addition, from the point that the OBSPS went into the PPF assessment period (29 March 2018), the valuation attribute can vary.

Methodology

Pre and Post 88 GMP

Fixed rate revaluation

Period before 29 March 2018

Benefits increase in line with the relevant fixed rate on each 6 April, apart from the final increase before the consumer's GMP age. If the consumer remains in deferment after their GMP age but before 29 March 2018, a statutory late retirement factor is applied to the GMP pension.

Period from 29 March 2018

Benefits increase in line with the outturn CPI inflation for periods up to the Valuation Date and Pre-retirement CPI inflation for period following the Valuation Date up to the earlier of the Retirement Date and the Normal Pension Age, subject to a maximum of 5% p.a. compounded on a Quarterly basis over the remaining period of deferment and a 0% floor over the period.

S148 revaluation

Period before 29 March 2018

Benefits increase in line with the s.148 orders on each 6 April, apart from the final increase before the consumer's GMP age. If the consumer remains in deferment after their GMP age a statutory late retirement factor is applied to the GMP pension.

Period from 29 March 2018

Benefits increase in line with the outturn CPI inflation for periods up to the Valuation Date and Pre-retirement CPI inflation for period following the Valuation Date up to the earlier of the Retirement Date and the Normal Pension Age, subject to a maximum of 5% p.a. compounded on a Quarterly basis over the remaining period of deferment and a 0% floor over the period.

Defined Benefits - Applying deferred revaluation to benefits in the PPF Scheme (2/2)

Calculated data used

- Outturn RPI inflation
- Outturn CPI inflation
- S52A orders
- GMP fixed rate revaluation
- S148 orders
- Pre-retirement CPI inflation

Prerequisites inputs

- Date of leaving active service
- Valuation Date
- Retirement Date
- Section
- Gender

Frequency of update

- Quarterly

Methodology

Excess benefits accrued prior to April 2009

Period before 29 March 2018

In line with the appropriate inflation index for the section of the OBSPS to the earlier of the Normal Pension Age for each pension tranche and 29 March 2018, subject to the appropriate caps and floors applied on a compound basis. Past increases are based upon known increases to the inflation index.

Period from 29 March 2018

Benefits increase in line with the outturn CPI inflation for periods up to the Valuation Date and Pre-retirement CPI inflation for period following the Valuation Date up to the earlier of the Retirement Date and the Normal Pension Age, subject to a maximum of 5% p.a. compounded on a Quarterly basis over the remaining period of deferment and a 0% floor over the period.

Excess benefits accrued after April 2009

Period before 29 March 2018

In line with the appropriate inflation index for the section of the OBSPS to the earlier of the Normal Pension Age for each pension tranche and 29 March 2018, subject to the appropriate caps and floors applied on an annual or compound basis. Past increases are based upon known increases to the inflation index.

Period from 29 March 2018

Benefits increase in line with the outturn CPI inflation for periods up to the Valuation Date and Pre-retirement CPI inflation for period following the Valuation Date up to the earlier of the Retirement Date and the Normal Pension Age, subject to a maximum of 2.5% p.a. compounded on a Quarterly basis over the remaining period of deferment and a 0% floor over the period.

Comments

- Deferred revaluation switches at the point the Scheme enters the PPF Assessment Period - 29 March 2018. From this point forward, GMP is no longer separated out from Excess pension.
- Where the Retirement Date is after the Normal Pension Age for the tranche of benefit, a late retirement factor is applied in lieu of deferred revaluation.
- The period of deferment is the number of complete months between the Assessment Date and the relevant Normal Pension Age.

Defined Benefits - Benefits at retirement under the PPF Scheme (1/4)

Calculated data used

- PPF Deferred revaluation
- PPF early retirement factors
- PPF late retirement factors
- PPF commutation factors

Prerequisites inputs

- Pension benefit tranches
- Section
- Retirement Date
- Sex

Frequency of update

- Quarterly

Overview

The benefits at retirement under the PPF Scheme are calculated by revaluing the pension at date of leaving up to the Retirement Date in line with the appropriate deferred revaluation, with early and late retirement factors applied as appropriate. Further, allowance needs to be made for pension to be commuted for cash as appropriate.

Methodology

Pre 88 and Post 88 GMP

Consumer reaches GMP age prior to the 29 March 2018 and the Retirement Date is prior to 29 March 2018

- The pension at date of leaving is increased in line with deferred revaluation up to the earlier of the consumer's Retirement date and the consumer's GMP Age.
- If the Retirement Date is after the consumer's GMP Age a statutory late retirement factor is applied to the consumer's benefits.
- If the Retirement Date is before the consumer's GMP age, only deferred revaluation is applied.

Consumer reaches GMP age prior to the 29 March 2018 and the Retirement Date is after 29 March 2018

- The pension at date of leaving is increased in line with deferred revaluation up to the consumer's GMP Age.
- A statutory late retirement factor is applied to the consumer's benefits up to 29 March 2018 and the PPF late retirement factor from 29 March 2018 up to the retirement date.

Consumer reaches GMP age after 29 March 2018 and the Retirement Date is before 29 March 2018

- The pension at date of leaving is increased in line with deferred revaluation up to the Retirement Date.

Consumer reaches GMP age after 29 March 2018 and the Retirement Date is after 29 March 2018

- The pension at date of leaving is increased in line with deferred revaluation up to the earlier of the Retirement Date and the consumer's GMP Age. Deferred revaluation pre 29 March 2018 is in line with OBSPS deferred revaluation, deferred revaluation after 29 March 2018 is in line with PPF Scheme revaluation.

