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THE PENSIONS TRUST – SCOTTISH HOUSING ASSOCIATIONS' PENSION SCHEME (SHAPS)

Discussion of FRS 102 Assumptions

For month ends from 31 March 2026 to 28 February 2027

30 April 2026

We have prepared this report for TPT Retirement Solutions Limited ("TPT").

This report has been commissioned by TPT. The sole purpose of this report is to provide TPT with a recommended approach to deriving key assumptions when preparing accounting disclosures under Section 28 of FRS 102 for employers participating in the Scottish Housing Associations' Pension Scheme ("SHAPS").

This report sets out a proposed approach for setting the assumptions for month ends between 31 March 2026 and 28 February 2027 ("2026/27 month ends").

The views expressed in this report are based on our latest opinions and experience of the wider practice of setting FRS 102 assumptions. This report does not contain any recommendations made specifically for any particular participating employer(s). As such, we have not taken into account any employer-specific information that we may otherwise have considered if recommending an approach to deriving assumptions on an individual employer basis. The contents of this report should not be taken as advice to individual employers as to what assumptions they should ultimately adopt, rather as generic (non-employer specific) recommendations to TPT as to what approach should be taken for setting "default" assumptions. Our understanding is that TPT's online accounting tool gives individual employers flexibility to adjust assumptions where they wish to do so.

The advice in this paper should be considered alongside the Appendix "Supporting Information on Accounting Valuation Assumptions".

The following table provides a summary of the proposed approach for setting the assumptions to use for the 2026/27 month ends, alongside the approach adopted for month ends between 31 March 2025 and 28 February 2026 ("2025/26 month ends") for comparison, along with the rationale for any changes in estimation approach.

The benefit obligations for different participating employers in SHAPS will have different durations, and the financial assumptions used for each employer should appropriately reflect this.

Derivation of principal financial assumptions

	2025/26 approach	Proposed 2026/27 approach	Rationale for change in estimation approach
Discount rate:	Single equivalent discount rate derived using the UK Mercer Yield Curve (expanded dataset) for AA corporate bond yields and sample cashflows with appropriate duration.	Single equivalent discount rate derived using the UK Mercer Yield Curve (expanded dataset) for AA corporate bond yields and sample cashflows with appropriate duration.	No change.
Retail Price Inflation (RPI):	Single equivalent rate derived using UK Mercer implied inflation curve less an inflation risk premium of 0.3% p.a.	Single equivalent rate derived using UK Mercer implied inflation curve less an inflation risk premium of 0.3% p.a.	No change.
Consumer Price Inflation (CPI):	Derived from the RPI assumption above, less a single equivalent “gap” for the expected average difference between RPI and CPI over the long term, derived assuming an RPI/CPI gap of 1.0% p.a. before 2030 and 0% p.a. from 2030.	Derived from the RPI assumption above, less a single equivalent “gap” for the expected average difference between RPI and CPI over the long term, derived assuming an RPI/CPI gap of 1.0% p.a. before 2030 and 0% p.a. from 2030.	No change.
Earnings growth:	CPI plus 1.0% p.a.	CPI plus 1.0% p.a.	No change.
Deferred revaluations:	The assumptions for the revaluation of deferred pensions are set equal to the relevant inflation assumption, subject to the maximum annual cap.	We recommend that the assumptions for the revaluation of deferred pensions are set equal to the relevant inflation assumption, subject to the maximum annual cap.	No change.

	2025/26 approach	Proposed 2026/27 approach	Rationale for change in estimation approach
Pension increases:	Allowing for the impact of caps and floors using a Black's model with assumed annual volatility of 1.75% p.a.	We propose allowing for the impact of caps and floors using a Black's model with assumed annual volatility of 2% p.a.	Inflation volatility has increased in recent years and Mercer's central view on modelling pension increase caps and floors supports an increase to the volatility assumption.

