City and County of Swansea Pension Fund Actuarial Valuation as at 31 March 2022

Initial results presentation to Pension Fund Committee

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Agenda

Part 1 — Valuation process and assumptions

Part 2 — Initial whole Fund 2022 results

Part 3 — Expectations for employer results and contributions

Part 4 — Summary, next steps and questions

Part 1
Valuation process and assumptions

What is a triennial actuarial valuation?

1. Assess financial health

A/L = funding level (ratio); A – L = Shortfall or surplus

A

L

Assets

Market value
from Fund accounts

Past service liabilities

Calculated by Actuary:
Use Fund specific data
Make assumptions about the future

Past service contributions

Calculated to eliminate the surplus or deficit over the recovery period

Future service liabilities

Employer contributions to meet cost of new benefits ("common" contribution rate)

2. Set employer contributions

Past plus future service contributions

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Regulatory requirement

LGPS Regulations require the Administering Authority to obtain and valuation and rates and adjustments certificate every three years, to be finalised within a year of the valuation date.

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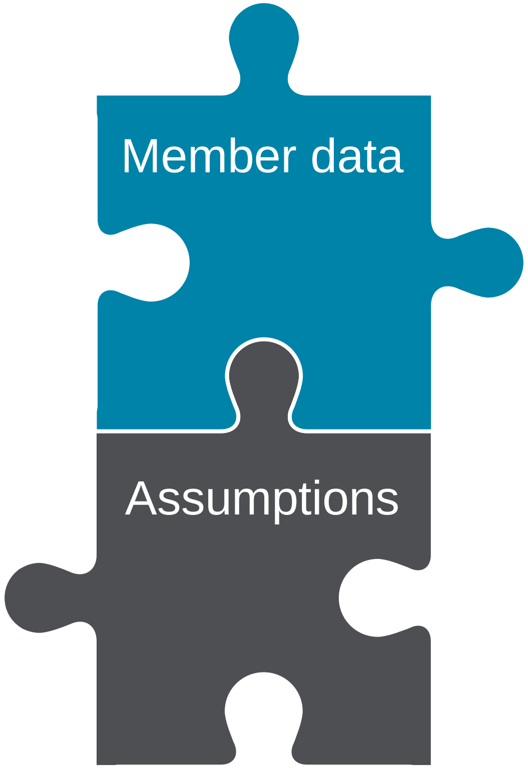
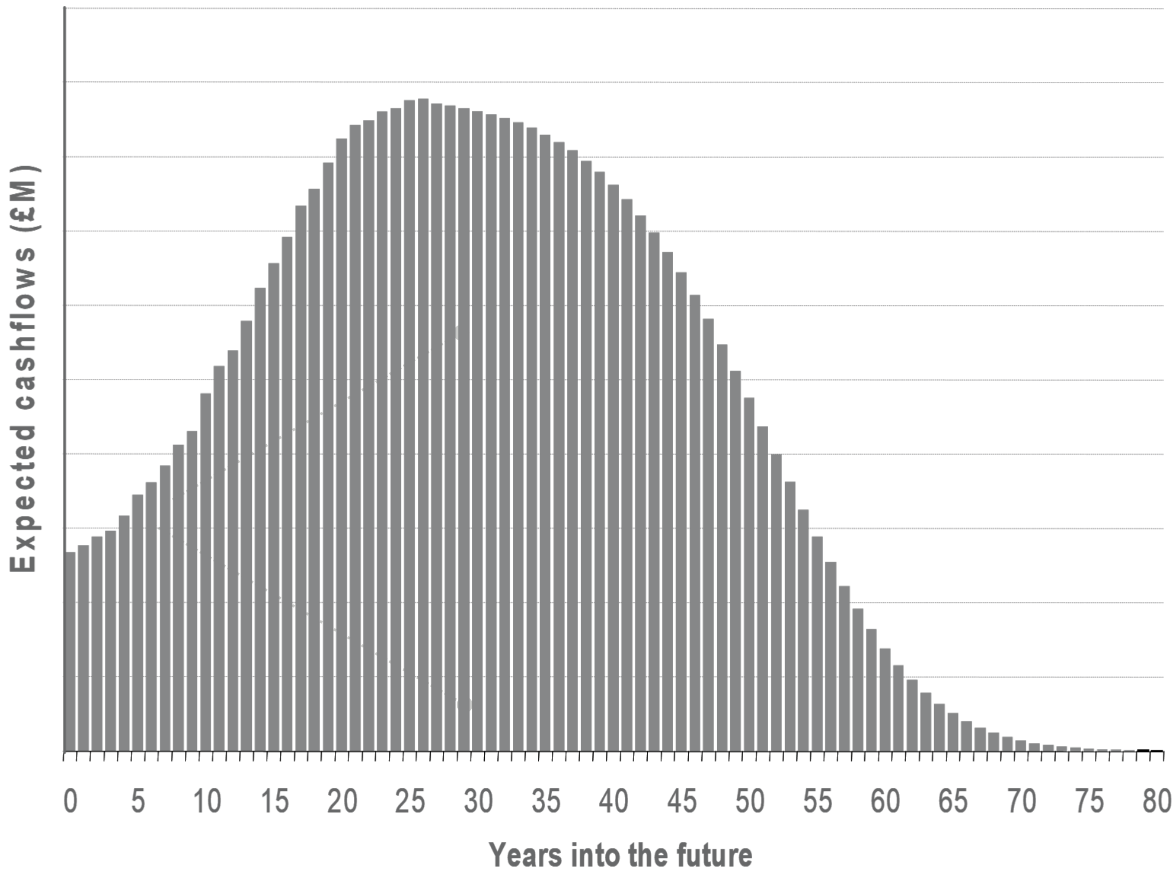
Valuing the liabilities

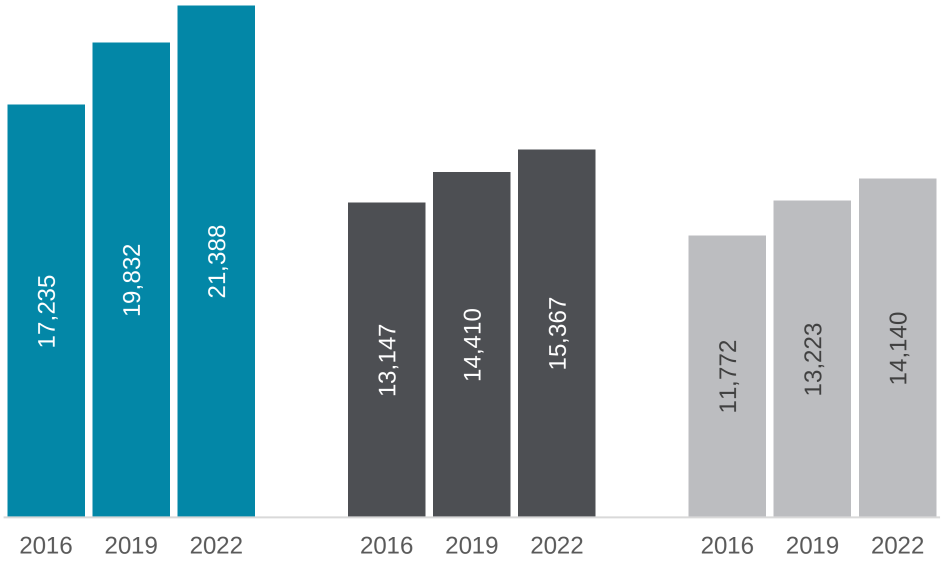




Sample fund, accrued liabilities only

Valuation assumptions are Fund-specific reflecting City and County of Swansea's membership characteristics