Defined Benefits - Benefits at retirement under the PPF Scheme (2/4)

Calculated data used

- PPF Deferred revaluation
- PPF early retirement factors
- PPF late retirement factors
- PPF commutation factors

Prerequisites inputs

- Pension benefit tranches
- Section
- Retirement Date

Frequency of update

- Quarterly

Methodology

Excess benefits

- The pension at date of leaving is increased in line with deferred revaluation up to the earlier of the consumer's Retirement Date and the Normal Pension Age.

Early retirement factor

- If the consumer's Retirement Date is before the Normal Pension Age of the tranche, an early retirement factor in line with page 43 will be applied for the period between the Retirement Date and the Normal Pension Age.
- For GMP benefits, the Retirement Date will be aligned with the GMP age of the benefit.

Late retirement factor

- If the consumer's Retirement Date is after the Normal Pension Age of the tranche, a late retirement factor in line with page 44 will be applied for the period between the Normal Pension Age and the Retirement Date.

Adjusting for PPF Scheme benefit levels

Benefits with a Normal Retirement Date before 29 March 2018

- Benefits will have no reduction applied.

Benefits with a Normal Retirement Date on or after 29 March 2018

- The benefits after the early retirement factor will be adjusted to allow for the PPF Scheme level of benefits insured.
- As a first step, the benefits are reduced to 90% of their level after the early retirement factor has been applied.

Defined Benefits - Benefits at retirement under the PPF Scheme (3/4)

Methodology

Allowance for pension commencement lump sum

- Where the consumer's Retirement Date is before the Valuation Date, allowance needs to be made for the consumer to have commuted pension for cash.

Where the consumer is accessing their DC fund on a flexible basis:

- The consumer is assumed to take the maximum tax-free lump sum
- The maximum lump sum (including the automatic lump sum where relevant) is calculated as

$$(20 \times \text{Pension} - 3 \times \text{automatic lump sum}) / (3 + 20 / \text{Commutation Factor}) + \text{automatic lump sum}$$

- The amount of pension commuted is calculated as

$$(\text{maximum lump sum} - \text{automatic lump sum}) / \text{Commutation factor}$$

Where the consumer has fully annuitised their DC fund after taking a pension commencement lump sum:

- If the consumer is entitled to an automatic lump sum payment at retirement, this will define the minimum amount of tax-free lump sum to be taken.
- The maximum amount of tax-free lump sum is then calculated, in line with the above methodology, this will define the maximum amount of tax-free lump sum that can be taken.
- Where the consumer has taken a lower amount under their DC pension arrangement than the maximum amount available under the DB scheme, the figure is set equal to the PCLS actually taken or the automatic lump sum where this is higher
- Where the consumer has not taken a PCLS from their DC pension arrangement, this is set equal to the automatic lump sum
- This cash will be taken from each tranche on a proportionate basis, with the proportion commuted from each tranche equal.
- The pension commencement lump sum is set equal to the automatic lump sum payment plus any cash due to commutation of pension.

Calculated data used

- Current commutation factors

Prerequisites inputs

- Pension benefit tranches
- Section

Frequency of update

- Quarterly

Defined Benefits - Benefits at retirement under the PPF Scheme (4/4)

Comments

Calculated data used

- Current commutation factors

Prerequisites inputs

- Pension benefit tranches
- Section

Frequency of update

- Quarterly

- Note that some consumers may have a split Normal Pension Age, depending on tranche of benefit. Allowance will be made for differing Normal Pension Ages when applying early and late retirement factors.
- Where the Retirement Date is after the Valuation Date, an adjustment is made to the post-retirement discount rate assumption to allow for the option for the consumer to take a pension commencement lump sum.

Defined Benefits - Valuing whole of life benefits in the PPF Scheme

Economic data used

- Awarded pension increases

Calculated data used

- PPF Benefits at retirement
- Whole of life annuities by each pension tranche
- Pre-retirement discount rate
- TTR

Frequency of update

- Quarterly

Overview

A capitalised value of the benefits needs to be calculated for all benefits that are payable for the whole of life from the PPF Scheme.

Methodology

Retirement date before the Valuation Date

- The pension at the Retirement Date (after all adjustments specified on pages 49 to 54) will be increased up to the Valuation Date in line with realised pension increases and in line with the associated caps and floors where relevant. See page 60 which sets out how these payments prior to the Valuation Date are allowed for in the valuation of benefits.
- The increased pension at the Valuation Date will be multiplied by a whole of life annuity, as set out on pages 40 and 41, in line with the appropriate pension increase assumption.

Retirement date on or after the Valuation Date

- The pension at the Retirement Date (after all adjustments specified on pages 49 to 54) is multiplied by a whole of life annuity, as set out on page 43, in line with the appropriate pension increase assumption for the benefit level.
- The benefit is then discounted back to the Valuation Date in line with the below formula

Pension at Retirement Date * whole of life annuity * $(1 + \text{Pre-retirement discount rate})^{-(\text{TTR})}$ * ttrPx

Comments

- The calculation will be undertaken for each tranche of pension.
- ttrPx is the probability of survival from age x to the Retirement Date of the consumer

Defined Benefits - Valuing temporary benefits in the PPF Scheme

Economic data used

- Awarded pension increases

Calculated data used

- PPF Benefits at retirement
- Temporary annuities by each pension tranche
- Pre-retirement discount rate
- TTR

Frequency of update

- Quarterly

Overview

A capitalised value of the benefits needs to be calculated for all benefits that are payable for a temporary period from the PPF Scheme (eg bridging pensions).

Methodology

Retirement date before the Valuation Date

- The pension at the Retirement Date (after all adjustments specified on pages 49 to 54) will be increased up to the Valuation Date in line with awarded pension increases, in line with the associated inflation indices and caps and floors. See page 60 which sets out how these payments prior to the Valuation Date are allowed for in the valuation of benefits.
- The increased pension at the Valuation Date will be multiplied by a temporary annuity, as set out on page 44, in line for the appropriate pension increase assumption for the benefit level.