Derivation of principal demographic assumptions

	2025/26 assumption	Proposed 2026/27 assumption	Rationale for change in estimation approach
Mortality: **Base table**	Pre-retirement: No allowance Post-retirement: 118% of S4PxA	Pre-retirement: No allowance Post-retirement: 119% of S4PxA	Update to base table scaling factors to maintain equivalence of the baseline mortality assumption from the 30 September 2024 funding valuation (with the margin for prudence removed).
Future improvements	CMI_2023 using core parameters except A=0.25. Long-term rate of improvement of 1.25% p.a.	CMI_2025 underlying rates (i.e. without the overlay) using core parameters except A=0.25. Long-term rate of improvement of 1.25% p.a.	Continue use of the assumption for the prior year but updated for the latest CMI_2025 model. Analysis across TPT membership commissioned by the Trustees continues to support an initial addition (A) parameter of 0.25.
Commutation	75% of members take the maximum cash at retirement using Trustees notional cash commutation rates for triennial valuations as in force at 31 December 2024.	75% of members take the maximum cash at retirement using Trustees notional cash commutation rates for	Allowance to be made for new notional cash commutation factors used for triennial valuations.

	2025/26 assumption	Proposed 2026/27 assumption	Rationale for change in estimation approach
		triennial valuations as in force at 31 December 2025.	
Retirement	As per the most recent Technical Provisions assumptions.	As per the most recent Technical Provisions assumptions.	No change.

Other demographic assumptions (proportions married or in a civil partnership, spouses' age difference, early retirements, turnover and no explicit allowance for transfers out etc.) are proposed to be in line with the most recent Technical Provisions assumptions.

Discount rate recommendation

We propose using single discount rates which, when used to discount the projected benefit cashflows with durations relevant to each employer, would give broadly the same result as using a full AA corporate bond yield curve to discount the same cashflows. This approach will therefore result in different single discount rates being derived for different employers, dependent on the duration profile of the relevant benefit obligations. The following table provides single equivalent discount rates by duration, derived using the recommended approach at various dates:

Duration Profiles[1]	2025/26 approach	Proposed 2026/27 approach	
	As at 31.3.25	As at 30.9.25	As at 31.3.26
6 years	5.28% p.a.	5.10% p.a.	5.47% p.a.
10 years	5.63% p.a.	5.61% p.a.	5.89% p.a.
14 years	5.82% p.a.	5.90% p.a.	6.14% p.a.
18 years	5.92% p.a.	6.06% p.a.	6.29% p.a.
22 years	5.99% p.a.	6.17% p.a.	6.40% p.a.
26 years	6.01% p.a.	6.24% p.a.	6.48% p.a.
30 years	5.99% p.a.	6.25% p.a.	6.50% p.a.

[1] The duration profiles are based on sample cashflows for different scheme maturities. The duration is based on those sample cashflows and Mercer Yield Curve (expanded dataset) for AA Corporate Bond Yields as at 30 September 2025. The duration for the profiles is not updated for changes in market conditions after 30 September 2025, as the profile selected for each employer is based on the durations determined from the discount rate sensitivity calculations provided in the 30 September 2025 APT information.

RPI inflation recommendation

As with the discount rate, setting RPI inflation assumptions based on the duration profile of the relevant benefit obligations will result in different RPI assumptions being derived for different employers. The following table provides sample single equivalent RPI inflation rates by duration, allowing for the 0.3% p.a. inflation risk premium recommended for 2025/26 and 2026/27 month ends:

Duration Profiles[2]	2025/26 approach	Proposed 2026/27 approach	
	As at 31.3.25	As at 30.9.25	As at 31.3.26
6 years	3.27% p.a.	2.81% p.a.	3.58% p.a.
10 years	3.15% p.a.	2.88% p.a.	3.36% p.a.
14 years	3.10% p.a.	2.92% p.a.	3.29% p.a.
18 years	3.05% p.a.	2.93% p.a.	3.25% p.a.
22 years	3.02% p.a.	2.94% p.a.	3.22% p.a.
26 years	2.98% p.a.	2.94% p.a.	3.21% p.a.
30 years	2.94% p.a.	2.93% p.a.	3.19% p.a.

[2] The duration profiles are based on those derived for the single equivalent discount rate i.e. based on sample cashflows and Mercer Yield Curve (expanded dataset) for AA Corporate Bond Yields as at 30 September 2025. The duration for the profiles is not updated for changes in market conditions after the 30 September 2025, as the profile selected for each employer is based on the durations determined from the discount rate sensitivity calculations provided in the 30 September 2025 APT information.

CPI inflation recommendation

We recommend single average RPI/CPI gaps based on a 1.0% p.a. assumed gap before 2030 and a 0% p.a. gap thereafter, suitably weighted to reflect each employer's exposure to CPI liabilities (based on their duration profile).

