

Nottinghamshire County Council Pension Fund

Board Training 16 December 2021
2022 Actuarial Valuation

Barry McKay FFA, Partner
Kelly Steele, Actuarial Assistant





What is a valuation?



How do we value liabilities?



How do we value assets?



How do we set contribution rates for employers?



Hot topics and looking ahead...

What is a valuation?



What is a funding valuation?



Liabilities

- Financial value of a promise
- Member entitlements
- Funded scheme



Assets

- Long-term investments
- Suitable risk
- Investment return on assets



Contributions

- Employee & employer
- Stability
- Cost efficiency

First project cashflows....

Step 1

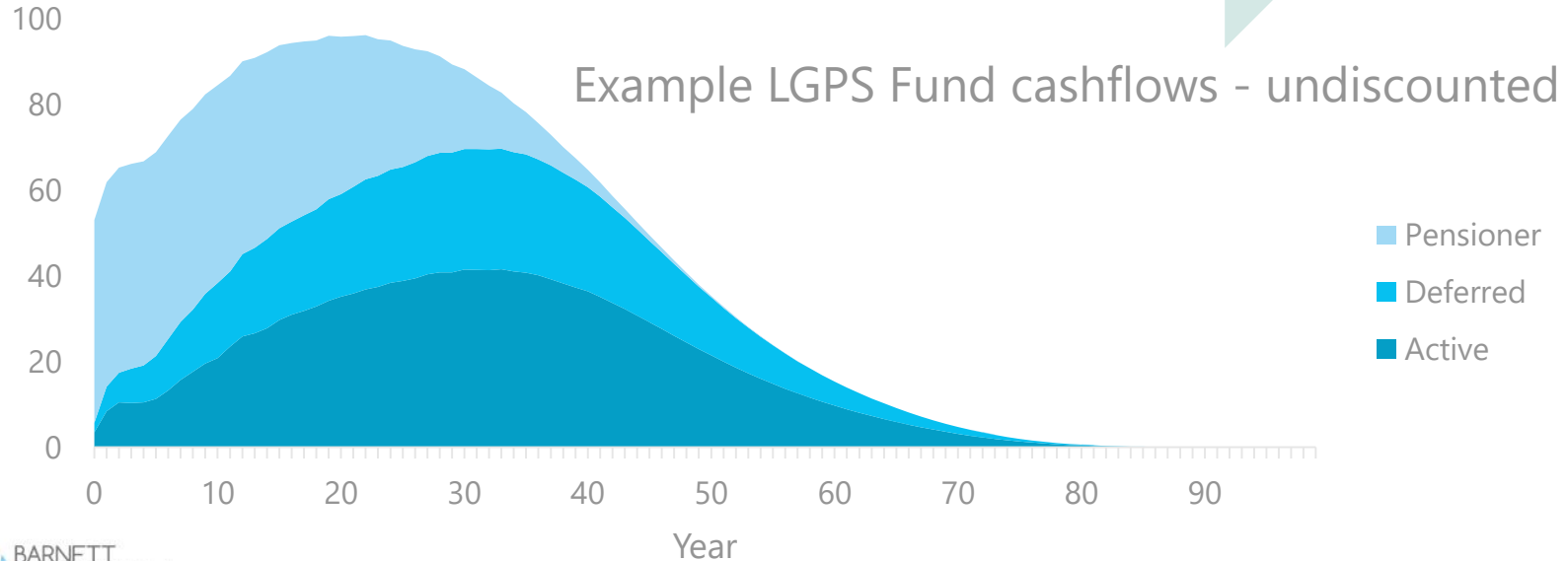
- Project all possible benefit payments for every member

Step 2

- Attach probabilities to each possible payment to get "expected" payments

Step 3

- then...



