

London Borough of Merton Pension Fund

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Advisory Panel Training 24 November 2021
2022 Actuarial Valuation

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Agenda Item 5



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What is a valuation?



How do we value liabilities?



How do we value assets?



How do we set contribution rates for employers?



Looking ahead...

What is a valuation?



Looking back to your last funding valuation

Funding position

- Liabilities of £698m
- Market value of assets £718m
- Funding level of 103%

Employer contributions

- Primary rate of 19%
- Total equivalent contribution rate 17.5%

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- SAB funding level 110%
- Green flags

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What is a funding valuation?



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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

Setting the contribution rates

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Funding strategy

- Employer covenant
- Employer circumstances
- Funding strategy statement

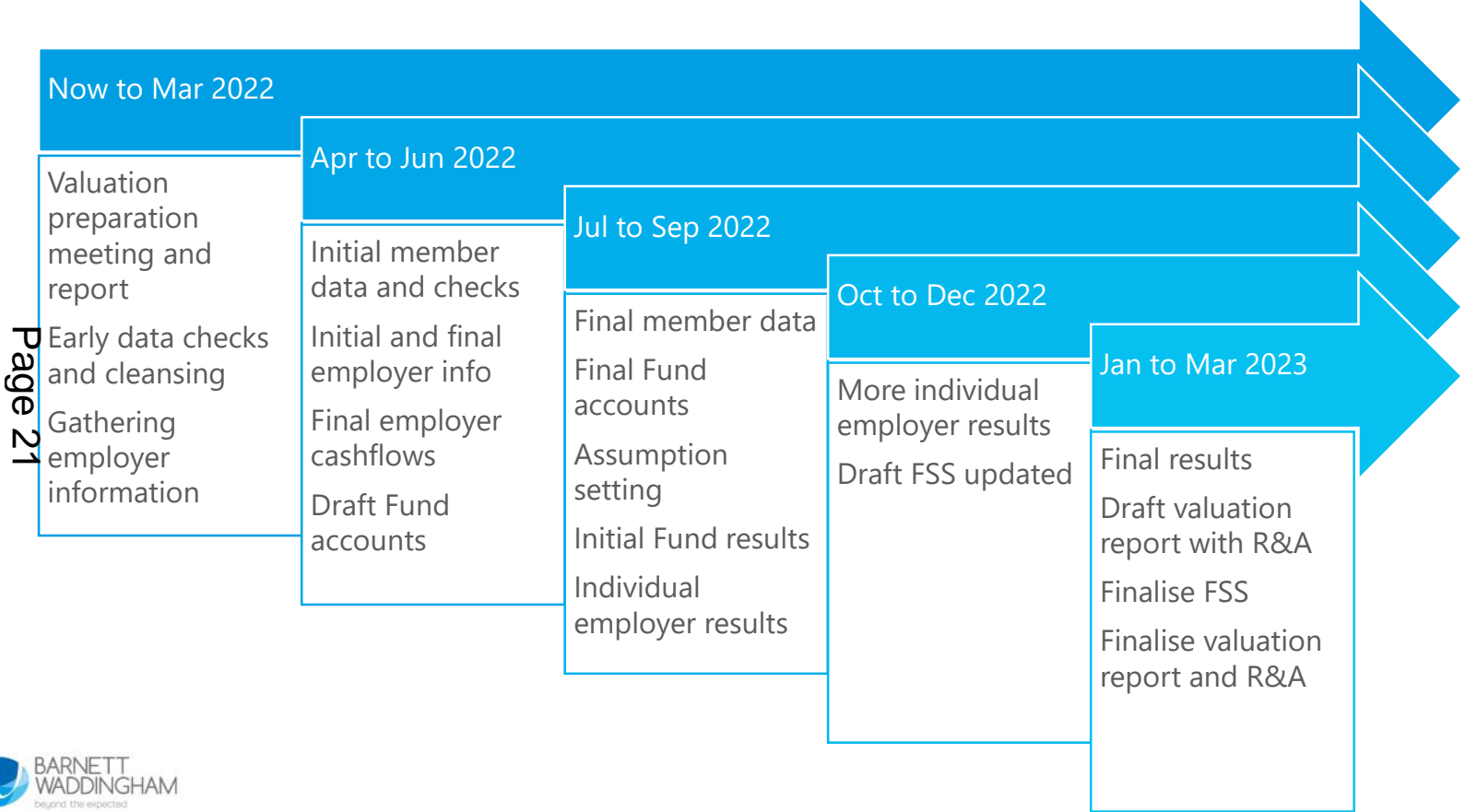
Primary rate

- Employer's share of cost of new benefits
- Over a period of time
- Current employees only