The following table provides single equivalent CPI inflation rates at various dates, derived by duration profile:

Duration Profile[3]	2025/26 approach	Proposed 2026/27 approach	
	As at 31.3.25	As at 30.9.25	As at 31.3.26
6 years	2.62% p.a.	2.25% p.a.	3.02% p.a.
10 years	2.73% p.a.	2.53% p.a.	3.01% p.a.
14 years	2.79% p.a.	2.66% p.a.	3.03% p.a.
18 years	2.80% p.a.	2.72% p.a.	3.04% p.a.
22 years	2.80% p.a.	2.76% p.a.	3.04% p.a.
26 years	2.79% p.a.	2.79% p.a.	3.06% p.a.
30 years	2.77% p.a.	2.79% p.a.	3.05% p.a.

[3] The duration profiles are based on those derived for the single equivalent discount rate i.e. based on sample cashflows and Mercer Yield Curve (expanded dataset) for AA Corporate Bond Yields as at 30 September 2025. The duration for the profiles is not updated for changes in market conditions after the 30 September 2025, as the profile selected for each employer is based on the durations determined from the discount rate sensitivity calculations provided in the 30 September 2025 APT information.

Deriving a future mortality improvement assumption

The Continuous Mortality Investigation (CMI) of the Institute and Faculty of Actuaries publish a model for projecting future mortality improvements that is updated each year to build in its latest analysis of mortality rates over the previous year. CMI_2025 was published on 10 March 2026, with significant changes having been made to the model when compared to CMI_2023. See the Appendix titled “Supporting Information on Accounting Valuation Assumptions and Methodology” for further details.

The effective date of the most recent longevity study commissioned, and whether or not it considered the impact of COVID-19, will determine whether or not it is appropriate to use the “total” mortality rates (which include the “overlay”) or the “underlying” mortality rates (which exclude the “overlay”).

Recent versions of the Club Vita analysis have already been adjusted to remove the short-term impact of the pandemic. As such, we recommend use of the “underlying” mortality rates, as it would be inappropriate to add back in pandemic effects via the CMI projections.

A key change the CMI made in CMI_2024 (which also applies to CMI_2025) is the use of five period terms (rather than one in previous versions) to better reflect different trends in mortality at different ages. As a result of this, the behaviour of the period smoothing parameter, S-kappa, has changed within the model. Rather than being a single parameter as in previous versions of the model, there are now five period smoothing parameters (one for each period term). The model still uses the single parameter as an input and we recommend that the core parameter is adopted.

The initial addition “A” parameter within the CMI model allows users to adjust initial rates of mortality and is commonly used to reflect socio-economic differences in mortality improvement that are expected in the short term. This parameter has a core value in the CMI model of zero. Based on the analysis carried out across TPT membership by the Trustee, we recommend an “A” parameter of 0.25.

The CMI_2024 and CMI_2025 models are based on general population data for England & Wales, and this includes its modelling of the short-term impact of the pandemic via the “overlay”. In particular, the core versions of the models assume that the initial peak of “excess” pandemic mortality happened in 2020 and that the impact has been gradually decreasing since. The core models assume that the decay is happening

exponentially with a half-life (the “H” parameter) of 1 year, i.e. the impact of the pandemic on mortality rates reduces by 50% each year. In the absence of recent Trustee analysis, we recommend that the default half-life parameter of 1 year is adopted for the **Year End**.

Re-weighting of baseline mortality assumption to be consistent with CMI_2025

Many baseline mortality studies provide estimated death rates at a recent effective date. Weightings are applied as an adjustment to scale the standard mortality tables up or down to match (on a liability-equivalent basis) the death rates at the effective date of the mortality study. As the S4 tables apply in 2017, this involves calibrating the weightings to allow for mortality improvements between 2017 and the effective date.

Each time a new CMI projection model is issued for mortality improvements, it re-estimates past mortality improvements from the date at which the base table applies until the date of the CMI model. As a result, baseline mortality studies for S4 tables that are weighted to reflect an effective date after 2017 need to consider re-weighting the scaling factors to be consistent with the latest CMI projection model if it significantly re-estimates past mortality improvements.