...then “discount” for today’s values

Step 1

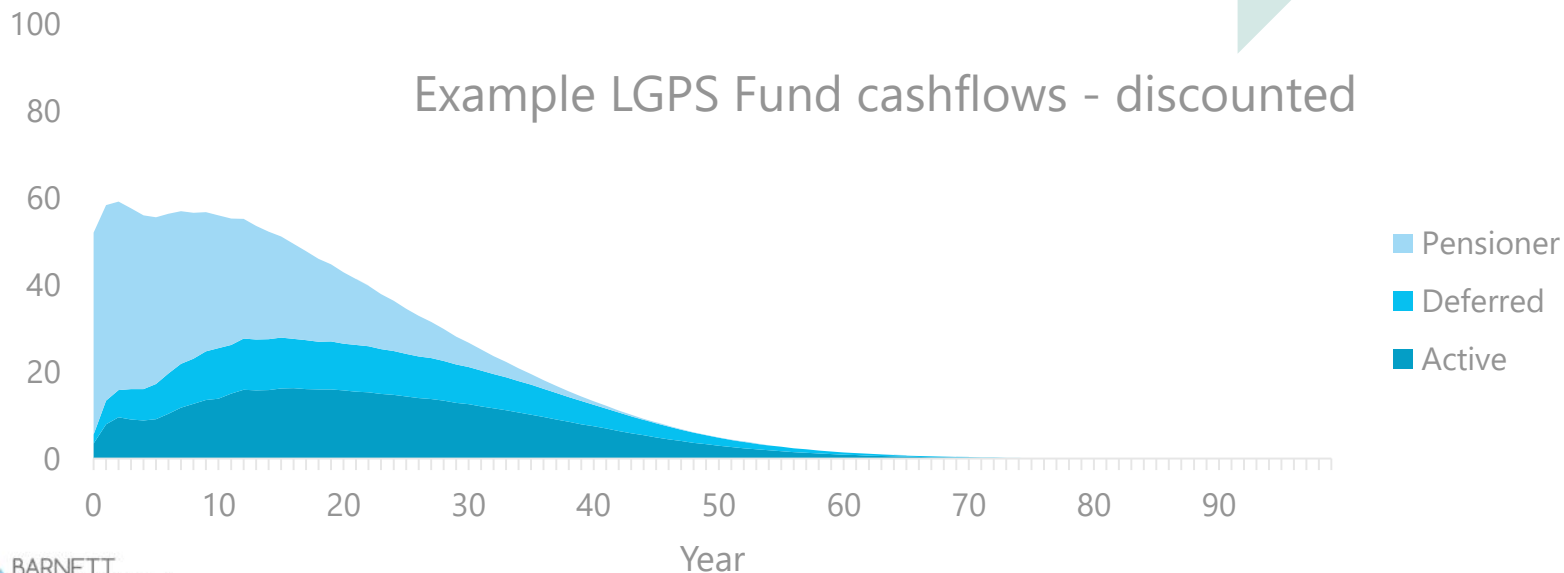
- Project all possible benefit payments for every member

Step 2

- Attach probabilities to each possible payment to get “expected” payments

Step 3

- Then discount payments to today’s “present value”



Your last funding valuation

Funding position

- Liabilities of £5,820m
- Market value of assets £5,415m
- Funding level of 93%

Employer contributions

- Primary rate of 17.9%
- Total equivalent contribution rate 21.6%

Section 13

- SAB funding level 100%
- Green flags

How to value liabilities

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Valuing liabilities for each employer