Data, experience and assumptions



Financial experience affecting benefit payments

	2019 assumption	2019 Update	Proposed 2022 assumption
CPI increases	2.1% pa	1.7%, 0.5%, 3.1%	2.3% pa(1)
Pay growth	3.6% pa(1)	c3.3% pa	3.8% pa(2)

(1) Plus a liability adjustment of 10% to allow for short-term inflation
(2) Plus an age-related promotional pay scale

Average ages (unweighted)

	Actives	Deferreds	Pensioners
2016	44.6	43.8	70.1
2019	44.7	44.8	70.5
2022	45.4	45.6	71.4

Assumptions best estimate except discount rate

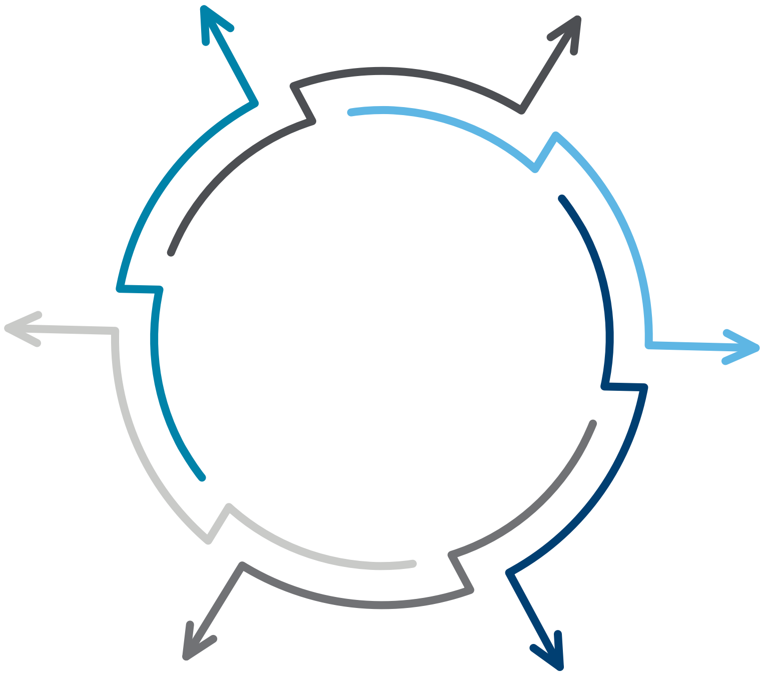
Elements of funding strategy

Prudence

Built into the calculation of the liabilities (funding target)

Security

Guarantee, bond or indemnity, commitment to subsume



Employer risk

Higher risk employers have a more prudent funding target

Risk/cost sharing

Pooling of risks between employers

Deficit recovery period

Average future working lifetime / contract length

Smoothing

Stabilisation / stepping

All affect the level of employer contributions actually payable

Funding strategy varies by Fund (and employers)

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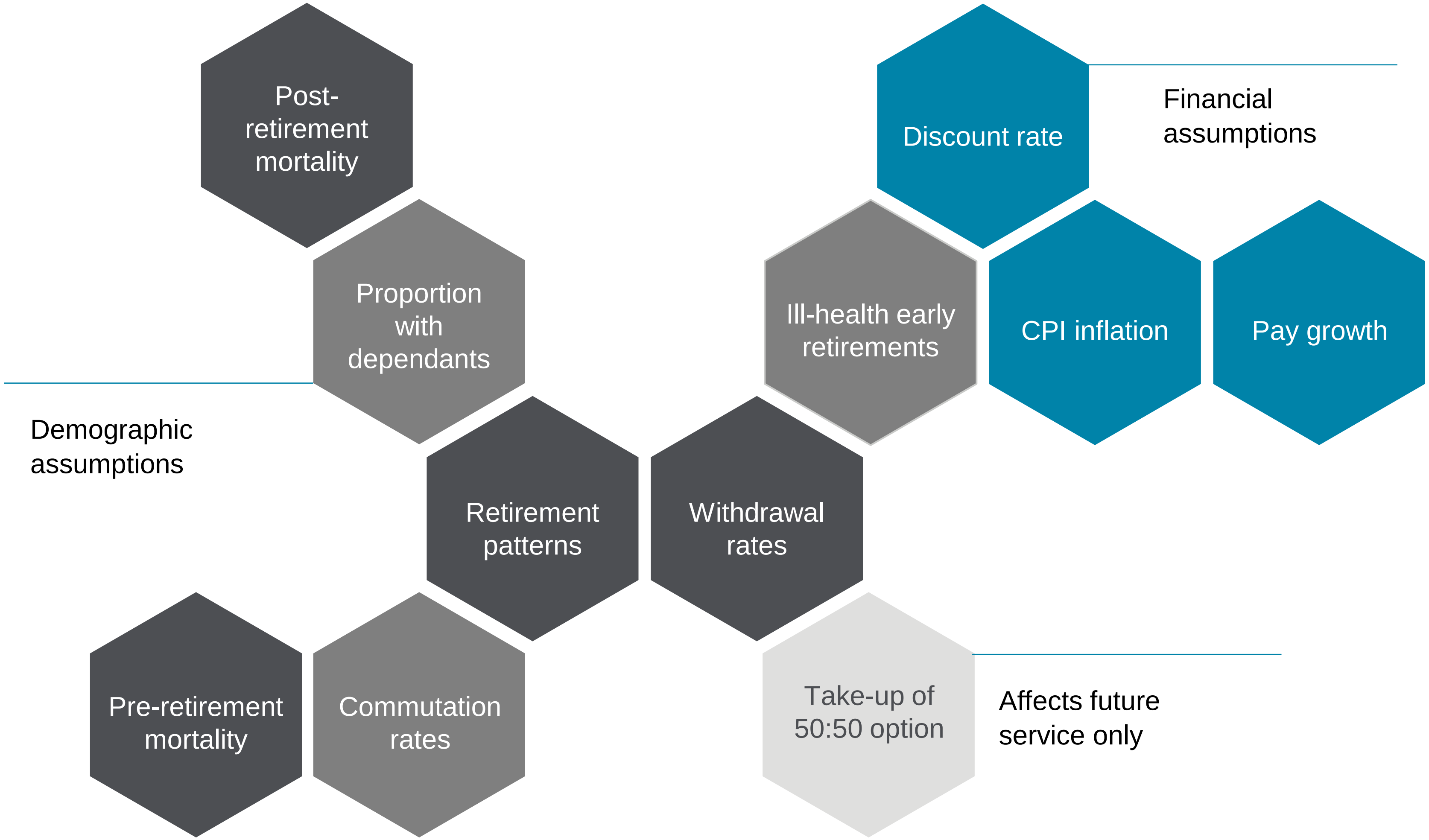
Valuation of liabilities - assumptions