Given the changes to the underlying CMI_2025 projection model, in order to maintain equivalence of the baseline mortality assumption to the underlying Club Vita study, we have carried out an approximate re-weighting of the baseline S4 table. The impact of this is an adjustment to the weighting applied to the standard table from 118% to 119%

Adjustment for inflation

The gilt implied inflation curve reflects future inflation expectations from the current point in time. However, because revaluation and pension increases are calculated based on inflation on specific month-ends, forthcoming revaluation and pension increases are also affected by actual inflation between the reference date and the accounting date.

We propose to continue to allow for this within the inflation experience of the Accounting Projection Tool (“APT”) by reflecting known changes in RPI/CPI since the last reference month used for pension revaluation in deferment and pension increases in payment.

Decisions required

In accordance with FRS 102, each employer will need to decide on the assumptions to be used for the preparation of their year-end disclosures and ensure that their auditor is comfortable with the approach adopted. The Appendix “Supporting information on Accounting Valuation Assumptions” provides further information on the proposed estimation approach. If you would like to discuss anything included in this report further then please let us know.

Significant events

This report does not consider any adjustments or alternative assumptions that may be required following a special event (e.g. a settlement or curtailment).

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Important Notes

Compliance with technical actuarial standards

This paper is provided under the terms of the Project Agreement between TPT and Mercer dated 6 February 2025 and should be read in conjunction with the Appendix “Supporting Information on Accounting Valuation Assumptions” and our prior assumptions paper dated 7 April 2025. This paper, and the work done in its preparation, is compliant with Technical Actuarial Standard 100 General Actuarial Standards (TAS 100 v2) which is issued by the Financial Reporting Council.

Confidentiality, scope and third parties

Mercer is providing this advice in its capacity as external adviser to TPT, not as an adviser to individual employers. TPT is ultimately responsible for the assumptions it uses when producing accounting disclosures and individual employers are ultimately responsible for selecting the accounting policies, methods and assumptions they wish to apply. Individual employers are responsible for obtaining formal confirmation from their auditors that their accounting policies are compliant with all necessary accounting standards.

The advice in this report has been supplied by Mercer on the following basis:

Unless otherwise stated, we have relied on the information and data TPT Retirement Solutions Limited have supplied to us in preparing the report and information from other third party sources, without independent verification. Save for where such third party is connected to, associated with or an affiliate of Mercer, we will not be responsible for any inaccuracy in the advice that is a direct result of any incorrect information provided to us. As such, Mercer (i) makes no representations or warranties as to the accuracy of the information presented by you or any third party and ii) takes no responsibility or liability (including for indirect, consequential or incidental damages), for any error, omission or inaccuracy in the data supplied by any third party, save in each case where the third party or parties is or are connected to, associated with or an affiliate of Mercer.

Appendix: Supporting information on Accounting Valuation Assumptions

The purpose of an accounting valuation for a defined benefit pension plan in the UK is to determine the values of assets and liabilities that are required to be shown on the plan sponsor's balance sheet, along with the pension cost charged or credited to the statement of profit or loss (P&L), under the relevant accounting standard (IFRS, US GAAP or UK GAAP).

These accounting standards also require various disclosures about the defined benefit pension plan including details of the assets held and a reconciliation of the movements in the assets and liabilities between the relevant disclosure dates.

The accounting valuation results depend on a number of assumptions that are used to measure the present value of the defined benefit pension plan liabilities. The accounting assumptions used in an employer's financial statements are ultimately the responsibility of the employer.

This Appendix provides a general overview of accounting valuation assumptions for UK defined benefit plans. It does not constitute advice specific to any particular defined benefit plan or any particular set of financial statements.

Accounting standards

The accounting standards set out the underlying principles for the actuarial assumptions (for example assumptions should be based on a 'best estimate' of future experience), and clear direction on the basis for the discount rate. In the context of setting actuarial assumptions for accounting disclosures, 'best estimate' means an unbiased estimate whereby the actual outcome is expected to be equally likely to be higher or lower than the assumption used.

The assumptions also need to reflect market conditions as at the reporting date.

Reasonable range for assumptions

For each of the assumptions used, there is a range of acceptable decisions that the employer could make, supported by different methods and approaches. Different assumptions within this reasonable range can have a material impact on the year-end position. The approach chosen may depend on the employer's objectives and where it wishes to position itself relative to other companies.