Retirement date on or after the Valuation Date

- The pension at the Retirement Date (after all adjustments specified on pages 49 to 54) is multiplied by a temporary annuity, as set out on page 42, in line with the appropriate pension increase assumption for the benefit level.
- The benefit is then discounted back to the Valuation Date in line with the below formula

Pension at Retirement Date * temporary annuity * (1 + Pre-retirement discount rate) ^ (-TTR) * ttrPx

Comments

- The calculation will be undertaken for each tranche of pension.
- Only bridging pensions in payment at 31 July 2020 are expected to continue. Any bridging pensions that were expected to come into payment after this date are not being provided under the benefits secured with PIC.
- ttrPx is the probability of survival from age x to the Retirement Date of the consumer

Defined Benefits - Valuing lump sum benefits in the PPF Scheme

Calculated data used

- PPF Benefits at retirement
- Pre-retirement discount rate
- TTR

Frequency of update

- Quarterly

Overview

A capitalised value of the benefits needs to be calculated for all lump sum benefits that are payable from the PPF Scheme (eg automatic lump sum benefits).

Methodology

Retirement date before the Valuation Date

- It is expected that the lump sum benefits will have already been paid and hence will be caught by past payments. Therefore no additional valuation is required. See page 60 which sets out how these payments prior to the Valuation Date are allowed for in the valuation of benefits.

Retirement date on or after the Valuation Date

- The lump sum at the Retirement Date (after all adjustments specified on pages 49 to 54) is discounted back to the Valuation date in line with the below formula

$$\text{Lump sum at retirement} * (1 + \text{Pre-retirement discount rate}) ^ (-\text{TTR}) * \text{ttrPx}$$

Comments

- The calculation will be undertaken for each tranche of lump sum.
- ttrPx is the probability of survival from age x to the Retirement Date of the consumer

Defined Benefits - Valuing contingent benefits in the PPF Scheme (1/2)

Overview

Contingent benefits are offered by the PPF Scheme in the form of a spouse's pension equal to 50% of the consumer's post-commutation pension revalued to date of death if before the consumer's Retirement Date, or 50% of the consumer's post-commutation pension in payment if date of death is after the consumer's Retirement Date.

Methodology

Death before retirement

The spouse pension is equal to 50% of the consumer's pension, payable for the remainder of the spouse's life. The value is therefore set equal to the sum over the period to retirement of:

$$\sum \frac{\text{Pension at Valuation Date} * \text{spouse\%} * (1-tPx) * a(y+t) * (1+\text{revaluation})^t * \text{proportion married}}{(1+\text{pre-retirement discount rate})^t}$$

A refund of contributions is also due. This is equal to:

$$\frac{\sum \text{Contributions paid to the OBSPPS} * (1-tPX)}{(1+\text{pre-retirement discount rate})^t}$$

Where:

- x is the age at the Valuation Date of the consumer
- t is the number of years since the Valuation Date
- tPx is the probability of survival from age x to age x+t of the consumer
- a(y+t) is the single life annuity for the consumer's spouse / civil partner at age y+t
- Revaluation is the revaluation derived for each tranche in line with the methodology set out on pages 51 and 52.
- Pre-retirement discount rate is the rate derived in line with the methodology set out on page 30.
- Where the consumer has already died at the Valuation Date and the spouse is in receipt of a spouse pension, no contingent benefit is calculated.

Calculated data used

- PPF Benefits at retirement
- Pre-retirement discount rate
- Deferred revaluation
- Proportion married
- q(x) mortality rates
- Contingent annuity

Prerequisites inputs

- Date of birth
- Spouse / civil partner's date of birth
- Date of leaving active service
- Valuation Date
- Retirement Date
- Pension benefit tranches
- Contingent spouse pension for each pension tranche

Frequency of update

- Quarterly

Defined Benefits - Valuing contingent benefits in the PPF Scheme (2/2)

Calculated data used

- PPF Benefits at retirement
- Pre-retirement discount rate
- Deferred revaluation
- Proportion married
- $q(x)$ mortality rates
- Contingent annuity

Prerequisites inputs

- Date of birth
- Spouse / civil partner's date of birth
- Date of leaving active service
- Valuation Date
- Retirement Date
- Pension benefit tranches
- Contingent spouse pension for each pension tranche

Frequency of update

- Quarterly

Methodology

Death after retirement

The spouse pension is equal to 50% of the consumer's pension, payable for the remainder of the spouse's life. The value is therefore set equal to the sum over the period to retirement of:

$$\frac{ttrPx * \text{Pension revalued to retirement date} * 50\% * a\text{-rev}(x,y) * \text{proportion married}}{(1 + \text{Pre-retirement discount rate})^{(TTR)}}$$

Where:

- $ttrPx$ is the probability of survival from age x to the Retirement Date of the consumer
- x is the age Valuation Date of the consumer
- $a\text{-rev}(x,y)$ is derived in line with the methodology set out on page 41

Comments

- The contingent benefit is valued on an annual basis, assuming the death occurs halfway through the year.
- Where the consumer has already died at the Date of Valuation and the spouse is in receipt of a spouse pension, no contingent benefit is calculated.

Defined Benefits - Valuing past benefit payments from the PPF Scheme

Calculated data used

- PPF Benefits at retirement
- Outturn RPI inflation
- Outturn CPI inflation

Economic data used

- Bank of England base rate

Prerequisites inputs

- Retirement Date
- Benefit payments - amount and date

Frequency of update

- Quarterly

Overview

Where the Valuation Date is after the Retirement Date, allowance needs to be made in the calculation for past benefit payments. These will be rolled up to the Valuation Date in line with the Bank of England Base Rate.