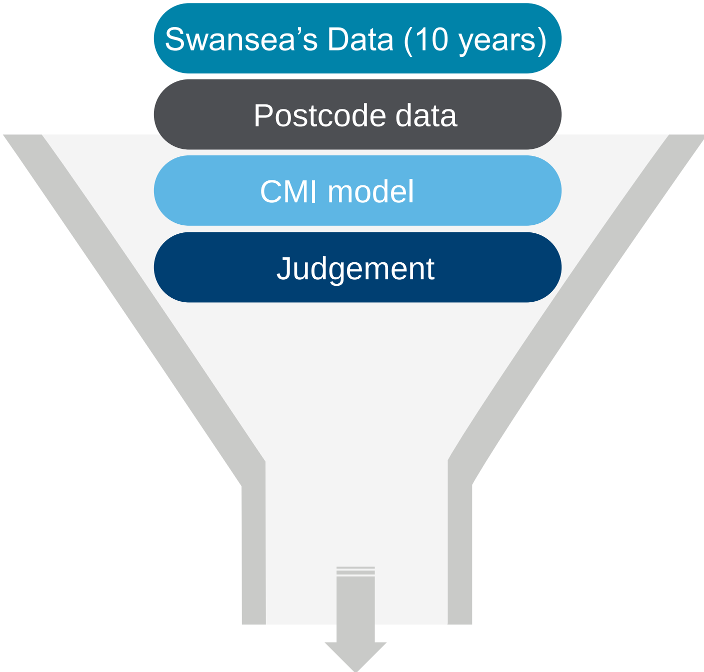
Post-retirement mortality

Base mortality

Analysed using Demographic Horizons™

Combination of Swansea Pension Fund experience and postcode data

Adjustment for experience over pandemic



Best estimate Fund-specific assumptions

Future improvements

Short-term - (CMI 2021, updated from CMI 2018) plus

Long-term – 1.5% per annum (same as 2019)

Allowance for pandemic

Life expectancy from age 65 (normal health retirements)

Years	2019*	2022 (expected)	Change
Males (active currently 45)	23.4	22.8	-0.6
Males (currently 65)	22.4	22.1	-0.3
Females (active currently 45)	25.9	25.7	-0.2
Females (currently 65)	24.4	24.6	+0.2

**Life expectancy for a member aged 45/65 at 31 March 2022 using the 2019 valuation assumptions*

Key takeaway

The overall impact on liabilities of our proposed mortality assumption changes is a liability reduction of less than 1%.

Mortality

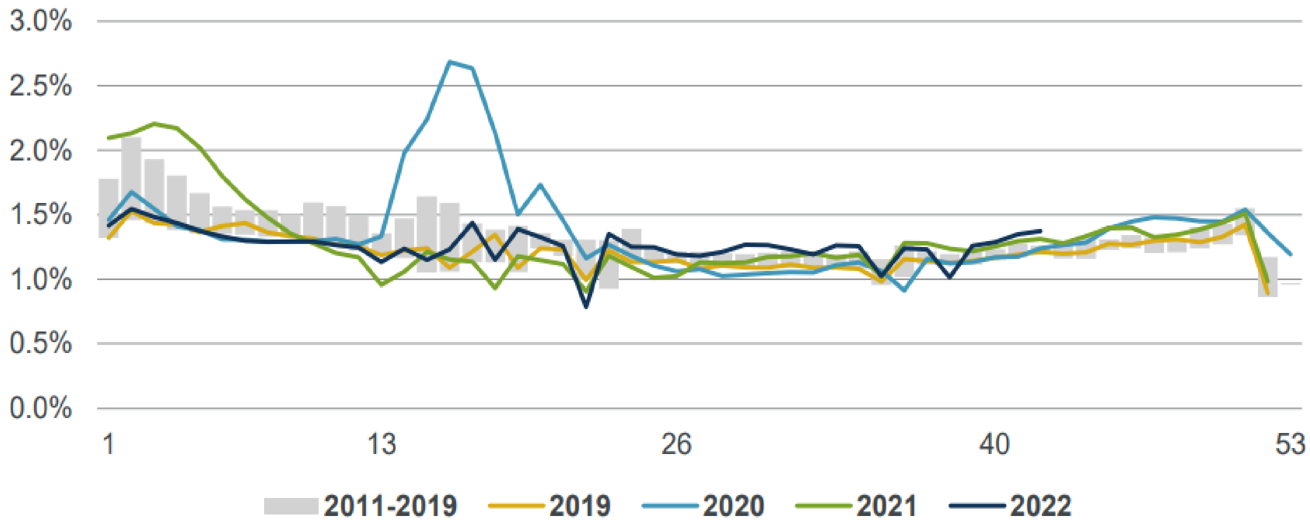
Impact of COVID-19

- CMI estimate c**127,400** excess deaths in England and Wales from the start of the pandemic to 21 October 2021

But …

- Includes periods of time with record low excess deaths (i.e. excess deaths were negative)
  - Low levels of flu have offset COVID-19 deaths (typically c15,000 flu deaths in England).

Chart 1: Weekly standardised mortality rates in England & Wales for 2011 to 2022



Mortality summary pandemic monitor Week 42 2022 (actuaries.org.uk)

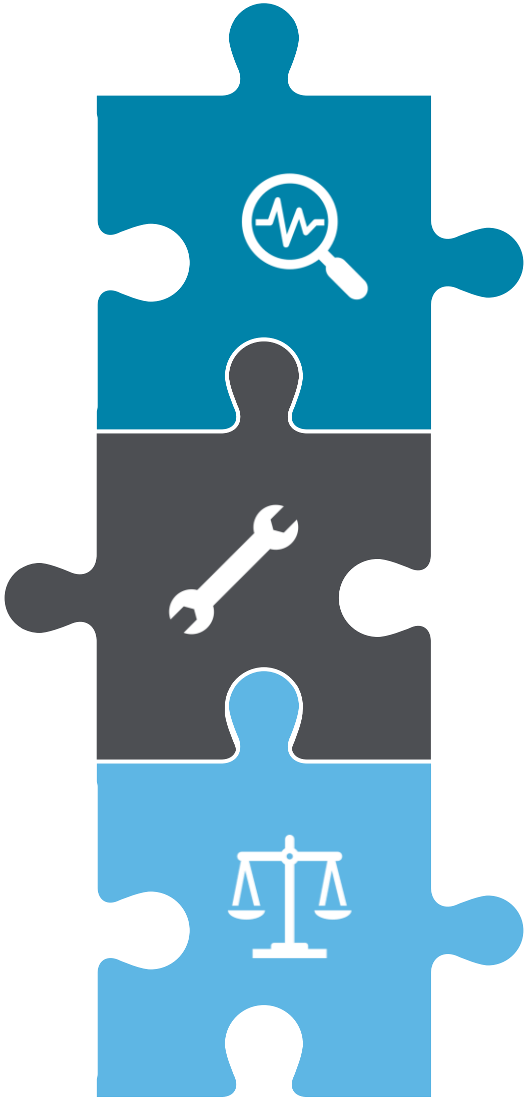
2022 valuation

We need to consider:

Swansea v UK and pension fund membership v population as a whole

The fact that our assumptions are very long-term

How we have allowed for the impact of COVID-19



Adjustment in analysis of experience

Adjusted for pattern seen over the pandemic

Considered relative levels of mortality compared to national population

Adjust scalings for future outlook

1.5 % addition to scalings from analysis

CMI Model

No weight based on 2020 and 2021 data in model

Best estimate

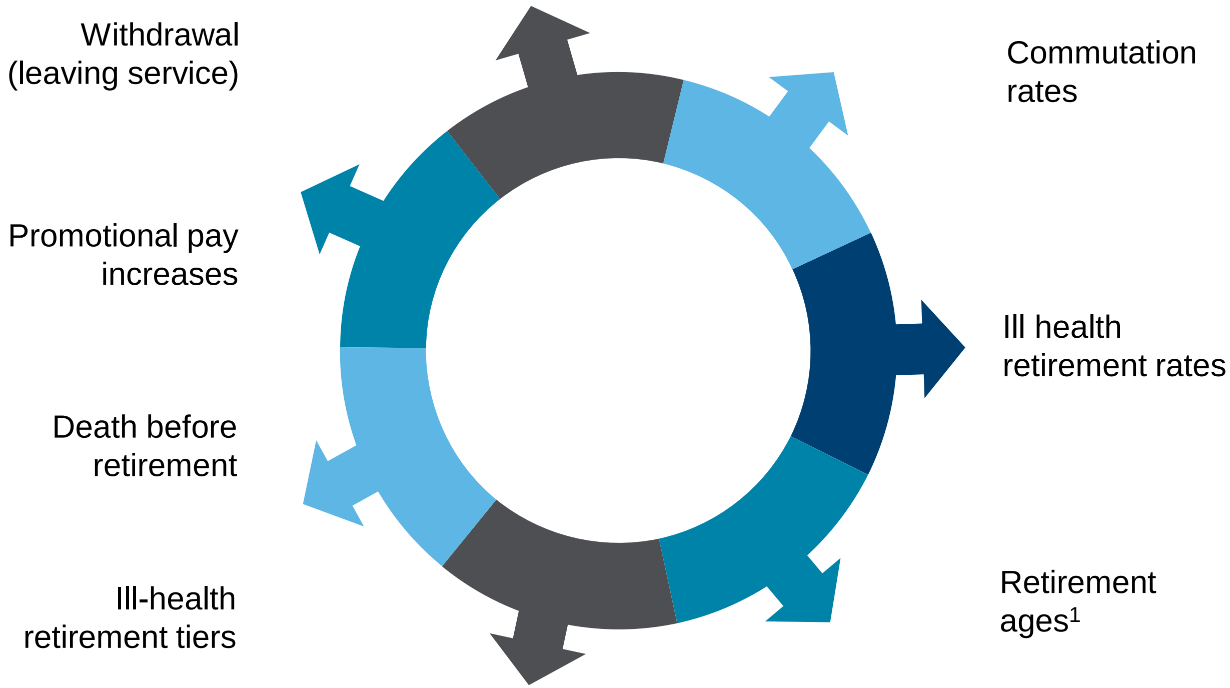
Our assumption for life expectancy should be a “best estimate” of the long term position

Setting other demographic assumptions

Demographic assumptions relate to membership movements or decisions leading to benefit payments or ending of benefit payments

We recommended these assumptions are **best estimate** and, where practical and cost effective, **informed by the experience of the Fund's membership.**

Assumptions based on experience analysis 2015 to 2021



Further information

Proportions married and partner/member age differences are set based on analysis across a sample of Aon's clients whose members are of a similar socio-economic profile as LGPS members, using our Demographic Horizons™ model

[1] Retirement age assumption based on analysis of Aon's LGPS actuarial clients

Employer Funding Targets

Strength of funding target

Stronger → Weaker

Gilts FT → Ongoing Orphan FT → Scheduled body and subsumption FT

Orphan liabilities

Valued on gilts FT (on exit and each valuation)

Low risk approach

For closed employers with no subsumption commitment

Long term, secure employers

And those admission bodies such employers support

Lower risk (higher discount rate) approach

Lower liabilities and contributions

Intention of ongoing orphan target is to avoid a material deficit building up that can’t be met on exit

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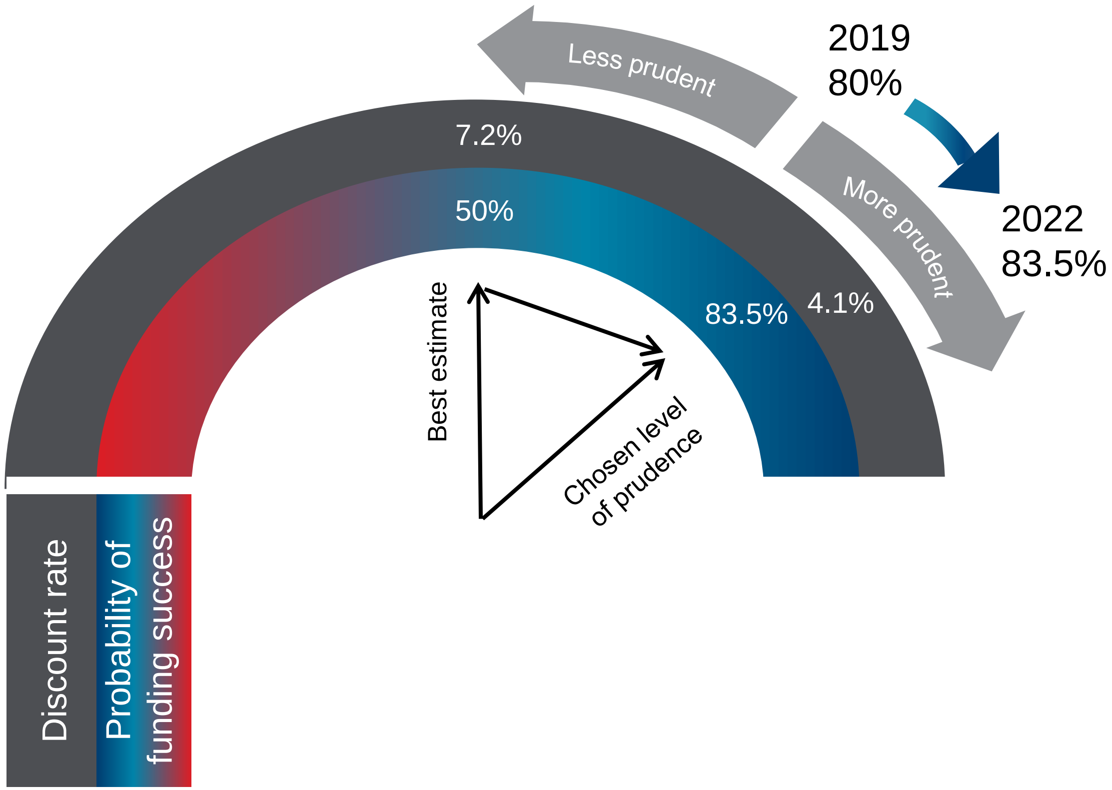
Setting the discount rate – most employers