Relevance of funding assumptions

The selection of the assumptions to be used for accounting purposes is largely independent of the assumptions used for funding purposes. Importantly, the accounting valuation usually has no direct impact on the pension contributions payable by the plan sponsor. However, many of the same principles and data will be applicable to both the funding and accounting valuations. This is particularly the case in relation to the demographic assumptions (i.e. assumptions used to provide estimates of the likelihood and timing of benefits being paid), such as how long members live for, when members retire and the rate at which members exchange pension for a cash lump sum at retirement.

Impact of decisions

The assumptions selected at the year-end will affect the year-end balance sheet position and the following year's P&L cost. The decisions made do not affect the current year's P&L cost, which continues to be based on the assumptions agreed a year ago. Auditors are likely to focus on whether any approach at the year-end is a disclosable change in accounting principles.

Impact of climate change

As part of assessing climate related risks and wider reporting requirements being introduced by the FCA (Financial Conduct Authority), the European Sustainability Reporting Standards (ESRS) and the International Sustainability Standards Board (ISSB), companies may wish to consider applying climate change scenario analysis to the pension disclosures.

In terms of assumption setting, as the economic assumptions are set on a market related basis consistent with the principles of the accounting standards, they allow implicitly for climate change to the extent that the market allows for it.

The impact of climate change on demographic assumptions would primarily be expected to impact the mortality assumptions, particularly future mortality improvements. Based on the evidence currently available, we do not consider climate change to be any more material than many of the other uncertainties linked to future mortality expectations and so we do not propose making any explicit allowance for climate change within the mortality assumption. This should be kept under review, along with other factors which affect longevity risk.

Explanation of key assumptions

The most important assumptions used for an accounting valuation of a defined benefit scheme are usually the discount rate, the price inflation assumptions (which often includes assumptions for pension increases) and the mortality assumption (i.e. the life expectancy of members and their dependants). Each of these assumptions is explained over the following pages.

Financial Assumptions

Deriving a discount rate

The discount rate is the rate of interest used to discount retirement benefit obligations in order to express expected future benefit payments as a single value at a present date. The accounting standards generally require the discount rate to be determined by the yields on high quality corporate bonds at the measurement date. For this purpose, a high quality corporate bond is taken as a bond that has been rated at the level of AA or equivalent status. The currency and term of the corporate bonds should be consistent with the currency and estimated term of the retirement benefit liabilities.

Since the retirement benefit obligation payments are made over many years into the future, in theory AA corporate bond spot rates are needed for all terms at which payments may be due. The assumed discount rate is then the single discount rate equivalent to discounting these liability payments, or cash flows, at the term-dependent spot rates. In practice, more pragmatic methods are often used to estimate a single equivalent discount rate.

Judgement is required when deriving the yield curve or discount rate, mainly in respect of the bond universe selected, the approach to fitting the yield curve and the approach to extrapolating the yield curve at long durations once there ceases to be a deep market in corporate bonds. These judgements can typically lead to differences of around 0.1% p.a. to 0.2% p.a. in the discount rate derivation.

Details on the judgements used by the Mercer Yield curve model (“expanded dataset”) to derive a discount rate are available to clients on request.

Deriving an inflation assumption

The headline assumption for price inflation is important as it is used to set a number of other inflation-linked assumptions. Examples include assumptions for inflation-linked pension increases in payment and pension increases in deferment for early leavers. If pension benefits are linked to salary increases, then price inflation is also typically used as the basis for setting the long term assumption for salary increases.

From 2011, statutory price inflation for pension increases in payment and deferment became linked to increases in the Consumer Prices Index (CPI) in place of the Retail Prices Index (RPI).

Retail Prices Index (RPI) Inflation

Market practice in the UK has historically based the RPI inflation assumption on the gilt implied inflation yield curve, reflecting the duration of the pension plan cash flows in a consistent way to the discount rate. The gilt implied inflation yield curve is derived based on the market implied yields available from fixed-interest and index-linked Government bonds ('gilts') and represents the rate of RPI in the future that would give investors the same total return from these stocks. Judgements are required when fitting a ‘gilt market implied’ inflation curve, particularly with regard to durations where data is limited and any allowance made for RPI reform (see below), which can typically lead to differences of around 0.1% p.a. in the average ‘gilt market implied’ RPI rate.

Details of the judgements used to determine the Mercer gilt implied inflation yield curve are available to clients on request.