Member data for details of the benefits

Assumptions about future **amount** of benefit

Assumptions about **when** benefits will be paid

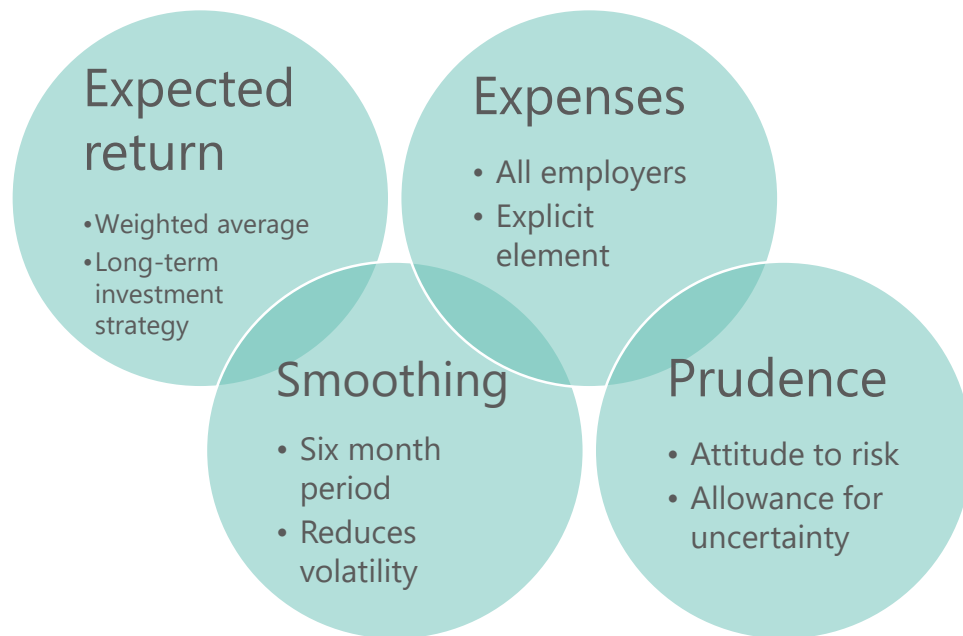
Actuary builds **model** and runs (lots of) calculations

Liability for each individual employer, in line with FSS

Key actuarial assumptions - financial



Key assumption - discount rate



Varies by Fund
Standardised for S13

Varies by employer
Employer covenant and circumstances

Varies over time
Updated for market conditions

Impact of increase in each assumption



Pension increases (CPI)

- Increases liability for **all members**
- All benefit payments are higher

Salary increases

- Increases liability for **active members**
- Final salary benefit payments higher