- Expected returns based on the Fund's investment strategy
- Risk based – level of prudence – "probability of funding success"



Sensitivity to discount rate

Discount rate	Cost now of paying £100 in 20 years' time
4.6%	£41 (c10% lower)
4.1%	£45
3.6%	£49 (c10% higher)

Supported by Aon's Capital Market Assumptions
Level of risk in strategy reduced compared to 2019 strategy (subject to Pension Fund Committee agreement)

Summary of key financial assumptions

% p.a.	2019 assumption	Proposed 2022 assumption
Probability of Funding Success	80%	83.5%
Discount rate – scheduled / subsumption employer bodies	4.25%	4.10%
Discount rate - ongoing orphan bodies		
In service	4.25%	4.10%
Left service	1.60%	0.80%
CPI pension increases	2.10%	2.30%
Post 88 GMP pension increases (p.a.) where SPA pre 2016	1.90%	2.00%
Pay growth(2)	3.60%	3.80%
Short-term inflation loading	n/a	10%

(2) Plus an age-related promotional pay scale.

Long term (in service) discount rate slightly lower than in 2019 (reduced 0.15% p.a.)

Long term best estimate inflation assumption slightly increased (additional allowance for current high levels of inflation)

Assumptions subject to agreement by Pension Fund Committee

Part 2
Initial whole Fund 2022 results

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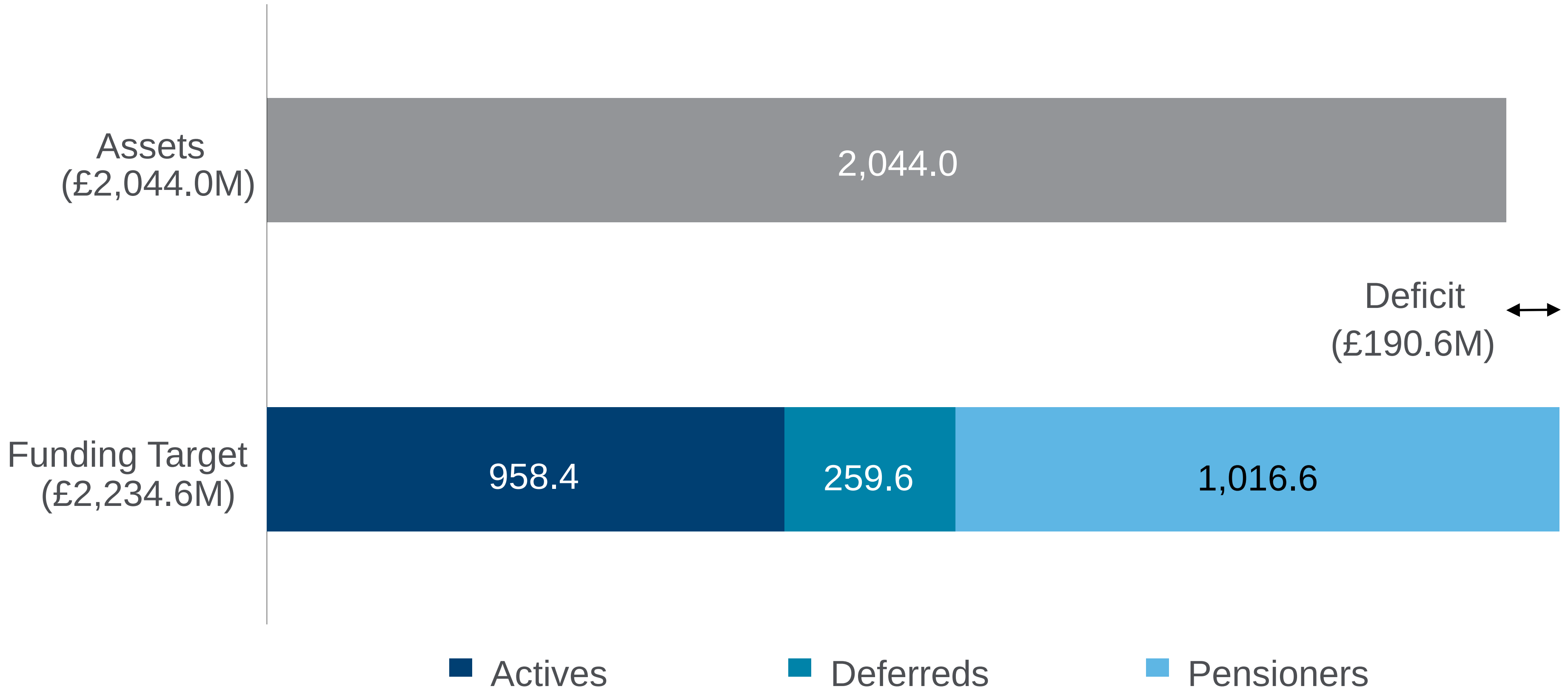
2019 Valuation - funding position (whole Fund)



Whole of Fund funding ratio: 91.5% (Total Assets/Total Liabilities %)

Initial 2022 whole fund past service position

£M	2019 valuation	Initial 2022 valuation
Value of past service benefits for:		
Actives	958.4	1,327.5
Deferreds	259.6	336.1
Pensioners	1,016.6	1,257.8
Value of liabilities	2,234.6	2,921.4
Value of assets	2,044.0	2,924.2
Past service surplus/(deficit)	(190.6)	2.9
Funding ratio	92%	100%