The ‘gilt market implied’ rate is the starting point for the future RPI assumption. This approach results in a risk that the 'market implied' rate is different from actual expectations for future inflation. In particular, the market implied rate may be overstated because some investors are prepared to pay a premium to hedge their inflation risk, and due to the excess demand and short supply of inflation protection in the gilt market, artificially increasing the market's perceived expectation of future inflation. The difference between market implied inflation expectations and actual (expected) inflation is known as an inflation risk premium.

RPI reform

Following a consultation process, the UK Government announced in November 2020 that the calculation of the RPI would be amended to match the Consumer Price Index including Housing (CPIH) from 2030. CPIH is expected to be materially lower than the current definition of RPI. Commentary on the expected difference between CPI and CPIH starts on the next page.

Inflation risk premium

There is no objective method of determining the correct level of the future inflation risk premium adjustment (if indeed there is any), particularly when gilt yields are distorted. Historically, adjustments of up to 0.3% p.a. to the rate of future RPI implied by the gilt market are supported by academic research and research published by the Bank of England, and so may be considered reasonable. In theory, an inflation risk premium adjustment should vary by term and there is generally likely to be more inflation uncertainty at longer durations.

In recent years, commentary from the UK Debt Management Office and LDI investment managers suggested that the supply/demand imbalance of inflation protection at terms after 2030 may be causing a greater inflation risk premium at longer durations than historic norms. Greater fear of inflation risk has arguably contributed to more demand for inflation hedging protection and caused a greater inflation risk premium.

The size of the inflation risk premium is a matter of judgement and it is common in financial reporting to use a constant inflation risk premium adjustment rather than to use a model to estimate changes in the inflation risk premium over time. This is because any such model would require subjective judgements on the long term outlook for RPI inflation and the likelihood of the Bank of England inflation target being met.

Although defined benefit pension plans often have some inflation hedging in place through Liability Driven Investments or index-linked gilts, this hedging is an investment decision that affects future asset returns and provides insurance against the financial implications of unexpected future inflation. The best estimate of the expected plan cash flows is independent of the assets held by a plan, so inflation hedging does not necessarily lead to an adjustment to the inflation risk premium used to determine the inflation assumption for accounting valuations.

Consumer Prices Index (CPI) Inflation and the RPI/CPI gap

Historically, there has been no reliable indicator for market expectations of CPI inflation. Hence, the assumption for CPI has commonly been derived by making an adjustment for the expected long term gap between RPI and CPI. This has generally been viewed as more credible than fixing the assumption based on the Bank of England CPI inflation target. This may change going forward, especially from 2030, when RPI is moved to CPIH.

In the past, the rate of change in RPI has been higher than CPI, on average. The difference results from the fact that the two indices are calculated in a slightly different way (the 'formula effect') and that the constituents of the indices are not the same.

Evidence as to the size of the gap (before any allowance for RPI reform), from sources such as the UK's Office for National Statistics, the Bank of England and the Government Actuary's Department, has typically supported a gap between RPI and CPI of 1% p.a. before 2030.

The Office for Budget Responsibility's (OBR) Economic and Fiscal Outlook reports have historically cited an estimated long run RPI/CPI gap (before 2030) of 1.0% p.a., although this reduced to 0.9% p.a. in December 2019. The November 2025 version of this report forecasts a c. 1.0% p.a. RPI/CPI gap over the 4 years from 2025 to 2029 (before RPI reform in 2030). The OBR report notes that this RPI/CPI gap has increased in 2026 to 2027 from previous forecasts due to higher mortgage interest payments, which only affect RPI. Similarly, the November 2025 medium-term inflation forecasts published by HM Treasury suggests that the RPI/CPI gap may average around 1. 0% p.a. from 2026 to 2029. The most recently published RPI/CPI gap for November 2025 was 0.6% p.a.

From 2030, when RPI will be aligned with CPIH, the CPI assumption can be derived by considering the long term gap between CPIH and CPI. The main difference between CPIH and CPI is the allowance made in CPIH for owner occupied housing, along with some differences in the weights given to different categories of goods within the inflation indices. Over long periods of time and economic cycles, the difference is expected to be close to zero.