Secondary "rate"

- Adjustment to remove a deficit or surplus
- Over a period of time

Valuation project timescales



How to value liabilities



Valuing liabilities for each employer

Member data

Assumptions

Model

Results

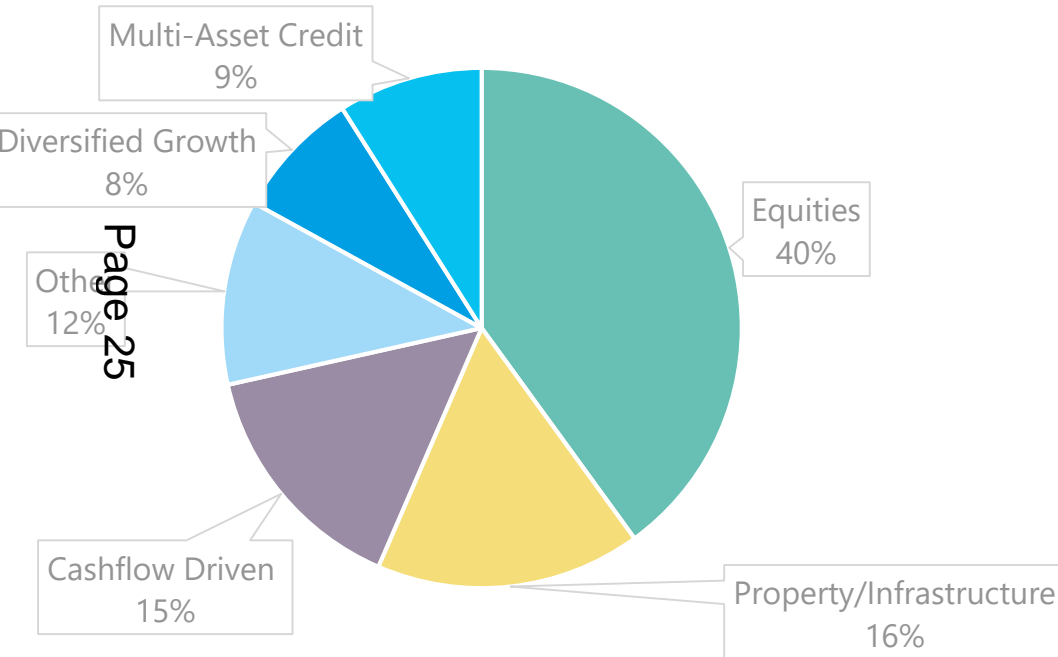
Key actuarial assumptions - financial

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Key assumption - discount rate

Fund's long-term investment strategy



Equities

- Dividend & capital growth

Property & Infrastructure

- Inflation plus a margin

Diversified growth

- Inflation plus a margin

Cashflow driven investment

- Fund benchmark

Multi-asset credit

- Fund benchmark

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 demographic assumption - mortality