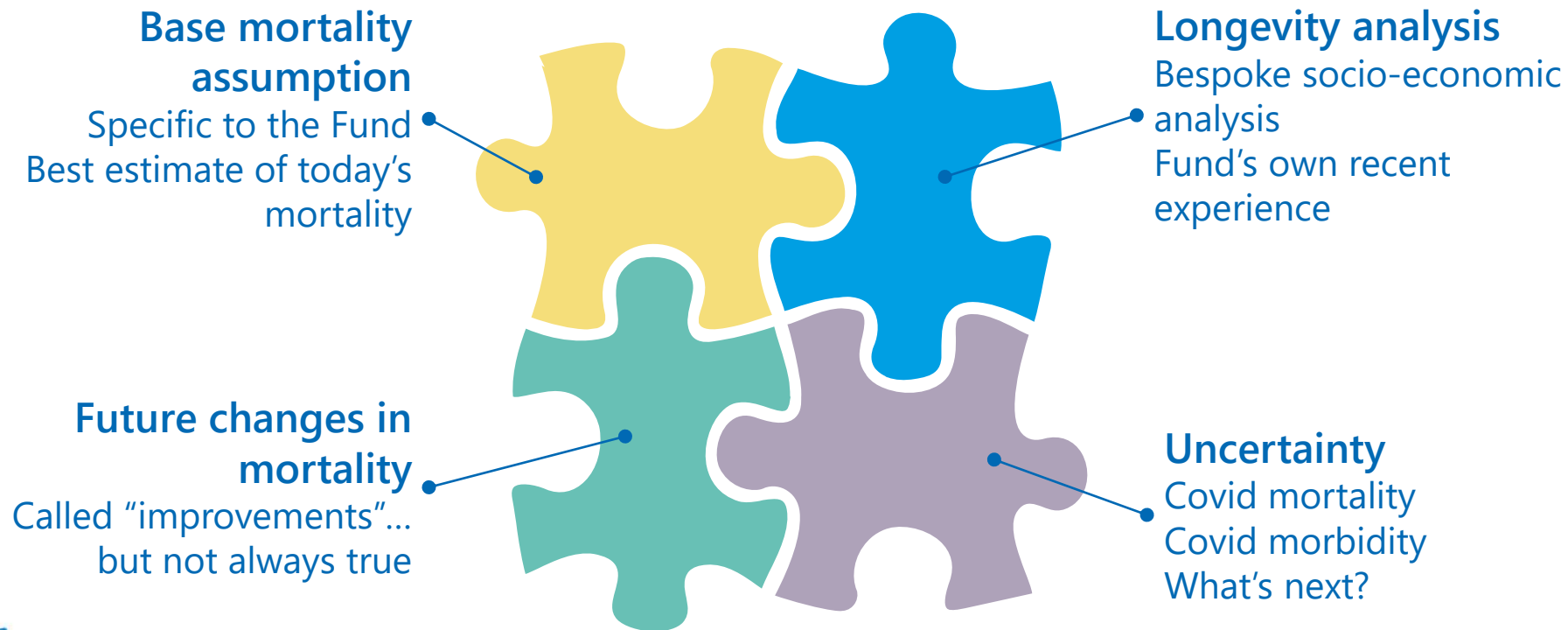
Discount rate

- Reduces liability for **all members**
- Investment return does more work

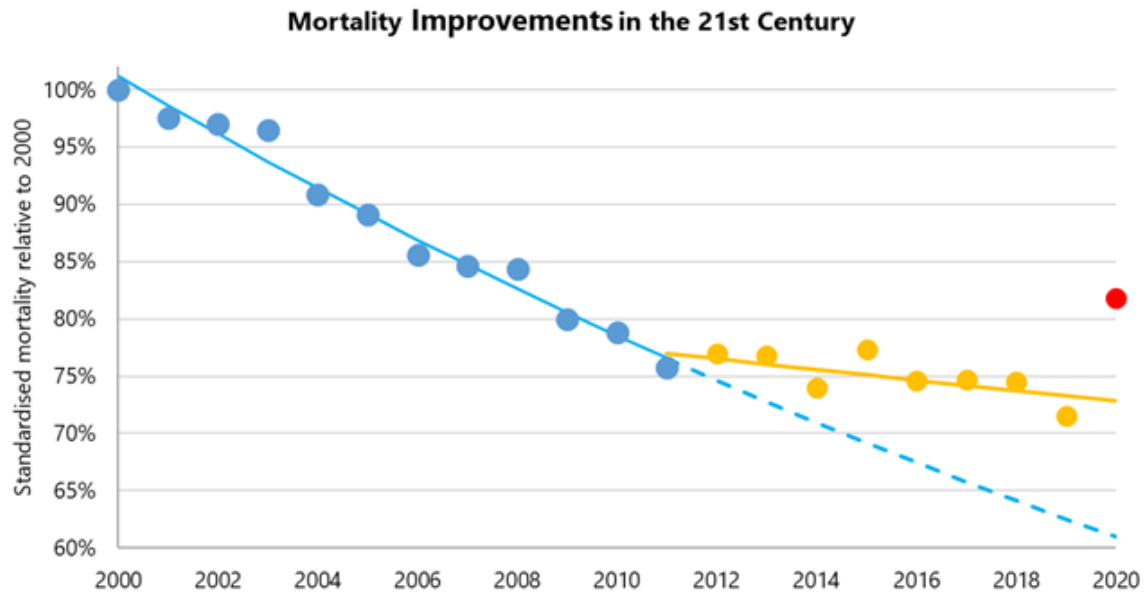
Key actuarial assumptions - demographic



Key assumption - mortality



How is mortality changing?