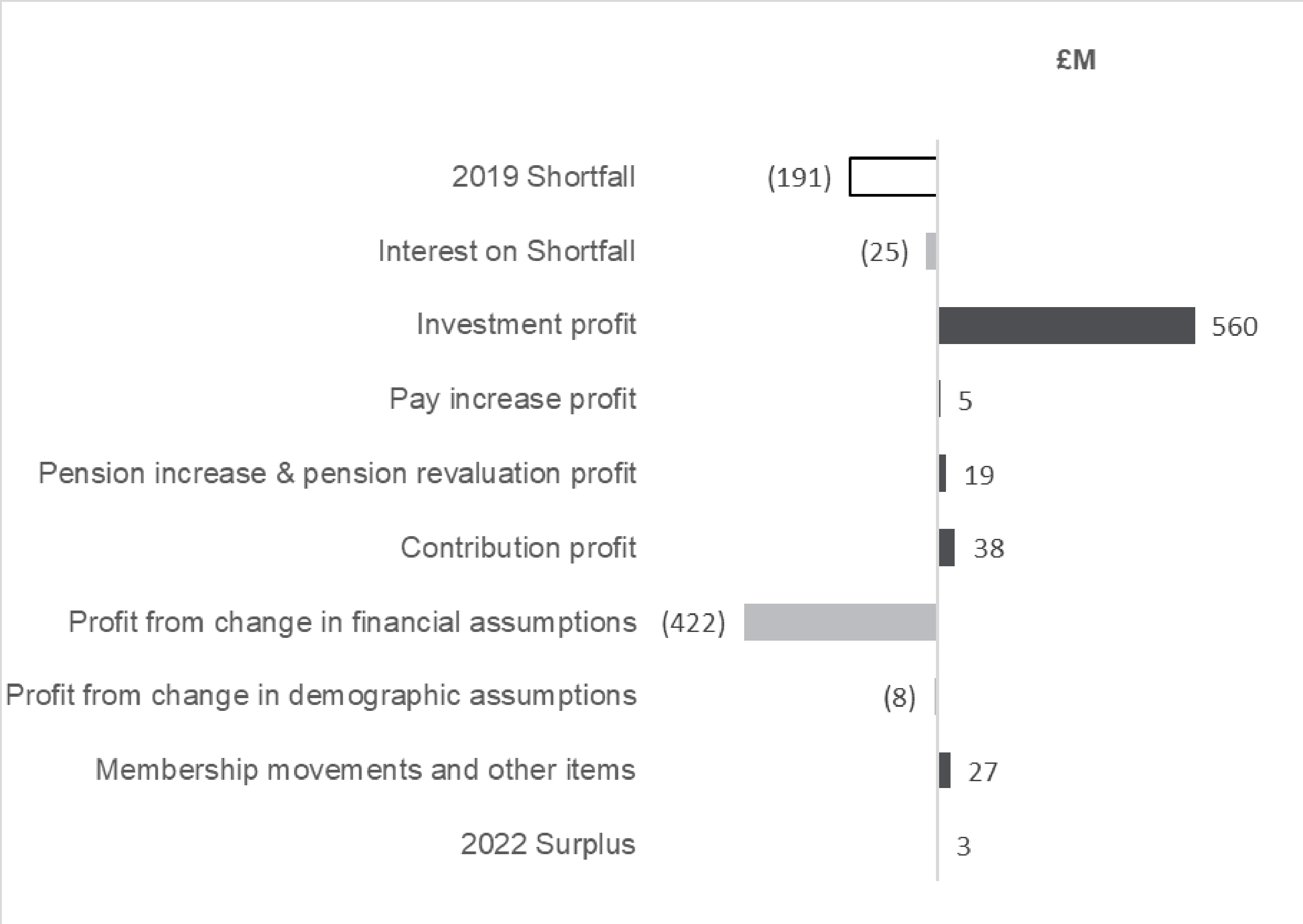
Note: The 2022 results and may change as we finalise the valuation calculations

83.5% Probability of Funding Success

Additional 10% short-term inflation allowance / risk margin in 2022 results (applying to scheduled body / subsumption funding target only)

Change in funding position (2019 to 2022)

The initial valuation result has increased from a deficit of £191M at the 2019 valuation to a surplus of c£3M at the 2022 valuation.



Investment gains partially offset by changes in financial assumptions

Initial 2022 whole fund employer contributions

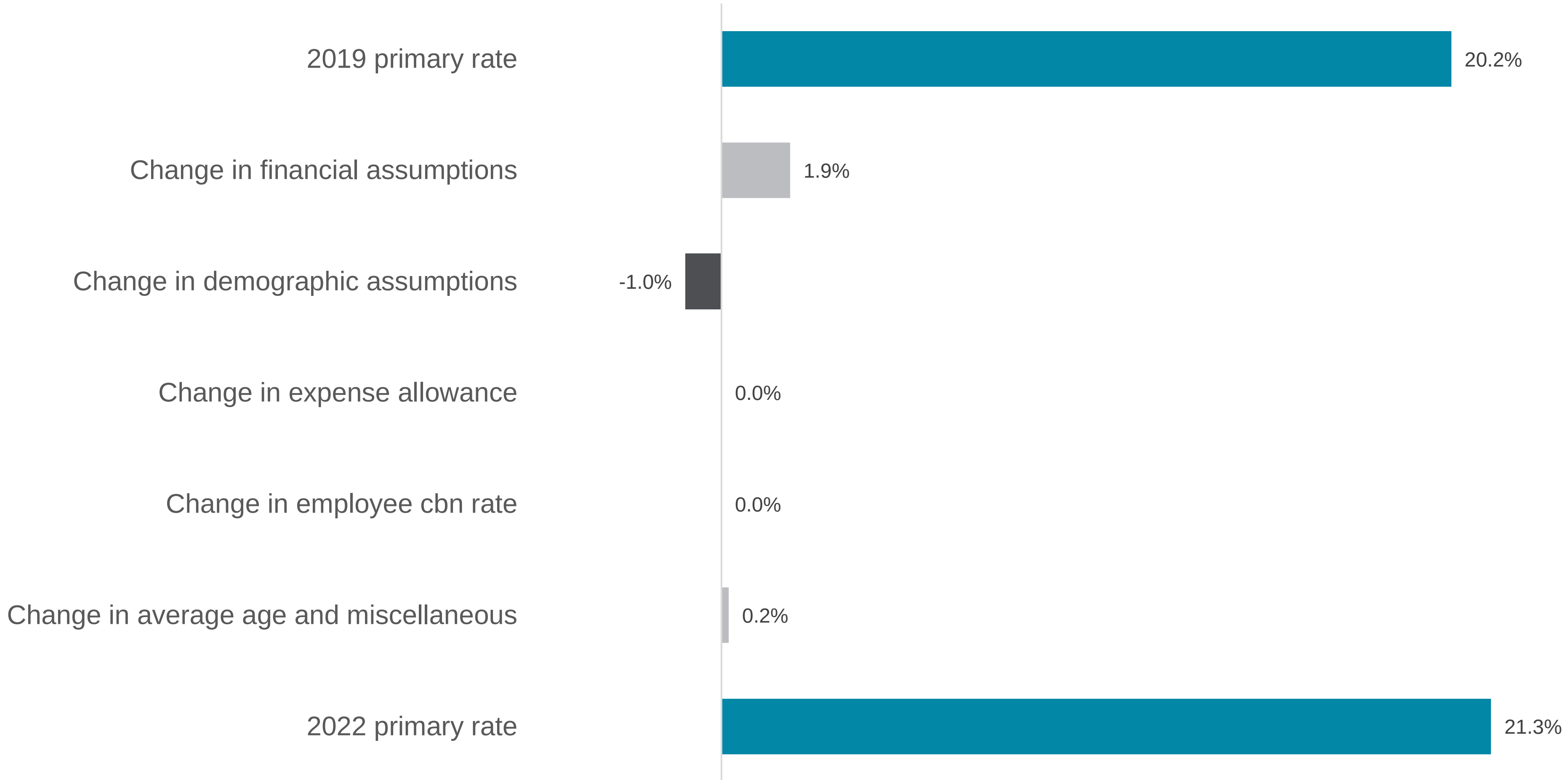
% of Pensionable Pay	2019 valuation	Proposed 2022 valuation
Value of benefits accruing	26.0%	27.1%
Expenses	0.5%	0.5%
Member contributions	(6.3%)	(6.3)%
Net employer cost (Primary Rate)	20.2%	21.3%
Surplus only recovered above	110%	110%
Past service (Secondary) contribution rate	3.3%	0.0%
Allowance for regulatory uncertainty	1.5%	n/a
Total employer rate as % Pay	25.0%	21.3%

