

CMC™ ("Check My Calculation")

CMC™ type: Redress, prospective loss, standard

Subject to the following disclaimer, lets you fully check the calculation identified by Congruent Calculations™ control ID : 33BA97E5B05C1E5980258BCE005189DF

DISCLAIMER: The CMC™ is a product of the subscriber operating the CONGRUENT CALCULATIONS™ service and is subject to all the terms and conditions applying to the operation by the subscriber. In particular, the subscriber is responsible for determining that the required calculation is within the scope of the software, including the specific structure of the scheme benefits to be modelled, and that the data entered has been validated before being entered and has then been entered correctly; the subscriber is then responsible for checking that the details in the CMC™ are correct

WARNING: Issue of this CMC™ is NOT a statement that the responsibilities stated in the disclaimer have been completed; if a certificate is required by a customer of the subscriber to the effect that the subscriber has the required understanding of the responsibilities and has fully discharged those responsibilities this must be in a separate document referencing the control ID stated above

CERTIFIED: Congruent certifies that the results are in accordance with FCA DISP App 4.2.7G - the warning above is therefore superceded

For this calculation retirement age is attained after the valuation date (sometimes called a "prospective loss" calculation)

The calculation considers the scheme benefits given up

For the user's convenience we provide a facility for the user to enter a flexible pension value at valuation date or transfer date (values given at transfer date are revalued using a specified annual growth rate or using an appropriate index as a proxy); a nil value below may mean that no value was entered by the user

Figure entered for value of flexible pension benefits : £0.00

Value of flexible pension at valuation date : £0.00

DISP App 4 methodology used

Section A - Data (excluding pension - see section B)

Calculation Run Date	Calculation Run Time	Valuation Date	Member DOB	Member Gender	Spouse DOB	Spouse Gender	Transfer Date	Date of Leaving	Retirement Age	Spouse Benefit	Proportion Married	Management Charges
07/11/2024	14:51:47	01/10/2024	10/10/1965	Neutral	05/05/1970	Neutral	31/03/2017	31/03/2017	65	50.000%	94.000%	1.250%

Notes about data (not specific to the calculation)

Calculation Run Date and Calculation Run Time are when the calculation was actually run

Market data is applied on an "end of previous business day" basis

Valuation Date is set when the data is entered and may be that date (or a recent date) or the date of an award or agreement

Member name and (if applicable) spouse name are not shown, for reasons of confidentiality

Member and spouse gender may be shown as "Neutral" - actual gender is not used in the calculation

Retirement Age means the retirement age required for the calculation and pension data must apply for that age

(If the member has in fact retired since the transfer date that is not likely to be relevant to the scheme retirement age)

Spouse Benefit means the percentage provided by the scheme but nil may have been inputted to ignore the spouse benefit

Where the Spouse date of birth is equal to the Member date of birth this may be because there is no spouse or may be an assumption

Proportion married is a prescribed calculation assumption, overriding actual marital status at retirement

Management charges are those incurred by the Member for management of his flexible pension after transfer and may include advice charges

Section B - Pension

Annual Pension at DOL	Extend Revaluation (In Years)	Start/Finish (Years from Retirement)	Pre-Retirement Indexation	Pre-Retirement Fixed	Pre-Retirement Cap	Pre-Retirement Floor	Pension at Valuation Date	Pension at Retirement Age	Post-Retirement Indexation	Post-Retirement Fixed	Post-Retirement Cap	Post-Retirement Floor

£10,000.00	0	0 / Life	RPI	N/A	100.00%	-100.00%	£14,718.76	£17,402.71	CPI	N/A	100.00%	-100.00%
£5,000.00	0	0 / 1	CPI	N/A	100.00%	-100.00%	£6,641.94	£7,474.38	CPI	N/A	100.00%	-100.00%

Indexation Date: Specific (Inflation index set = September, Inflation index apply = April)

Post-retirement first increase: Proportionate

Tranche labels

Tranche 1 (Not GMP, YOY)

Tranche 2 (Not GMP, YOY)