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Base mortality assumption

Specific to the Fund
Best estimate of today's mortality

Longevity analysis

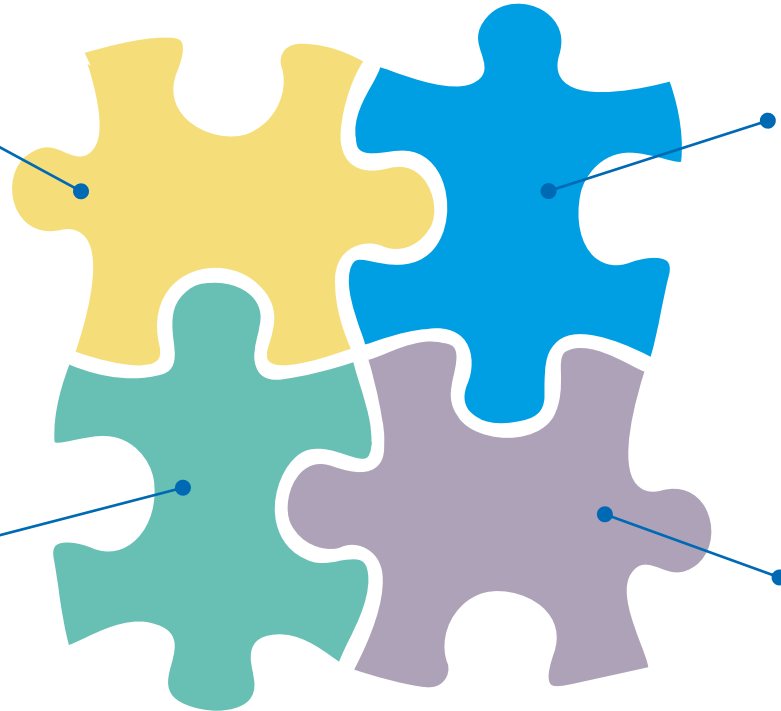
Bespoke socio-economic analysis
Fund's own recent experience

Future changes in mortality

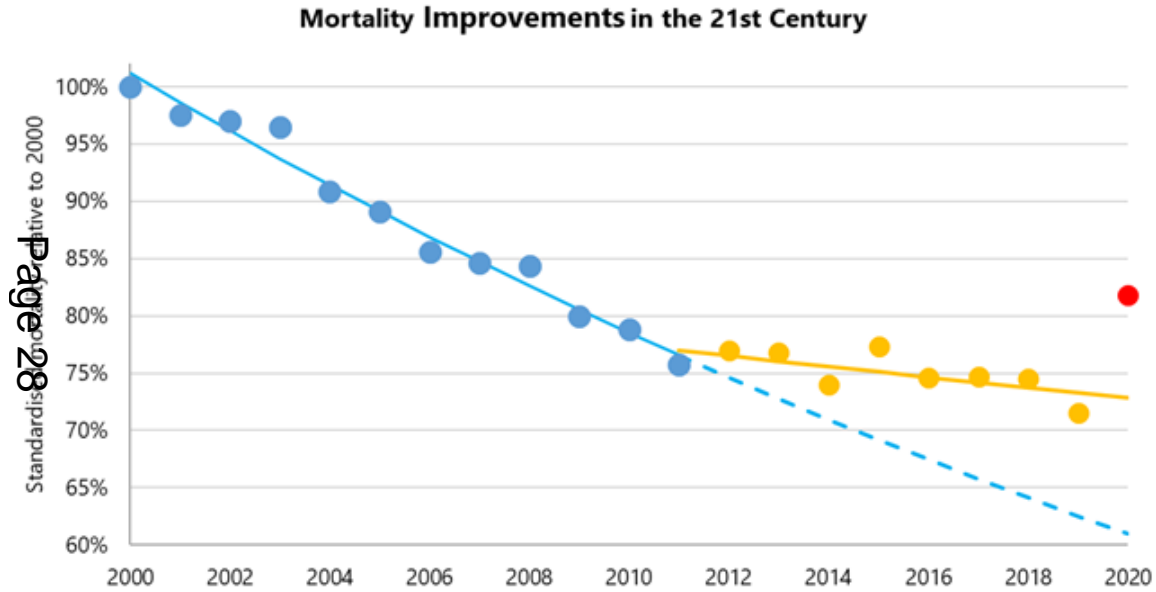
Called "improvements"...
but not always true

Uncertainty

Covid mortality
Covid morbidity
What's next?



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)

First project cashflows....