Notes:

- *Value of benefits accruing includes value of death in service lump sum benefit.*
- *The employer rate certified in 2019 included an uplift for regulatory uncertainties (McCloud and Cost Management). In the 2022 valuation, the expected McCloud cost is included wholly within the past service liabilities because the remedy period ended on the valuation date.*
- *The 2019 valuation contribution rates were based on a 19 year deficit recovery period*

Change in future service rate (2019 to 2022)

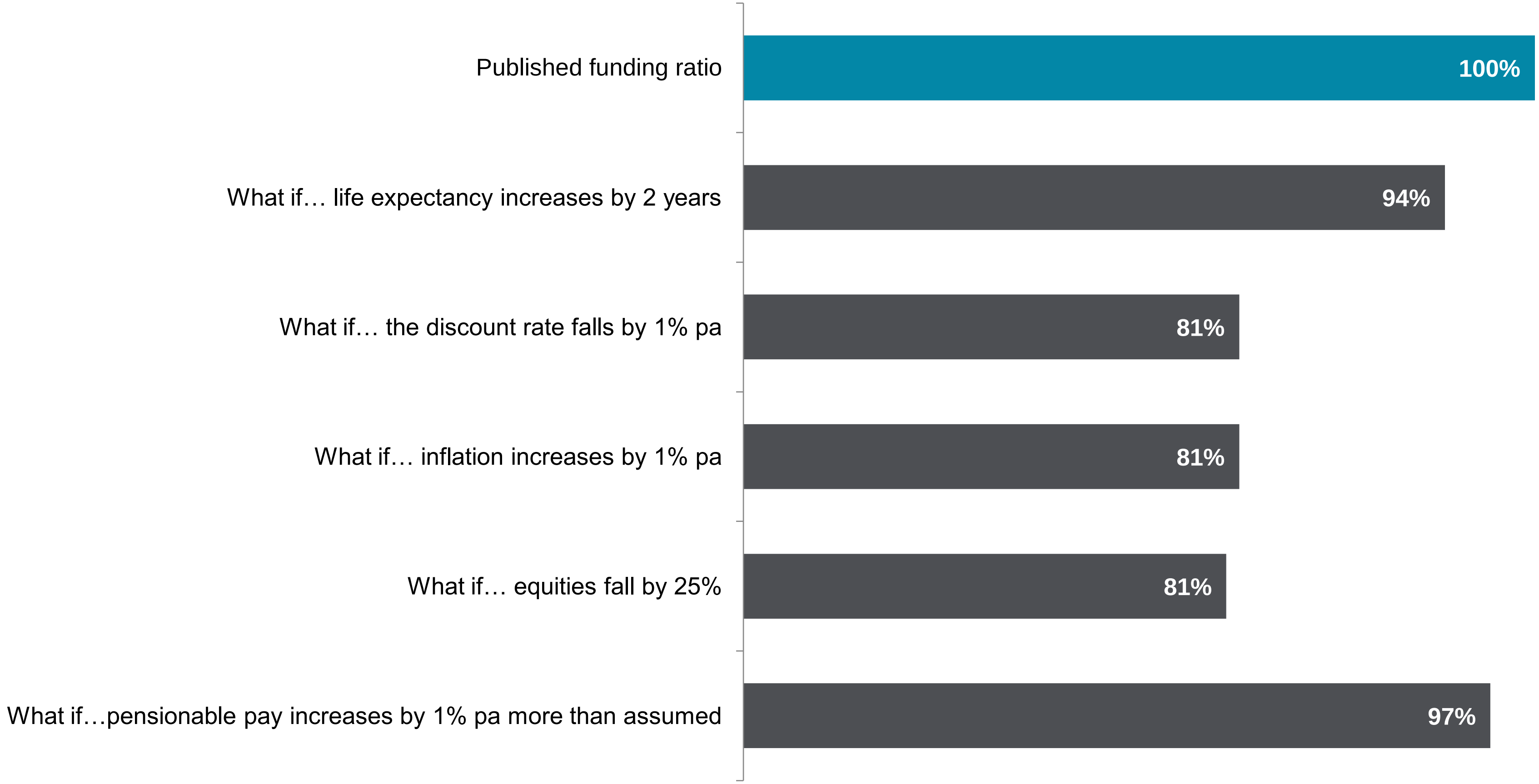
The cost of future benefits (as a percentage of Pensionable Pay) on the initial 2022 valuation result has decreased from 20.2% of pay to 21.3% of pay.



Risks and uncertainties

The Fund faces a number of key risks

The chart below shows approximate impact of changes to assumptions / fund experience



Short-term inflation uncertainty is a key consideration for the 2022 valuation

The scenarios considered are not ‘worst case’ scenarios, and could occur in combination (rather than in isolation)

Part 3
Expectations for employer results and contributions

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McCloud/cost cap allowance within actuarial calculations

2019 valuation

1.5% allowance in contributions

Average across the Fund as a whole (minimum of cost management changes).

More information now available on the remedy

Cost cap process complete (no changes)

2022 valuation

Make approximate allowance at employer level allowing for individual employer profile

In line with guidance from DLUHC

Include allowance within past service liabilities

Cost cap timeline

Initial results

SAB process – 0.9% floor breach

HMT process – breach much higher

Process paused

Jan/Feb 2019 – due to McCloud judgement

Process restarted

July 2020 (alongside consultation on McCloud)

SAB letter to Minister

Published 7 October 2021 (dated 18 August 2021) – no recommendation to change benefits

HMT Directions

Published 7 October 2021

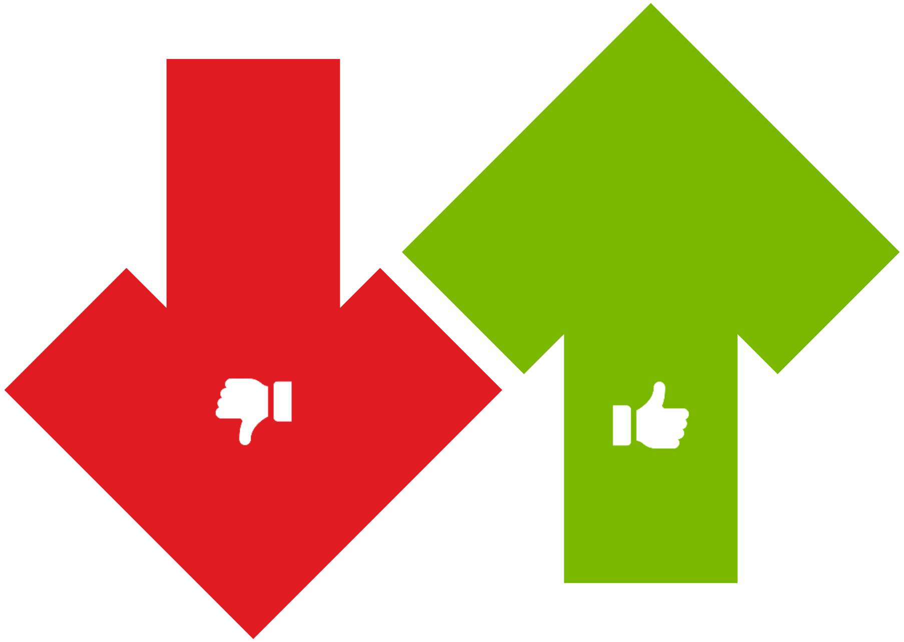
Judicial review?