Notes about pension amount and parameters

Where there is more than one line each is a separate pension tranche; total pension is the sum of all the tranches; a tranche may be a nil pension

All tranches must have the same retirement age and spouse benefit

Pension input is interpreted to be annual pension at date of transfer, or at date of leaving the scheme if earlier

RPI* - CPI replaced RPI for statutory revaluation post April 2011

Pension inputted is revalued, first to the valuation date and then to normal retirement age, using the pre-retirement revaluation basis and parameters shown

(for the first stage actual revaluation data is used; for the second stage the process is one of creating a forecast)

Where the revaluation cap is shown as 100% this means no cap and where the revaluation floor is shown as -100% this means no floor

Pension increases where a cap and/or floor are relevant are adjusted using the Black-Scholes model (see FCA guidance)

Annual Pension at Date and Pension at Valuation Date are unweighted pension values

Pension at Retirement Age is weighted using the relevant Tranche Retirement Factor

YOY indicates inflation caps and floors to be applied on year on year basis

CUM indicates inflation caps and floors to be applied on a cumulative basis

Section C - Value of Pension Benefits (and important notes on settlement issues)

Principal Value at Valuation Date	Years to Retirement	Discount Factor	Survival Factor	Value at Retirement Age	Pension at Retirement Age	Annuity Value
£321,118.60	6.0250	0.87197	0.96982	£379,730.24	£24,877.08	15.2643

Total Value at Valuation Date (including Other Benefits and Alternative Benefits): £331,173.14

Important notes on settlement issues and redress determination

Settlement issues can include the choice of method of providing the primary amount of compensation - paying compensation into the fund, a process known as augmentation, or alternatively payment by a cash lump sum. There may be various possible tax-related issues (which will be different for the two alternative methods), consideration of adviser charges, compensation for costs incurred, compensation for distress or inconvenience and compensation for any delay in payment of redress. In some cases there may be an offset for incentive payments. Other adjustments, positive or negative, may be applicable. Where the primary amount of compensation is provided by augmentation there may be other amounts paid in cash.

If compensation is paid by augmentation, 25% of the compensation amount would be available as a tax-free cash lump sum on retirement, but the balance of 75% would be expected to incur income tax at the consumer's marginal tax rate at retirement - this is equivalent at retirement to the situation if the former member had retained benefits in the scheme. However there may be further tax considerations e.g. annual allowance, lifetime allowance - this list is not exhaustive.

If, alternatively, compensation is paid as a cash lump sum there is no tax payable. The standard adjustment is to apply a multiplicative factor of 25% + 75% x (100% - assumed marginal rate of income tax). For example, if the assumed marginal rate is 20% at retirement, then the factor applied to the primary compensation sum would be 85%. You must also consider state mean tested benefits for the member for cash compensation

The determination of redress is therefore the sum of the primary compensation (adjusted for tax as noted above, if relevant) and secondary or consequential losses compensation (e.g. to reflect change of advisor, if relevant) and the additional compensation to reflect the delay in payment between Valuation Date and settlement Date minus the value of the flexible pension benefits at the Valuation Date taking into account

withdrawals and/or contributions (if relevant)

Other Benefits

The following values are provided (or the specification for the calculation may have been to ignore Other Benefits)

Usually the value of other benefits is payable in addition to the value of pension benefits

Value of pension guarantee = £1,448.05 (Guarantee period = 60 months, Discount = Not discounted, Overlap = Overlapping with spouse benefit)

Alternative Benefits

The following values are provided (or the specification for the calculation may have been to ignore Alternative Benefits)

Usually the value of Alternative Benefits is payable in addition to the value of pension benefits

Value of death before retirement pension = £8,038.71

Value of death before retirement lump sum = £567.78

DISP App 4: Additional Compensation Sum

This sum increases the redress amount using the following factor:

$$(1+r)^{t/365}$$

where:

r = 2.300%; and

t = 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

DISP App 4: Consequential losses

Consequential losses are payable if consumer is not in an ongoing advice arrangement with any firm or the client will not undertake a reduction to 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. This amount is 2.4% of the total value of the personal pension plan subject to a minimum of £1,000 and maximum of £3,000.