Methodology

Pension commencement lump sum

Pension commencement lump sums are allowed for in line with the 'Allowance for pension commencement lump sum' section set out on page 53, both due to an automatic lump sum and cash commutation.

Pension payments

Benefit payments start from the Retirement Date and assumed to occur Quarterly in arrears. The initial level of the benefit payment is in line with the Pension at Retirement, set out on page 51 to 54, after allowance for PPF Scheme benefit levels, early and late retirement factors and cash commutation.

Pension increases are applied on an annual basis in line with actual pension increase awards.

Applying interest and summing payments

$$\sum(\text{benefit payment } t) * (1 + \text{compounded Bank of England base rate } t)$$

Where

Benefit payment t = number of benefit payments

Compounded Bank of England base t is the cumulative return for benefit payment t

Comments

- Pension increases are applied on an annual basis on the anniversary date of the Retirement Date.

Defined Benefits - Total valuation of PIC benefits

Calculated data used

- Valuation of whole of life benefits in the PPF Scheme
- Valuation of temporary benefits in the PPF Scheme
- Valuation of lump sum benefits in the PPF Scheme
- Valuation of contingent benefits in the PPF Scheme
- Valuation of past payments in the PPF Scheme

Frequency of update

- Quarterly

Overview

The total valuation of PIC benefits takes account of all aspects of the PPF Scheme. This is used as the assessment value for the PIC benefits when calculating the gross redress

Methodology

The total valuation of the PIC is set equal to:

- Valuation of whole of life benefits in the PPF Scheme, plus
- Valuation of temporary benefits in the PPF Scheme, plus
- Valuation of lump sum benefits in the PPF Scheme, plus
- Valuation of contingent benefits in the PPF Scheme, plus
- Valuation of past payments in the PPF Scheme

The overall benefit is then uplifted by an amount, with reference to the loss incurred as a result of benefits switching from OBSPS to PPF. The amount will differ by individual.

Valuation of benefits - BSPS2

Defined Benefits - Applying deferred revaluation to benefits in BSPS2

Calculated data used

- Outturn RPI inflation
- Outturn CPI inflation
- S52A orders
- GMP fixed rate revaluation
- S148 orders
- Pre-retirement CPI inflation

Prerequisites inputs

- Date of leaving active service
- Valuation Date
- Retirement Date
- Section
- Gender

Frequency of update

- Quarterly

Overview

Deferred revaluation in BSPS2 will be split depending upon the tranche of pension accrued. In addition, the revaluation may differ for the periods between OBSPS and BSPS2.

Methodology

Pre and Post 88 GMP

Fixed rate revaluation

Benefits increase in line with the relevant fixed rate on each 6 April, apart from the final increase before the consumer's GMP age. If the consumer remains in deferment after their GMP age a statutory late retirement factor is applied to the GMP pension.

S148 revaluation

Benefits increase in line with the s.148 orders on each 6 April, apart from the final increase before the consumer's GMP age. If the consumer remains in deferment after their GMP age a statutory late retirement factor is applied to the GMP pension.

Excess pensions increases

In line with the appropriate inflation index, subject to the appropriate caps and floors applied on an annual or compound basis (depending upon the benefit section and tranche of benefit) to the earlier of the consumer's Retirement Date and the Normal Retirement Date for the tranche of pension. Past increases are based upon known increases to the inflation index.

Comments

- Some sections change inflation index from RPI inflation to CPI inflation, either in line with statutory increase changes or at a later date. Allowance is made for this within the revaluation calculation.
- An underpin applies to the deferred revaluation in line with S52A orders.

Defined Benefits - Benefits at retirement under BSPS2 (1/4)

Calculated data used

- BSPS2 Deferred revaluation
- BSPS2 early retirement factors
- BSPS2 late retirement factors
- BSPS2 commutation factors

Prerequisites inputs

- Pension benefit tranches
- Section
- Retirement Date
- Gender

Frequency of update

- Quarterly

Overview

The benefits at retirement under BSPS2 are calculated by revaluing the pension at date of leaving up to the Retirement Date in line with the appropriate deferred revaluation, with early and late retirement factors applied as appropriate. Further, allowance needs to be made for pension to be commuted for cash as appropriate.

Methodology

Pre 88 and Post 88 GMP

Consumer reaches GMP age on or prior to the Retirement Date

- The pension at date of leaving is increased in line with GMP deferred revaluation up to the consumer's GMP Age.
- A statutory GMP late retirement factor is applied to the consumer's benefits (if applicable).

Consumer reaches GMP age after the Retirement Date

- The pension at date of leaving is increased in line with deferred revaluation up to the Retirement Date.
- For the period between GMP age and the consumer's retirement age, the GMP pension is treated as though it is an Excess Pension, with benefit increases awarded in line with the Excess tranche that was accrued alongside the GMP benefit.

Excess benefits

Period before 29 March 2018

In line with the appropriate inflation index for the section of the OBSPS to the earlier of the Normal Pension Age for each pension tranche and 29 March 2018, subject to the appropriate caps and floors applied on an annual or compound basis. Past increases are based upon known increases to the inflation index.

Period from 29 March 2018

In line with the appropriate inflation index for the section of the BSPS2 to the earlier of the Normal Pension Age for each pension tranche, Retirement Date, and 29 March 2018, subject to the appropriate caps and floors applied on an annual or compound basis. Past increases are based upon known increases to the inflation index with caps and collars applied as appropriate.