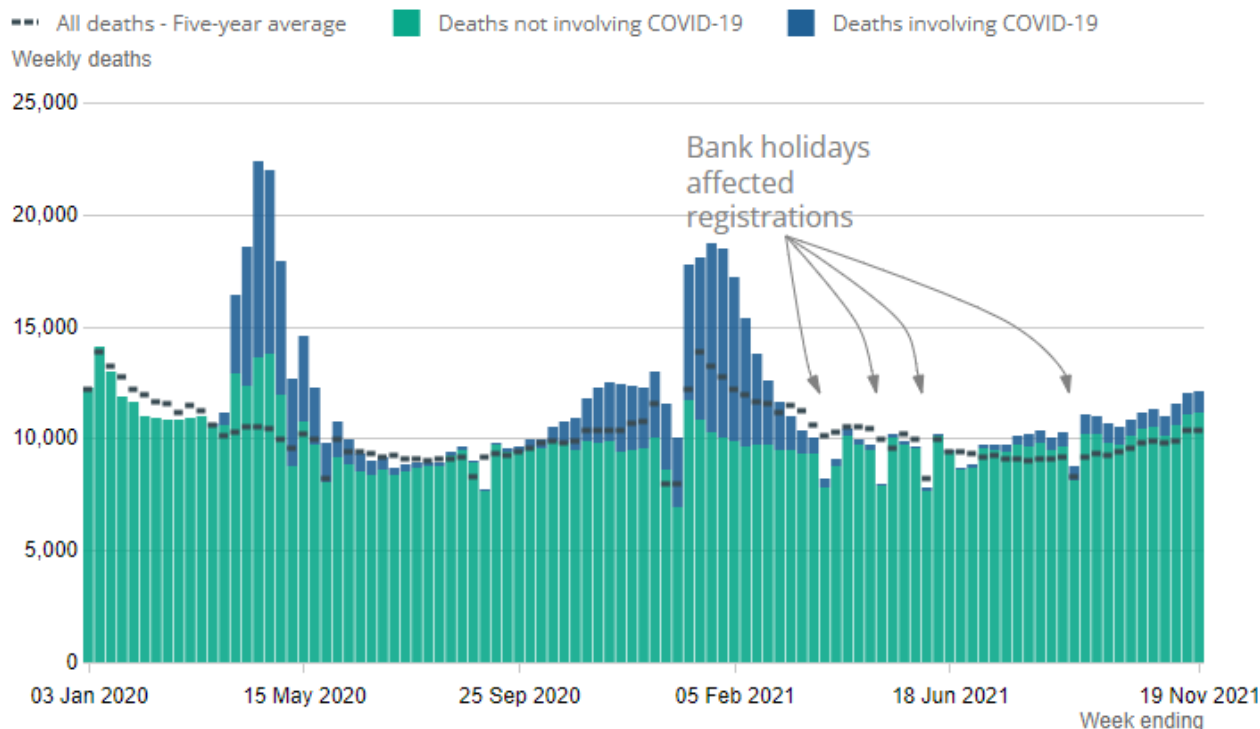
Source: Barnett Waddingham calculations based on Office for National Statistics data for England and Wales and Continuous Mortality Investigation Ltd (CMI) methodology

First recorded UK
Covid death 30 January
2020

100,000 UK Covid
deaths by 22 January
2021

124,000 deaths above
5 year average E&W
(to November 2021)

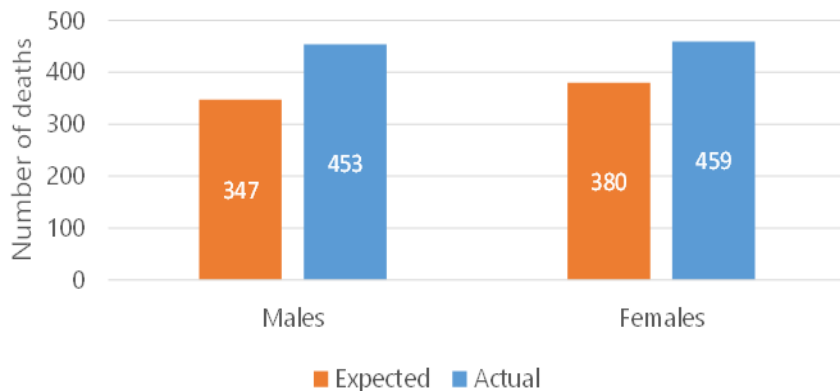
Impact of Covid-19



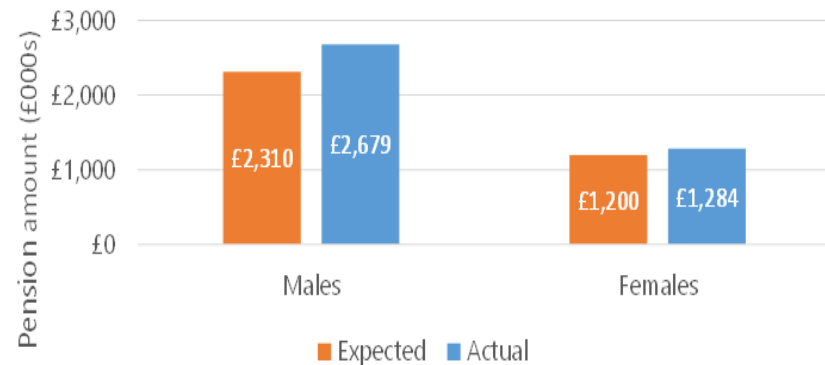
Source: Office for National Statistics – Deaths registered weekly in England and Wales