Notes about principal results (before analysing Value at Retirement Age)

It is Value at Valuation Date, in the first column, that is the result of the calculation - the other values are significant intermediate results

The overall method is to forecast the pension payable from retirement including escalation, value that at retirement age and then produce the value at the valuation date,

Value at Valuation Date is determined from Value at Retirement Age by multiplying by both of the two factors shown - Discount Factor and Survival Factor

The Discount Factor allows for the different time values of money at the Valuation Date and Retirement Age respectively - applying a discount rate to that period

The Survival Factor uses a mortality table to determine survival of the member from the Valuation Date to Retirement Age

Period to Retirement is relevant to both the above factors; the issues of discounting and survival / mortality are explored further in later sections

Value at Retirement Age and Pension at Retirement Age are intermediate results and where there are multiple pension tranches these are combined for these results

Annuity Value is a derived value at retirement age which is shown as being of interest; the standard HMRC factor is 20 for comparison (used for some tax-related purposes)

Section D - Pre-Retirement Revaluation - First Stage to Valuation Date

Annual Pension at Date	Date of Annual Pension	Pension at Valuation Date	Valuation Date	Revaluation Periods	Revaluation Increases	Percentage Increase	Average Annual Increase	Pre-Retirement Indexation	Pre-Retirement Fixed	Pre-Retirement Cap	Pre-Retirement Floor
£10,000.00	31/03/2017	£14,718.76	01/10/2024	8.0000	YOY	47.19%	4.95%	RPI	N/A	100.00%	-100.00%
£5,000.00	31/03/2017	£6,641.94	01/10/2024	8.0000	YOY	32.84%	3.61%	CPI	N/A	100.00%	-100.00%

Notes about pre-retirement revaluation - first stage to valuation date

This section shows the derivation of Pension at Valuation Date (see Section B)

The calculated annual average increase can be checked approximately against actual average increase of the index concerned using public information

Annual Pension at Date and Pension at Valuation Date are unweighted pension values

YOY indicates inflation caps and floors to be applied on year on year basis

CUM indicates inflation caps and floors to be applied on a cumulative basis

Section E - Pre-Retirement Revaluation - Second Stage to Retirement

Pension at Valuation Date	Valuation Date	Tranche Factor	Pension at Retirement Date	Retirement Date	Revaluation Periods	Revaluation Increases	Percentage Increase	Average Annual Increase	Pre-Retirement Indexation	Pre-Retirement Fixed	Pre-Retirement Cap	Pre-Retirement Floor
£14,718.76	01/10/2024	100.000%	£17,402.71	10/10/2030	5.0000	YOY	18.23%	3.41%	RPI	N/A	100.00%	-100.00%
£6,641.94	01/10/2024	100.000%	£7,474.38	10/10/2030	5.0000	YOY	12.53%	2.39%	CPI	N/A	100.00%	-100.00%

Notes about pre-retirement revaluation - second stage to retirement

This section shows the derivation of Pension at Retirement Age (see Section B)

The calculated annual average increase can be checked approximately against market data

The revaluation to retirement age is based on the complete number of years (or tax years for GMP pension tranches) between Date left Scheme and Retirement Age

Pension at Valuation Date is unweighted

Pension at Retirement Date is weighted using the relevant Tranche Factor

Post-retirement first inflation increase is proportion of a years increase

Section F - Inflation Assumptions (RPI and, by adjustment, CPI)

	Number of Years	Spot Rate (Raw)	Rate (Derived)	RPI Assumption	CPI Adjustment	CPI Assumption
Pre-Retirement	6.0250	3.515%	3.370%	3.350%	1.000%	2.350%
Pre- plus Post-Retirement	22.0250	3.333%	N/A	N/A	N/A	N/A
Post-Retirement	16.0000	N/A	3.318%	3.300%	0.031%	3.300%

Notes about inflation assumptions

Based on Bank of England UK instantaneous implied inflation forward curve (gilts)