Defined Benefits - Benefits at retirement under BSPS2 (2/4)

Calculated data used

- BSPS2 Deferred revaluation
- BSPS2 early retirement factors
- BSPS2 late retirement factors
- BSPS2 commutation factors

Prerequisites inputs

- Pension benefit tranches
- Section
- Retirement Date

Frequency of update

- Quarterly

Methodology

Early retirement factor

- If the consumer's Retirement Date is before the Normal Pension Age of the tranche, an early retirement factor in line with page 43 will be applied for the period between the Retirement Date and the Normal Pension Age.

Late retirement factor

- If the consumer's Retirement Date is after the Normal Pension Age of the tranche, a late retirement factor in line with page 44 will be applied for the period between the Normal Pension Age and the Retirement Date.

Anti-franking test

- If the consumer's Retirement Date is on or after the Normal Retirement Date, an anti-franking test will apply.
- The GMP is revalued up to GMP age and carved out of the total Pre 97 pension at GMP age.
- The Pre 97 Excess pension is then set equal to the greater of the total Pre 97 Excess pension at Date of Leaving and the total Pre 97 pension at GMP Age less the consumer's GMP that has been revalued from date of leaving to GMP Age in line with GMP increases.
- For the majority of consumers, it is expected that the GMP only underpin will not bite.

Defined Benefits - Benefits at retirement under BSPS2 (3/4)

Methodology

Allowance for pension commencement lump sum

- Where the consumer's Retirement Date is before the Valuation Date, allowance needs to be made for the consumer to have commuted pension for cash.

Where the consumer is accessing their DC fund on a flexible basis:

- The consumer is assumed to take the maximum tax-free lump sum
- The maximum lump sum is calculated as

$$(20 \times \text{Pension} - 3 \times \text{automatic lump sum}) / (3 + 20 / \text{Commutation Factor}) + \text{automatic lump sum}$$

- The amount of pension commuted is calculated as

$$(\text{maximum lump sum} - \text{automatic lump sum}) / \text{Commutation factor}$$

Where the consumer has fully annuitised their DC fund after taking a pension commencement lump sum:

- If the consumer is entitled to an automatic lump sum payment at retirement, this will define the minimum amount of tax-free lump sum to be taken.
- The maximum amount of tax-free lump sum is then calculated, in line with the above methodology, this will define the maximum amount of tax-free lump sum that can be taken.
- Where the consumer has taken a lower amount under their DC pension arrangement than the maximum amount available under the DB scheme, the figure is set equal to the PCLS actually taken or the automatic lump sum where this is higher
- Where the consumer has not taken a PCLS from their DC pension arrangement, this is set equal to the automatic lump sum
- This cash will be taken from each tranche (except GMP) on a proportionate basis, with the proportion commuted from each tranche equal.
- The pension commencement lump sum is set equal to the automatic lump sum payment plus any cash due to commutation of pension.

Calculated data used

- BSPS2 Deferred revaluation
- BSPS2 early retirement factors
- BSPS2 late retirement factors
- BSPS2 commutation factors

Prerequisites inputs

- Pension benefit tranches
- Section

Frequency of update

- Quarterly

Defined Benefits - Benefits at retirement under BSPS2 (4/4)

Comments

Calculated data used

- BSPS2 Deferred revaluation
- BSPS2 early retirement factors
- BSPS2 late retirement factors
- BSPS2 commutation factors

Prerequisites inputs

- Pension benefit tranches
- Section

Frequency of update

- Quarterly

- Note that some consumers may have a split Normal Pension Age, depending on tranche of benefit. Allowance will be made for differing Normal Pension Ages when applying early and late retirement factors.
- Where the Retirement Date is after the Valuation Date, an adjustment is made to the post-retirement discount rate assumption to allow for the option for the consumer to take a pension commencement lump sum.

Defined Benefits - Valuing whole of life benefits in BPS2

Economic data used

- Awarded pension increases

Calculated data used

- BPS2 Benefits at retirement
- Whole of life annuities by each pension tranche
- Pre-retirement discount rate
- TTR

Frequency of update

- Quarterly

Overview

A capitalised value of the benefits needs to be calculated for all benefits that are payable for the whole of life from BPS2.

Methodology

Retirement Date before the Valuation Date

- The pension at the Retirement Date (after all adjustments specified on pages 63 to 67) will be increased up to the Valuation Date in line with realised pension increases, in line with the associated inflation indices and caps and floors where relevant. See page 73 which sets out how these payments prior to the Valuation Date are allowed for in the valuation of benefits.
- The increased pension at the Valuation Date will be multiplied by a whole of life annuity, as set out on pages 40 to 41, in line with the appropriate pension increase assumption.

Retirement Date on or after the Valuation Date

- The pension at the Retirement Date (after all adjustments specified on pages 63 to 67) is multiplied by a whole of life annuity, as set out on pages 40 to 41, in line with the appropriate pension increase assumption.
- The benefit is then discounted back to the Valuation date in line with the below formula

Pension at retirement * whole of life annuity * $(1 + \text{Pre-retirement discount rate})^{-TTR} * ttrPx$

Comments

- The calculation will be undertaken for each tranche of pension.
- $ttrPx$ is the probability of survival from age x to the Retirement Date of the consumer

Defined Benefits - Valuing temporary benefits in BSPS2

Economic data used

- Awarded pension increases

Calculated data used

- BSPS2 Benefits at retirement
- Temporary annuities by each pension tranche
- Pre-retirement discount rate
- TTR

Frequency of update

- Quarterly

Overview

A capitalised value of the benefits needs to be calculated for all benefits that are payable for a temporary period from BSPS2 (eg bridging pensions).

Methodology

Retirement date before the Valuation Date

- The pension at the Retirement Date (after all adjustments specified on pages 63 to 67 will be increased up to the Valuation Date in line with awarded pension increases, in line with the associated inflation indices and caps and floors. See page 73 which sets out how these payments prior to the Valuation Date are allowed for in the valuation of benefits.
- The increased pension at the Valuation Date will be multiplied by a temporary annuity, as set out on page 40 to 41, in line for the appropriate pension increase assumption for the benefit level.