Your Fund - Impact of Covid-19

Number of pensioner deaths



Pension ceasing (£000s)



How to value assets

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Valuing assets for each employer



Assets at the **start** of the period

Plus **contributions** paid in

Minus **benefits** paid out

Investment return – gain or loss

Assets at the **end** of the period

Employer contributions

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Contribution rates for each employer



Primary rate or future service rate

Funding position for **deficit or surplus**

Appropriate deficit **recovery period**

Secondary rate or "deficit" contribution

Total contributions for each employer in
Rates and Adjustments certificate

What affects employer contribution rate?

Primary rate

- Employer share only
- Membership profile



Secondary rate

- Deficit recovery period
- Regular lump sums, % of payroll, something else?



Funding risks

- Employer covenant
- Risk-sharing or guarantees



Funding strategy statement

- Stability
- Solvency & long-term cost efficiency



Looking ahead to key issues

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Key issues affecting LGPS

- Age discrimination remedy
- Underpin increases employer cost
- Huge admin project

McCloud

- Cost cap and floor
- 2016 process paused in Jan 2018
- SAB & HMT

Cost
Management

- Public sector reform from 4 Nov 2020
- Contradictory regulations in force
- 12 Feb 2021 revoked by HMT

Exit Reform



Wider key issues



Covid

- Short and long term impact
- Mortality and morbidity
- Demographic changes

Climate emergency

- Working with investment advisers
- Scenario analysis

Future inflation

- Long term inflation
- Employee participation

How can we help your Fund?