The Post-Retirement number of years is average length of time from date of valuation to pension payments; the value is prescribed by FCA

The Spot Rates (Raw) are obtained from the Bank of England data

The Rates (Derived) are the transformed rates taking into account market data yield conventions and any inflation risk premium (where relevant)

RPI Assumption is as per FCA methodology (after rounding adjustments)

CPI Adjustment is as per FCA methodology which gives rise to the CPI Assumption (after rounding adjustments)

Section G - Pre-Retirement Discount Rate

Pre-retirement discount rate components and result:

Inflation Rate (Derived) = 3.370% ("Raw" = 3.515%)

CPI Adjustment = 1.000%

Dividend yield = 3.713%

Dividend growth rate = 1.000%

Personal pension charges = 1.250%

Interest rate spread adjustment = 0.000%

Pre-retirement discount rate = 2.300%

Notes about pre-retirement discount rate

There are three stages to arrive at the result

The spot inflation rate referred to is published by the Bank of England each working day and can be found on their website but must be converted from continuously compounded rates to an annual rate

The dividend yield referred to is published FTSE data; FCA specify 1% for dividend growth

First stage - multiplicatively combine the CPI spot inflation rate, dividend yield, and dividend growth rate

This means calculating $(1 + \text{Inflation Rate (Derived)} - \text{CPI Adjustment}) \times (1 + \text{dividend yield}) \times (1 + \text{dividend growth rate}) - 1$

Second stage - take half that rate - this is an FCA specification and presumably represents the probability that the full rate will not be achieved

Third stage - use the following netting formula: $[(1 + i\%) \times (1 - \text{Personal Pension Charges})] - 1$ Where $i\%$ is the pre-retirement discount rate (unadjusted for charges) - this has the effect of adjusting for the fact that the alternative pension arrangement, ie where the transfer value is transferred to, will necessarily suffer charges

Fourth stage - add any interest rate spread adjustment (if relevant - default is no adjustment)

Section H - Post-Retirement Discount Rate

Post-retirement discount rate components and result:

A. Term to retirement = 6.0250

B. Spot interest rate to retirement = 3.823% ("Raw" = 3.751%)

C. Average term in retirement = 16.0000

D. Spot interest rate for full period = 4.721% ("Raw" = 4.613%)

E. Post-retirement discount rate (rounded) before adjustments = 5.062%

F. Annuity costs = 0.6%

G. Increase in discount rate on a quarter of pension (to allow for PCLS - prospective loss only) = $1.60\% \times 25\%$

H. Interest rate spread adjustment = 0.000%

Post-retirement discount rate = 4.850%

Notes about post-retirement discount rate

There are several stages to arrive at the result

FCA has issued tables, depending on retirement age, for the average period after retirement until pension payments will be made

"Raw" rates are taken directly from Bank of England data using integer years for relevant period

The spot interest rates referred to are published by the Bank of England each working day and can be found on their website but must be converted from continuously compounded rates to annual rates

Use the spot interest rates to forecast accumulation at interest over the period from the valuation date until the end of that average period

Now use the spot interest rates to forecast accumulation at interest over the period from the valuation date until retirement

Accumulation at interest during retirement is then found by multiplicatively deducting the second interest accumulation from the first

The average annual interest rate is calculated by multiplicatively dividing the result by the average period after retirement until pension payments will be made

The result is then reduced by the forecast annuity costs;

Note that the calculation process is defined by FCA and includes some rounding requirements

The Interest rate spread adjustment is a user defined parameter - the default model value is 0% but the user may have entered a value different from 0%

The formulae, in the order in which the explanation has been given, are (R1 to R4 are labels used for stages in calculating the result):

$$R1 = (1 + D)^{(A + C)}$$

$$R2 = (1 + B)^A$$

$$R3 = R1 / R2$$

$$R4 = R3^{(1 / C)}$$

$$\text{Result} = (R4 - 1) - F + G + H \text{ with } R4 \text{ rounded to nearest } 0.05\%$$

CERTIFIED