TUs expected to challenge allocation of McCloud costs to members

Market movements since 31 March 2022

Assets

Investment return -7%
(to 30 September)



2023 PI

Expected to be 10.1% (set based on Sept CPI increase)

Liabilities

Group net discount rate up c0.4%
(30 September 2022)

We are taking account of these factors when setting employer contributions, keeping in mind the overriding objective of stability of contributions

Funding Strategy specifics

Managing a surplus

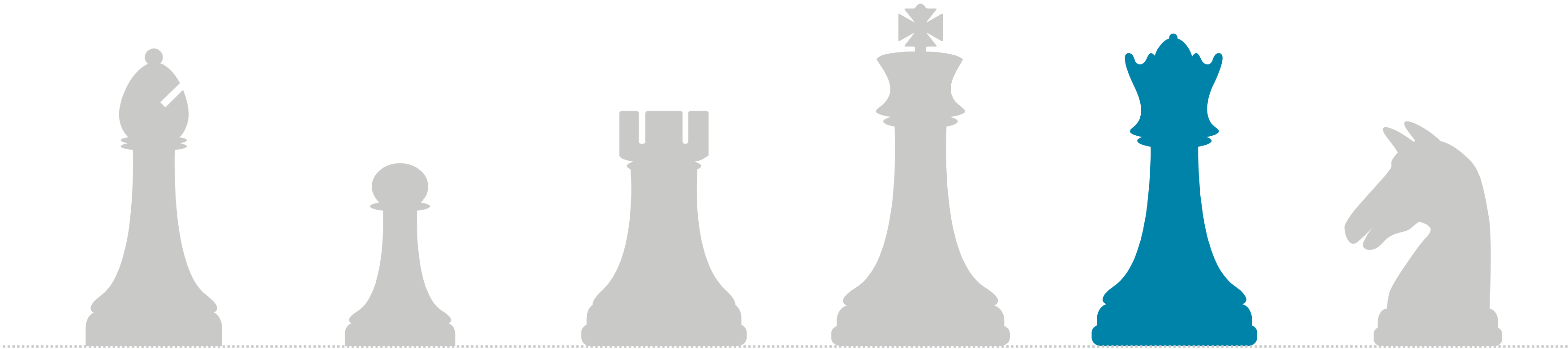
Where an employer is in surplus*, and where an employer's expected exit date is unknown or expected to be later than the date the revised rates and adjustments certificate will come into force following the next valuation, this* ***surplus will only lead to an adjustment*** *in an employer's contributions to the extent that this surplus is in excess of 10% of the value of that employer's liabilities valued relative to the appropriate Funding Target (i.e.* ***to the extent that the employer's funding level is greater than 110%****).*

Grouping and pooling of risks

All employers in the Fund are grouped together in respect of the risks associated with payment of ***lump sum benefits on death in service*** *– in other words, the* ***cost of such benefits is shared across the employers*** *in the Fund….*

Funding Strategy specifics

Grouping and pooling of risks, continued

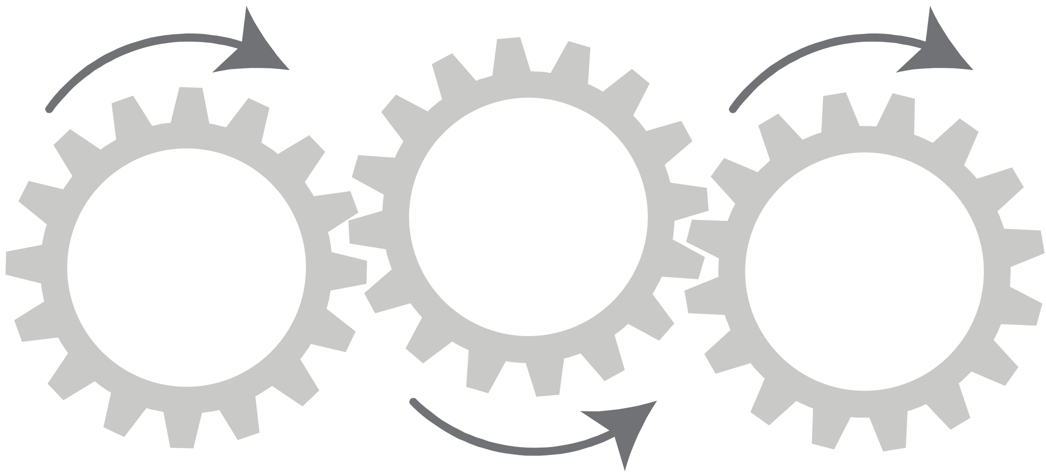


Town and Community Councils Group:

*Under the pooling approach these employers will pay a **common percentage of pay as their primary contribution rate** and will share experience (subject to each employer not taking action which adversely and materially, as determined by the Administering Authority, affects the group's liabilities in which case the Administering Authority may ensure that employer meets the additional liabilities it has created by such action).*

***Each employer in the group will be responsible for meeting any deficit (or benefit from any surplus) allocated to the employer** i.e. this will be outside the experience sharing mechanism. Any deficit recovery plan will be based on the specific employer's circumstances.*

Outlook for scheduled and subsumption body employers



Past service position

Funding level has improved

Almost all employers now are over 100 funded so no longer need to pay deficit contributions

Surplus to be recovered over 19 years

Future service position

Future service (primary) rate has increased

McCloud now all in past service

Strategic Decisions

Short term inflation allowance

Avoid material contribution reductions given post valuation experience and ongoing McCloud uncertainty

Note

Individual employer rates apply (other than future service / primary rates for the Town and Community Councils Group) – almost all employers likely to see a reduction in contributions

Ongoing orphan employer is subject to different strategy = higher contributions

Part 4
Summary, next steps and questions

Summary and next steps

Results

Asset returns and deficit contributions have improved the position, offset by changes in financial assumptions increasing the liabilities

Short term inflation allowed for in liabilities

Surplus recovered only where employers over 110% funded

Employer rates

All employer contributions communicated

For ongoing orphan employer these may take into account post valuation experience

Finalise rates and outputs

Aon to finalise results for all employers and sign off valuation by 31 March 2023

Swansea CC to provide individual employer schedules and agree contributions for all employers

Any questions?

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