Keeping you up to date



Bespoke advice



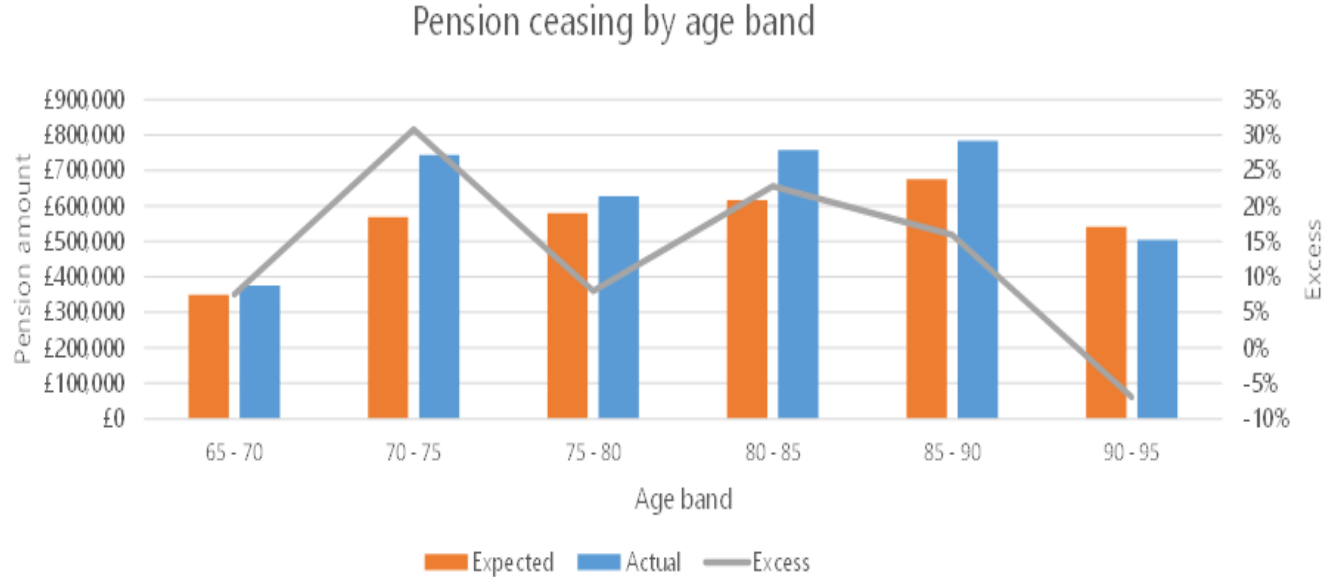
Benefits & governance support



Training available

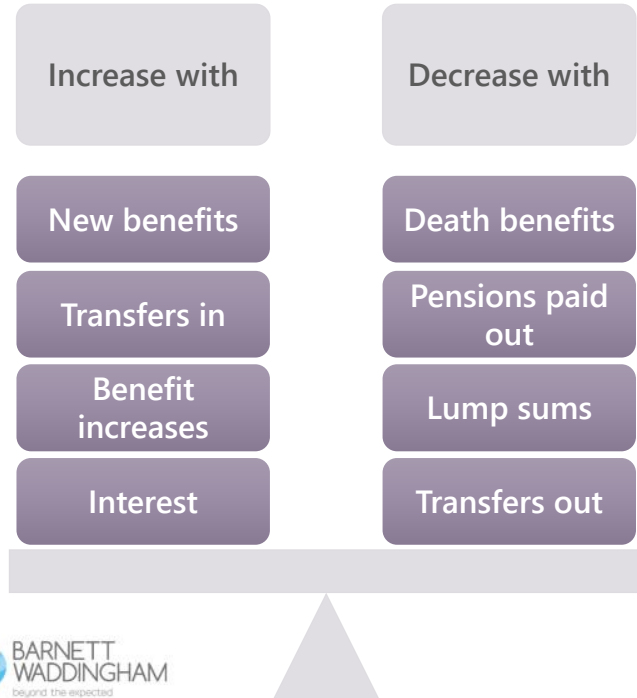
THANK YOU

Your Fund - Impact of Covid-19

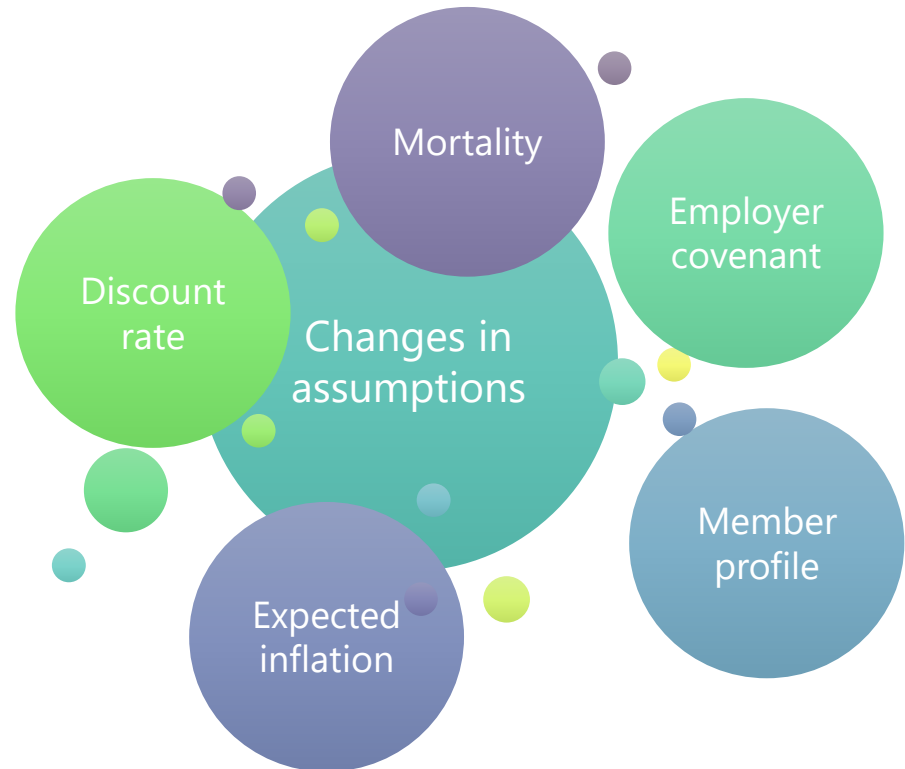


How do liabilities change over time?

Underlying liabilities



Actuarial value of liabilities



How do employer assets change over time?