The ONS announced on 1 December 2023 some changes to the way it calculates CPI and CPIH, introducing improved statistics for private rents and second-hand car prices. It estimates that between January 2018 and October 2023, these changes would have increased the annual rate of

CPI by under 0.1% while the annual rate of CPIH would have been increased by 0.2%. Our view is that the impact of these changes is not expected to be significant when measured over a full economic cycle.

The OBR provided a new forecast in October 2024 for the long term CPIH/CPI wedge of c. 0.4% p.a. based on CPI of 2% p.a., CPIH of 2.4% p.a., earnings growth (and rental inflation) of 3.8% and council tax inflation of 4.8% p.a. An updated OBR long term forecast was published in June 2025 and continues to show a long term CPIH/CPI wedge of c. 0.4%. This OBR forecast is based on fundamental economic views and is not supported by market based data or historical evidence. Therefore, we do not currently consider this OBR forecast to be compelling evidence for the purpose of setting the accounting assumptions.

Salary growth assumption (if relevant)

The salary growth assumption (if relevant) is generally set by reference to price inflation as, over the long term, there is evidence that general pay growth keeps up with increases in the cost of living. It is therefore common to set an assumption for salary increases relative to the price inflation assumption (this is known as “real salary growth”). Real salary growth could be considered by reference to RPI or CPI inflation.

Real salary growth is expected to be positive over the long term as it must take into account not only inflationary increases, but also promotional increases.

Significant variation is possible in salary growth depending on industry sector specific factors and the extent of promotional increases.

Deriving deferred revaluation assumptions

Assumptions are usually required for pension indexation before retirement that are based on inflation, subject to a minimum or maximum level of annual increase measured over the whole period of deferment. Where the increase is linked to inflation, an assumption is set by taking the relevant inflation assumption and applying the caps and collars directly to this.

Deriving pension increase assumptions

Assumptions are required for pension indexation after retirement that are based on inflation and are subject to minimum and maximum amounts. Generally, for pension increases in payment the level of inflation is compared to the cap and / or collar in each individual year. To allow for this, the assumption is typically set by considering the likelihood of inflation being above the cap or below the collar in future years, and applying an adjustment to the relevant inflation assumption to reflect this.

The adjustments could be derived as a simple deterministic amendment, using a Black option pricing model or using a more sophisticated stochastic model such as a Jarrow Yildirim model.

If a model is used to estimate the impact of caps and floors when deriving the pension increase assumption, details on the judgements used by the model are available to clients on request.

Demographic Assumptions

Mortality assumption

The mortality assumption can be broken down into two distinct parts:

- A 'baseline' assumption about current mortality rates that takes into account the profile of a defined benefit pension plan’s membership.
- A 'future improvement' assumption about how these 'baseline' rates should be projected into the future.

Deriving a baseline mortality assumption

The ‘baseline” assumption is typically set by reference to standard mortality tables for UK occupational pension schemes (e.g. the S4 tables) with an adjustment to reflect how the plan members differ to the population underlying the standards tables. These adjustments are often expressed as a percentage weighting of the table or an age rating deduction.

The adjustments are usually based on a plan specific mortality study carried out for the latest statutory funding valuation (excluding any prudence), although they can be determined more generally by reference to occupation, location or wealth of the members.

S4 base tables published on 26 February 2024 update the “currency” in which baseline tables are expressed but are not expected to fundamentally change the baseline mortality assumption where this has previously been determined based on a scheme specific mortality study expressed in terms of S3 base tables.

Deriving a future mortality improvement assumption

The Continuous Mortality Investigation (CMI) of the Institute and Faculty of Actuaries publish a model for projecting future mortality improvements that is updated each year to build in its latest analysis of mortality rates over the previous year. CMI_2024 was published on 30 June 2025, with significant changes having been made to the model when compared to CMI_2023. The main changes are described below. CMI_2025 was published on 10 March 2026, with no significant changes compared to the CMI_2024 model.

Recent CMI models (CMI_2020 to CMI_2023) introduced a new parameter which enabled users to make allowance for the possible impact of COVID-19 on future mortality projections by applying bespoke weightings on recent mortality data. Following consultation, within the CMI_2024 and CMI_2025 models, the CMI is no longer using these weightings to adjust for the impact of the pandemic. Instead, the pandemic impact is modelled by a “fitted overlay” that treats the pandemic as a temporary increase to mortality rates starting in 2020, which drops off in subsequent years. Because this approach explicitly models the temporary impact of the pandemic, full weight is given to data for all years, including 2020 and 2021, and the Model fits the “underlying”, “overlay”, and “total” mortality simultaneously such that the “underlying” rates are equal to the “total” rates minus the ”overlay”. The “underlying” mortality rates have a smooth trend, which could be considered a reasonable estimate of what

mortality rates might have been in the absence of the pandemic. In the core version of CMI_2024 and CMI_2025 most of the difference between the underlying and total rates will have “worn off” by around 2030.