Retirement date on or after the Valuation Date

- The pension at the Retirement Date (after all adjustments specified on pages 63 to 67) is multiplied by a temporary annuity, as set out on page 42, in line with the appropriate pension increase assumption for the benefit level.
- The benefit is then discounted back to the Valuation Date in line with the below formula

$$\text{Pension at retirement} * \text{temporary annuity} * (1 + \text{Pre-retirement discount rate}) ^ {(-\text{TTR})} * \text{ttrPx}$$

Comments

- The calculation will be undertaken for each tranche of pension.
- This will apply to both bridging pensions and notional GMP pensions in payment prior to GMP age
- ttrPx is the probability of survival from age x to the Retirement Date of the consumer

Defined Benefits - Valuing lump sum benefits in BSPS2

Calculated data used

- BSPS2 Benefits at retirement
- Pre-retirement discount rate
- TTR

Frequency of update

- Quarterly

Overview

A capitalised value of the benefits needs to be calculated for all lump sum benefits that are payable from BSPS2 (eg automatic lump sum benefits).

Methodology

Retirement date before the Valuation Date

- It is expected that the lump sum benefits will have already been paid and hence will be caught by past payments. Therefore no additional valuation is required (see page 73).

Retirement date on or after the Valuation Date

- The lump sum at the Retirement Date (after all adjustments specified on pages 63 to 67) is discounted back to the Valuation date in line with the below formula

$$\text{Lump sum at retirement} * (1 + \text{Pre-retirement discount rate}) ^{-\text{TTR}} * \text{ttrPx}$$

Comments

- The calculation will be undertaken for each tranche of lump sum.
- ttrPx is the probability of survival from age x to the Retirement Date of the consumer

Defined Benefits - Valuing contingent benefits in BSPS2 (1/2)

Calculated data used

- BSPS2 Benefits at retirement
- Pre-retirement discount rate
- Deferred revaluation
- Proportion married
- q(x) mortality rates
- Contingent annuity

Prerequisites inputs

- Date of birth
- Spouse / civil partner's date of birth
- Date of leaving active service
- Valuation Date
- Retirement Date
- Pension benefit tranches
- Contingent spouse pension for each pension tranche

Frequency of update

- Quarterly

Overview

Contingent benefits are offered by BSPS2 in the form of a spouse's pension equal to a percentage of the consumer's pre-commutation pension.

Methodology

Death before retirement

The spouse pension is equal to the spouse% of the consumer's pension, payable for the remainder of the spouse's life. The value is therefore set equal to the sum over the period to retirement of:

$$\sum \frac{\text{Pension at Valuation Date} * \text{spouse\%} * (1-tPx) * a(y+t) * (1+\text{revaluation})^t * \text{proportion married}}{(1+\text{pre-retirement discount rate})^t}$$

A refund of contributions is also due. This is equal to:

$$\frac{\sum \text{Contributions paid to the OBSPS} * (1 + \text{interest on contributions})^t * (1-tPX)}{(1+\text{pre-retirement discount rate})^t}$$

Where:

- x is the age at the Valuation Date of the consumer
- t is the number of years since the Valuation Date
- tPx is the probability of survival from age x to age x+t of the consumer
- a(y+t) is the single life annuity for the consumer's spouse / civil partner at age y+t
- Revaluation is the revaluation derived for each tranche in line with the methodology set out on page 63
- Pre-retirement discount rate is the rate derived in line with the methodology set out on page 28
- Where the consumer has already died at the Valuation Date and the spouse is in receipt of a spouse pension, no contingent benefit is calculated.

Defined Benefits - Valuing contingent benefits in BSPS2 (2/2)

Calculated data used

- BSPS2 Benefits at retirement
- Pre-retirement discount rate
- Deferred revaluation
- Proportion married
- $q(x)$ mortality rates
- Contingent annuity

Prerequisites inputs

- Date of birth
- Spouse / civil partner's date of birth
- Date of leaving active service
- Valuation Date
- Retirement Date
- Pension benefit tranches
- Contingent spouse pension for each pension tranche

Frequency of update

- Quarterly

Methodology

Death after retirement

The spouse pension is equal to the spouse% of the consumer's pre-commutation pension, payable for the remainder of the spouse's life. The value is therefore set equal to the sum over the period to retirement of:

$$\frac{ttrPx * \text{Pension revalued to retirement date} * \text{spouse\%} * a\text{-rev}(x,y) * \text{proportion married}}{(1 + \text{Pre-retirement discount rate})^{(TTR)}}$$

Where:

- $ttrPx$ is the probability of survival from age x to the Retirement Date of the consumer
- x is the age at Valuation Date of the consumer
- $a\text{-rev}(x,y)$ is derived in line with the methodology set out on page 41

Comments

- Where the consumer has already died at the Date of Valuation and the spouse is in receipt of a spouse pension, no contingent benefit is calculated.

Defined Benefits - Valuing past benefit payments from BSPS2

Calculated data used

- BSPS2 Benefits at retirement
- Outturn RPI inflation
- Outturn CPI inflation

Economic data used

- Bank of England base rate

Frequency of update

- Quarterly

Overview

Where the Valuation Date is after the Retirement Date, allowance needs to be made in the calculation for past benefit payments. These will be rolled up to the Valuation Date in line with the Bank of England Base Rate.

Methodology

Pension commencement lump sum

Pension commencement lump sums are allowed for in line with the 'Allowance for pension commencement lump sum' section set out on page 67, both due to an automatic lump sum and cash commutation.