Step 1

- Project all possible benefit payments for every member

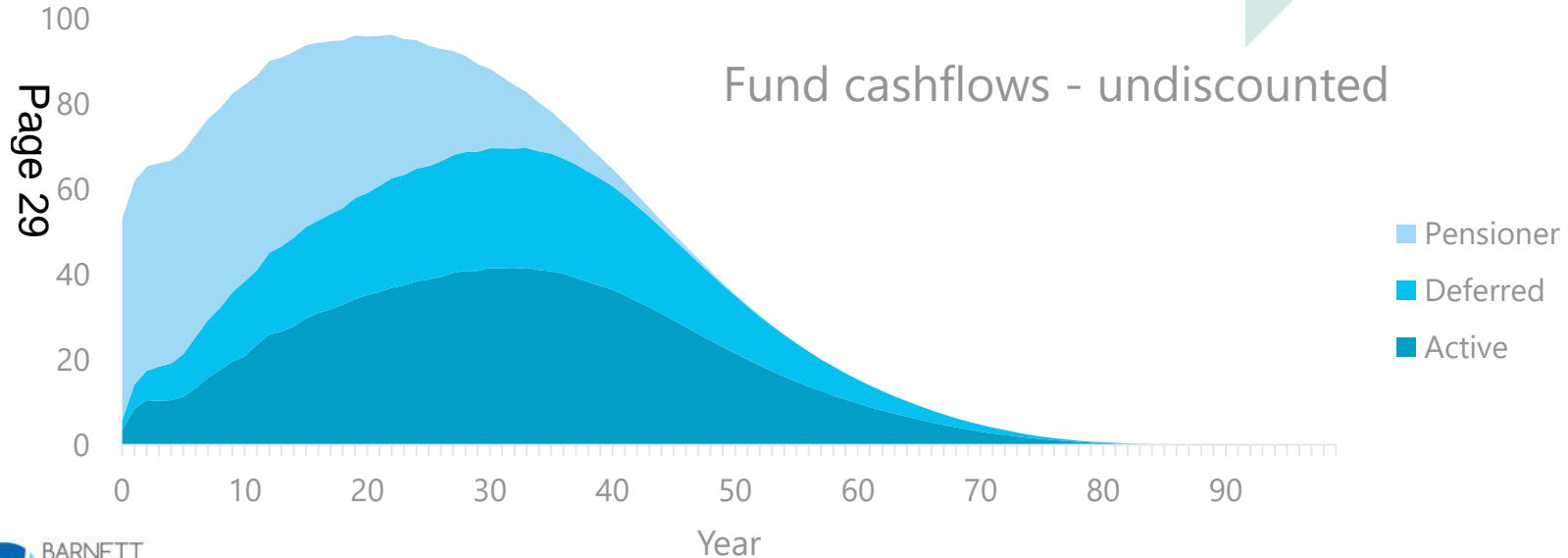
Step 2

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

Step 3

- then...