All versions of the CMI model prior to CMI_2024 provided a smooth pattern of mortality rates and improvements, deliberately smoothing annual variations in the data. The new overlay allows a closer fit to the unusual mortality rates in 2020 and following years without needing to fully or partially exclude data from the model.

The CMI_2024 and CMI_2025 models are based on general population data for England & Wales, and this includes its modelling of the short-term impact of the pandemic via the “overlay”. In particular, the core version of the model assumes that the initial peak of “excess” pandemic mortality happened in 2020 and that the impact has been gradually decreasing since. The core model assumes that the decay is happening exponentially with a half-life (the “H” parameter) of 1 year, i.e. the impact of the pandemic on mortality rates reduces by 50% each year. In the absence of recent plan-specific experience, we are expecting that the default half-life parameter of 1 year will be adopted in the majority of cases.

The effective date of the most recent longevity study commissioned, and whether or not it considered the impact of COVID-19, will determine whether or not it is appropriate to use the “total” mortality rates (which include the “overlay”) or the “underlying” mortality rates (which exclude the “overlay”). As recent versions of the Mercer Mortality Model have already been adjusted to remove the short-term impact of the pandemic, the default approach with this model is to use the “underlying” mortality rates, as it would be inappropriate to add back in pandemic effects via the CMI projections.

The other key change to CMI_2024 (also applying to CMI_2025) was the introduction of more detailed modelling for different age groups to reflect differing trends at different ages, which has been done by the use of five period terms (rather than one in previous versions). As a result of this change, the behaviour of the period smoothing parameter, S-kappa, has changed within the model. Rather than being a single parameter as in previous versions of the model, there are now five period smoothing parameters (one for each period term) that, combined, have a similar

effect to the single parameter. Although the model still accepts a single parameter as an input, this has been moved to the “advanced” parameter layer within the model and we expect the additional complexity to mean that the core parameter value is adopted in the majority of cases.

Potential adjustment for socio-economic groups

It is possible that some of the underlying causes of excess deaths (for example COVID related strains on the NHS, high seasonal flu, financial hardship, rise in mental health issues) may affect population wide mortality to a greater extent than the defined benefit pension plan population (particularly those with the largest liabilities, who may see little impact from financial hardship). The CMI model is based on general population data for England & Wales. There is evidence published by the Office for National Statistics that individuals in higher socio-economic groups, as shown by a higher Index of Multiple Deprivation (IMD), have seen better mortality improvements in recent history. These population disparities appear to have been amplified by early COVID experience, which caused greater excess death experience amongst lower socio-economic groups. It is unclear whether this trend will continue and the counter-argument is that lower socio-economic groups have more potential to experience greater future longevity improvements.

The initial addition “A” parameter within the CMI model allows users to adjust initial rates of mortality and is commonly used to reflect socio-economic differences in mortality improvement that are expected in the short term. This parameter has a core value in the CMI model of 0. Additional analysis of a defined benefit pension plan membership can be carried out to determine if an “A” parameter greater than zero is justifiable.

Long-term mortality improvement rate

The CMI’s projection models use historic data to establish a “current” rate of improvement, and use the model’s parameters to create a trend line joining the current rate to the long-term rate selected by the model’s user. Consequently, the long-term improvement rate is a key parameter within the mortality assumptions.

Research suggests that the long-term improvement rate for life expectancy, which applies from 20 or so years into the future, is expected to be more influenced by long-term economic growth, healthcare system performance, lifestyle improvements and medical advances than by recent past experience for mortality improvements.

Other Demographic Assumptions

Other assumptions adopted will typically reflect any plan specific evidence, which is often reviewed every three years alongside the statutory funding valuation of the pension plan carried out by the Trustees. It is also common to consider whether assumptions for member options, particularly the option to exchange part of the pension at retirement for a cash sum, need to be updated to reflect changes in the terms of the available member options.

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