Pension payments

Benefit payments start from the Retirement Date and are assumed to occur Quarterly in arrears. The initial level of the benefit payment is in line with the Pension at Retirement, set out on page 64, after allowance for early and late retirement factors and cash commutation.

Pension increases are applied on an annual basis in line with actual pension increase awards.

Applying interest and summing payments

$$\sum(\text{benefit payment } t) * (1 + \text{compounded Bank of England base rate } t)$$

Where

Benefit payment t = number of benefit payments

Compounded Bank of England base t is the cumulative return for benefit payment t

Comments

- Pension increases are applied on an annual basis on the anniversary date of the Retirement Date.

Defined Benefits - Total valuation of BSPS2 benefits

Calculated data used

- Valuation of whole of life benefits in the BSPS2
- Valuation of temporary benefits in the BSPS2
- Valuation of lump sum benefits in the BSPS2
- Valuation of contingent benefits in the BSPS2
- Valuation of past payments in the BSPS2

Frequency of update

- Quarterly

Overview

The total valuation of BSPS2 benefits takes account of all aspects of the BSPS2 Scheme. This is used as the assessment value for the BSPS2 benefits when calculating the gross redress

Methodology

The total valuation of the BSPS2 benefits is set equal to:

- Valuation of whole of life benefits in the BSPS2, plus
- Valuation of temporary benefits in the BSPS2, plus
- Valuation of lump sum benefits in the BSPS2, plus
- Valuation of contingent benefits in the BSPS2, plus
- Valuation of past payments in the BSPS2

Valuation of benefits - Defined Contribution

Defined Contribution - Valuation of current funds

Calculated data used

- Outturn CPI inflation

Prerequisites inputs

- Fund value
- Date of fund value
- Valuation Date

Frequency of update

- Quarterly

Overview

For current funds that have yet to be withdrawn, a valuation will be required to be obtained and inputted by the User.

Methodology

Where the fund value has been provided as a liquid fund

The fund value is set equal to the quoted value from the provider.

Where the fund value has been provided as an illiquid fund

The fund value is set equal to:

Fund value obtained * Outturn CPI inflation

Comments

- All efforts should be made to obtain an updated DC fund valuation at the Valuation Date.
- If an up-to-date valuation is not readily available for a liquid investment a firm should calculate the notional value of the fund on the valuation date using available information. For example, using the known number of units and an available unit price, or a last known value and the change in the unit price (and allowing for known charges);
- In line with DISP App 4.5.6, when deciding what action to take to place a value on investments of illiquid fund, a firm should consider the reason why a valuation is not readily available for the investment and, in particular, seek to identify whether assets could be:
 - (a) associated with a scam;
 - (b) associated with illegal activity; or
 - (c) subject to insolvency procedures.
- Where the only available valuation of an investment is the book value, a firm should consider whether the book value is representative of what could realistically be realised from the investment and, if appropriate, adjust the valuation accordingly, which may include disregarding 100% of the book value of the investment.

Defined Contribution - Valuation of withdrawals and payments from the fund

Economic data used

- Bank of England base rate
- Outturn RPI inflation
- Outturn CPI inflation

Prerequisites inputs

- Withdrawal amount
- Withdrawal date
- Initial annuity payment value
- Annuity start date
- Valuation Date

Frequency of update

- Quarterly

Overview

The consumer may have flexibly accessed some or all of the funds in their DC vehicle. These need to be taken into account when producing a capitalised value of the defined contribution arrangement.

Methodology

Flexible withdrawals

Any withdrawals will be rolled up for interest to allow for the passage of time since the payment was made. This interest will be applied in line with the Bank of England base rate on a compound basis.

$$\sum(\text{withdrawal amount } t) * (1 + \text{compounded Bank of England base rate } t)$$

Where

Withdrawal amount t = number of withdrawal amounts

Compounded Bank of England base t is the cumulative return for benefit payment t

Annuity payments

Similarly, benefit payments start from the point that an annuity commenced and are assumed to occur on a monthly basis in arrears. The initial level of the benefit payment is in line with the initial annuity purchase level.

Pension increases are applied on an annual basis in line with actual pension increase awards and the level of benefit secured within the annuity.

$$\sum(\text{annuity payment } t) * (1 + \text{compounded Bank of England base rate } t)$$

Where

Annuity payment t = number of annuity payments

Compounded Bank of England base t is the cumulative return for benefit payment t

Where N = number of days since the annuity payment was made calculated at the Valuation Date.

Comments

- Allowance is made for changes in the Bank of England base rate over time.

Defined Contribution - Valuation of annuity purchases

Calculated data used

- Whole of life annuity
- Contingent annuity
- Outturn RPI inflation
- Outturn CPI inflation

Prerequisites inputs

- Initial annuity payment value
- Annuity start date
- Valuation Date
- Spouse%
- Information on increases to apply to the annuity

Frequency of update

- Quarterly

Overview

Where an annuity has been purchased, a capitalised value of the expected future benefit payment needs to be calculated.

Methodology

Consumer's benefit

- The annuity pension secured at the point of annuitisation is increased up to the Valuation Date
- The benefit is valued in line with the below formula

$$\text{Consumer's Pension at Valuation Date} * a(x)$$

Contingent benefit

- The spouse annuity pension secured at the point of annuitisation is increased up to the Valuation Date

$$\text{Consumer's Pension at Valuation Date} * \text{Spouse\%} * a\text{-rev}(x,y)$$

Where:

- $a(x)$ is derived in line with the methodology set out on page 40
- $a\text{-rev}(x,y)$ is derived in line with the methodology set out on page 41
- Total value from the annuity is equal to the consumer's benefit plus the contingent benefit
- An allowance for a guarantee period is included in $a(x)$ and $a\text{-rev}(x,y)$

Defined Contribution - Total valuation of DC benefits

Calculated data used

- Valuation of current fund
- Valuation of benefit payments from the fund
- Valuation of annuity purchases

Frequency of update

- Quarterly

Overview

The total valuation of DC benefits takes account of all aspects of the DC arrangement. This is used as the DC scheme assessment value for the gross redress.