Fund cashflows - undiscounted



...then "discount" for today's values

Step 1

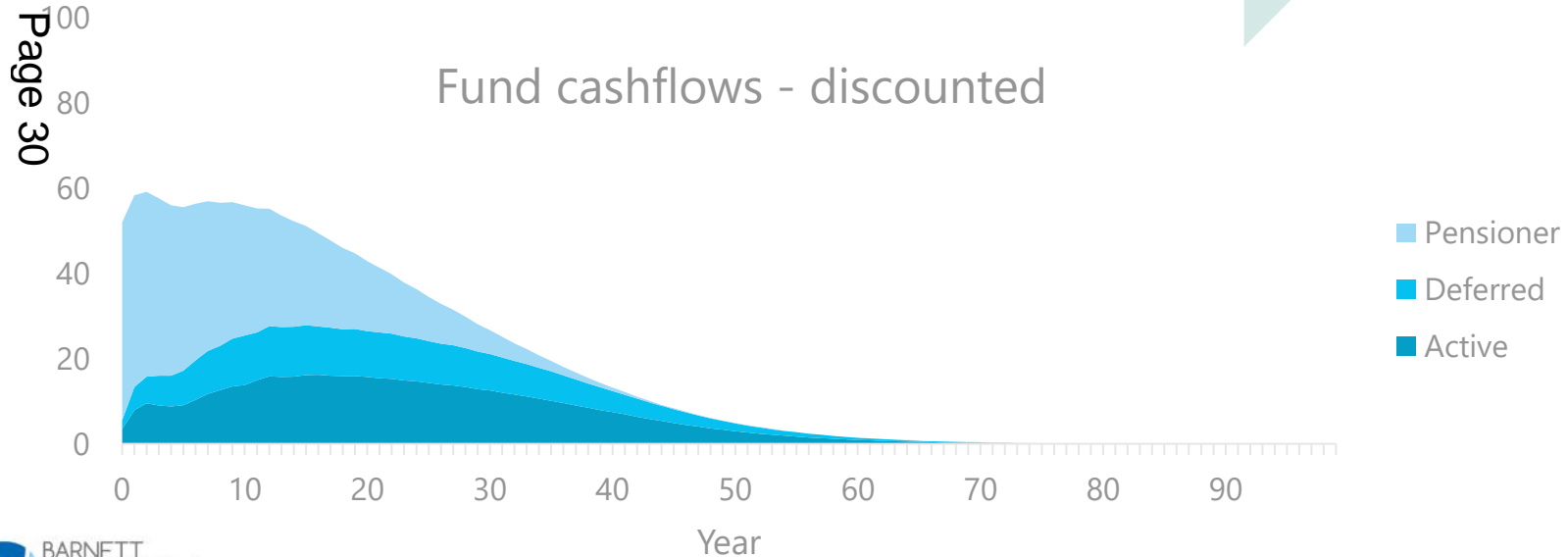
- Project all possible benefit payments for every member

Step 2

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

Step 3

- Then discount payments to today's "present value"



How do liabilities change over time?

Underlying liabilities

Increase with

New benefits

Transfers in

Benefit increases

Interest

Decrease with

Death benefits

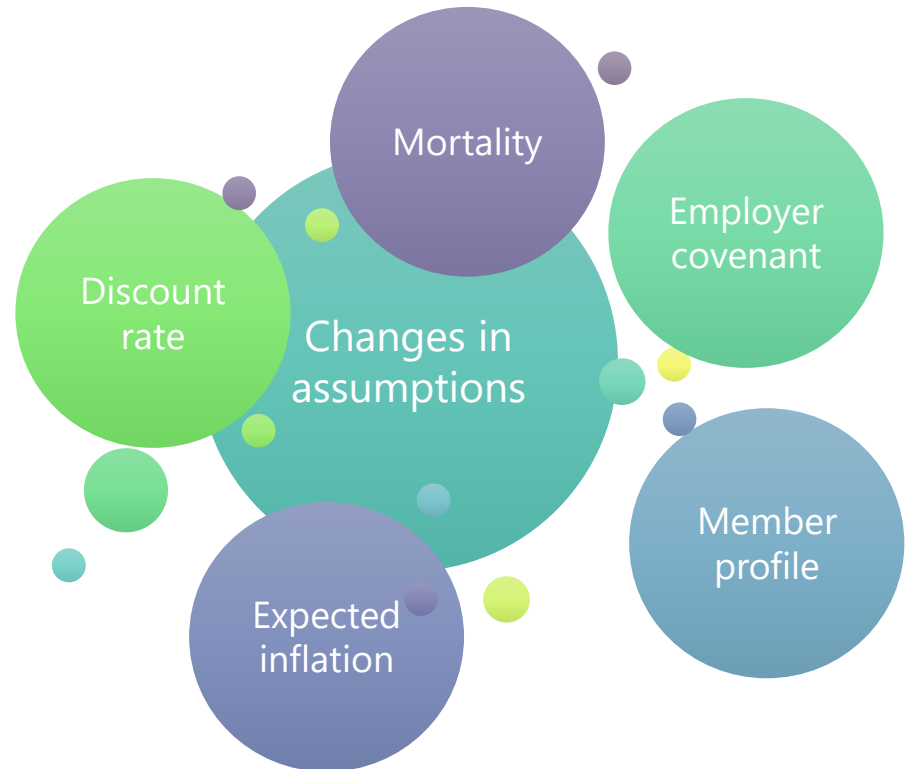
Pensions paid out

Lump sums

Transfers out

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Actuarial value of liabilities



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



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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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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

THANK YOU