Methodology

The total valuation of the DC is set equal to:

- Valuation of current funds, plus
- Valuation of benefit payments from the fund, plus
- Valuation of annuity purchases

Redress calculation - Gross redress

Calculated data used

- PPF Scheme total value
- BSPS2 total value
- DC total value

Prerequisites inputs

- Comparator Scheme selected

Frequency of update

- Quarterly

Overview

The gross redress payable is the amount due before any adjustments are made for the way the redress will be paid.

Methodology

Where the comparator scheme is OBSPS

The gross redress is set equal to the maximum of

- The PPF Scheme total value less the total value of the DC scheme plus the initial advice charge and any compensation due to consequential loss
- Zero

Where the comparator scheme is BSPS2

The gross redress is set equal to the maximum of

- The BSPS2 total value less the total value of the DC scheme plus the initial advice charge and any compensation due to consequential loss
- Zero

These redress amounts will be split by past and future loss.

The User will then be responsible for determining the amount of redress that is payable to the consumer (eg after adjustment for tax).

Comments

- Both redress values will be calculated in the model and outputted for completeness.
- The initial advice charge calculation is set out on the following page.

Other adjustments - initial advice charge

Calculated data used

- Valuation of current DC funds
- Valuation of comparator scheme DB benefits

Prerequisites inputs

- Currently in receipt of ongoing advice
- Current advice charge
- Whether an initial charge needs to be applied

Frequency of update

- Quarterly

Overview

If the consumer is:

- (1) not in an ongoing advice arrangement with any firm; or
- (2) the consumer is in an ongoing advice arrangement with the firm that gave the non-compliant pension transfer advice, where;
 - (a) the firm is charging the consumer more than the default ongoing adviser charges (0.5% p.a.); and
 - (b) the firm will not provide an undertaking to reduce its ongoing adviser charge to the level of the default ongoing adviser charge (or lower) for the period to the consumer's assumed retirement date; or
 - (c) consumer has requested to terminate the ongoing advice arrangement with the firm that gave the non-compliant pension transfer advice and move to a new adviser,

an initial advice charge will be added to the redress amount.

This only applies to cases where the Valuation Date is before the Retirement Date.

Methodology

Where the above conditions hold, the initial advice charge is set as 2.4% of the consumer's DC fund value and primary compensation sum, subject to a minimum of £1,000 and a maximum of £3,000.

If the member does not require the initial advice, then no advice charge will be added to the redress amount.

Redress calculation - apply a compensatory amount

Calculated data used

- Gross redress

Prerequisites inputs

- Compensatory rate
- Valuation Date
- Payment Date

Frequency of update

- Daily

Overview

As part of the redress process, an additional compensatory amount will need to be applied to increase the redress amount for the period of time between the Valuation Date and the Payment Date, as detailed in DISP App 4 Annex 1 section 14.

Methodology

Where the Valuation Date is before the Retirement Date

Gross redress with appropriate adjustments applied $\times (1 + \text{compensatory rate})^{\text{term}/365}$

Where:

- The term is the number of days from the valuation date to the payment date, not counting the payment date itself, and where the valuation date is Day 1.
- The compensatory rate is the pre-retirement discount rate (with an adjustment for charges).

Where the Valuation Date is on or after the Retirement Date

Gross redress with appropriate adjustments applied $\times (1 + \text{compensatory rate})^{\text{term}/365}$

Where:

- The term is the number of days from the valuation date to the payment date, not counting the payment date itself, and where the valuation date is Day 1.
- The compensatory rate is the post-retirement discount rate (with no adjustment for annuity pricing or pension commencement lump sums).

Retranching

Retranching methodology

Users of the calculator have the ability to input data into bespoke tranches, with the dates of each tranche based on the data that is available to them where a Time to Choose letter is not available. This may not necessarily correlate with the tranches of benefits offered by the OBSPS. For example, Users may have data for the Main Section split by pre and post 06/04/1997 benefits, but the benefits applicable to a section could be pre and post 2006.

Uniform accrual

Where service entered into the Calculator covers more than one tranche of benefit in the OBSPS, it is assumed that service has been accrued uniformly throughout this period. For example:

Service dates

Service start - April 2004

Service end - April 2010

Total service - 6 years

Total pension applicable to this service - £1,000

Tranches benefits earned in

Pre 06 - April 2004 to April 2006 = 2 years

Post 06 - April 2006 to April 2010 = 4 years

Tranche of benefits

Pre 06 = Pre 06 service / Total service entered * pension applicable = $2 / 6 * £1,000 = £333.33$

Post 06 = Post 06 service / Total service entered * pension applicable = $4 / 6 * £1,000 = £666.67$

Accrual rate changes

An adjustment is made where there are any known accrual rate changes to tranche the benefit accordingly.

Pre and post 1997 service

Where service straddles 6 April 1997, it is important that all benefits are considered due to the existence of GMP benefits. For the period before 6 April 1997, excess pension is likely to have accrued at a slower rate than excess pension accrued from 6 April 1997.

For these benefits, the Calculator sums up all pensions where the tranche start date is before 6 April 1997. From this, a daily total pension accrual is determined. The daily GMP accrual is then determined with the daily Pre 97 excess accrual set equal to the daily total pensions accrual less the daily GMP accrual. This is then converted into a Pre 97 excess pension by multiplying the Pre 97 excess accrual by the number of days service up to 6 April 1997. Finally, the Post 97 excess is set equal to the total of all pensions less GMP and Pre 97 excess pension.