

The Actuarial Profession
making financial sense of the future

Pensions Conference 2010
Andrew Gaches, Club Vita



The risky side of life

Managing longevity risk

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Longevity is a big issue...

£30,000,000,000

5 days earnings

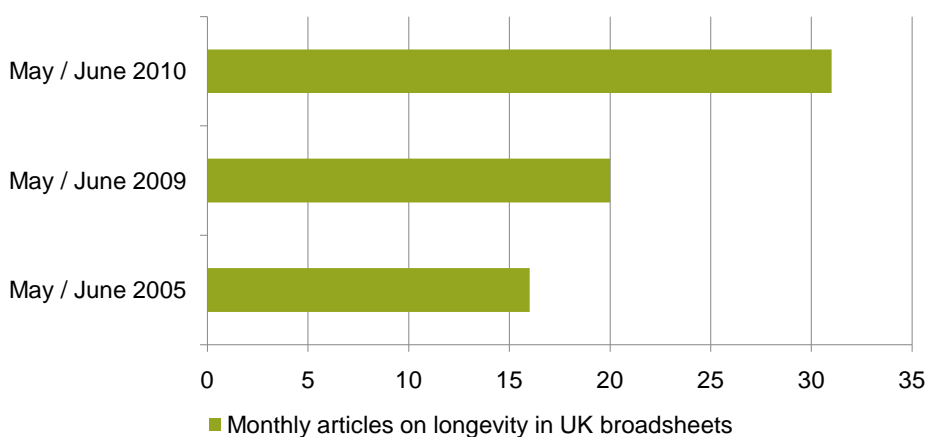
20% increase in liabilities

7 years variation

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...and the world seems to agree



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Source: Hill & Knowlton

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Longevity risk is different

Volatility risks

Short term fluctuation risks

- Equity price moves
- Bond price moves
- Currency moves

Cash flow risks

Affect actual amounts of benefits payable

- Higher inflation
- Increased longevity

Higher inflation

- Real assets likely to grow faster too
- Aligned risk strategy with Government policy

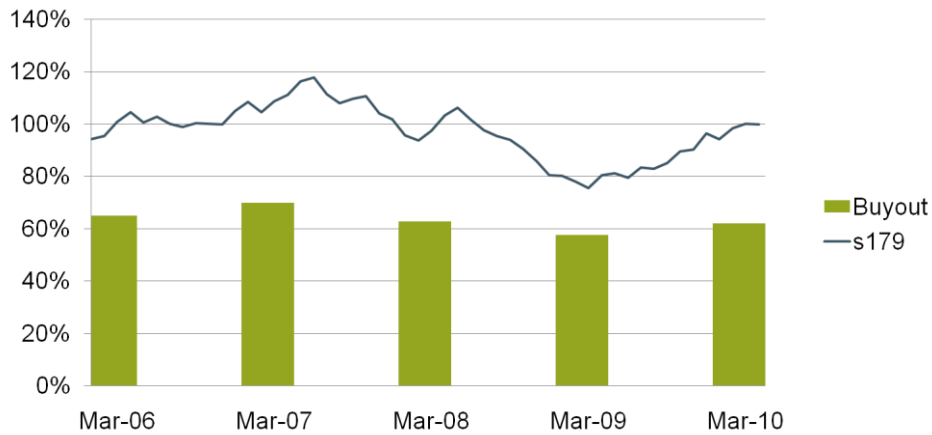
Increased longevity

- (Almost) independent of asset side
- Government social/health policy acts against pension schemes

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Buyout is unaffordable (for most)



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Source: Pensions Regulator / own calculations

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Longevity swaps: The highs



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Longevity swaps: The lows



THE
INDEPENDENT

Premier ditches pension swap plans and takes on risk of long-lived members

Co-operative is second firm to ditch longevity swap deal

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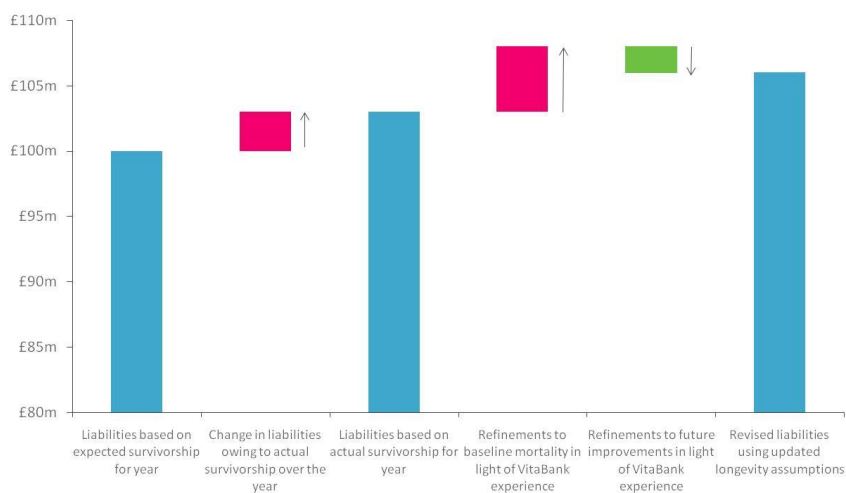
Who's left holding the baby?



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Monitoring longevity trends



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Risk sharing benefit designs

Adjust member contributions

- Monitor longevity experience
- Adjust member contributions to reflect any change in costs
- Crude across generations and unstable in closed schemes
- But several examples in UK public service schemes

Longevity adjustment factors

- Apply on retirement
- Future service only (without member consent)
- Agree benchmark and monitor subsequent experience
- Personal choice of later retirement or smaller pension
- More targeted, but criticised for difficulties in planning

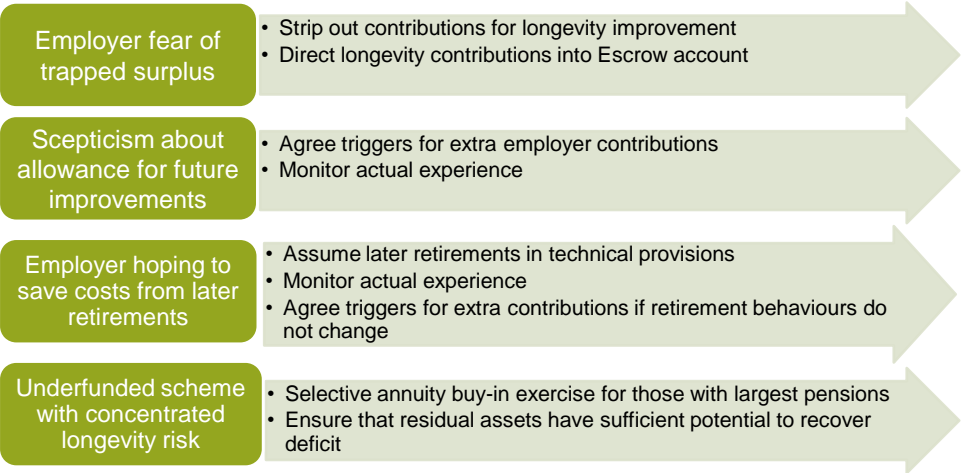
Sharing savings from late retirement

- For schemes that do not fully compensate late retirees
- Many examples in public sector and in schemes with split retirement ages following Barber
- Encourage later retirements, by introducing uplifts to past service
- Can split the money between employee and employer, to create win-win

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Innovative funding plans



Communicating longevity clearly



VS



1. Know your limitations

Separate the known knowns...

...from the known unknowns...

...in assumptions **and in results**

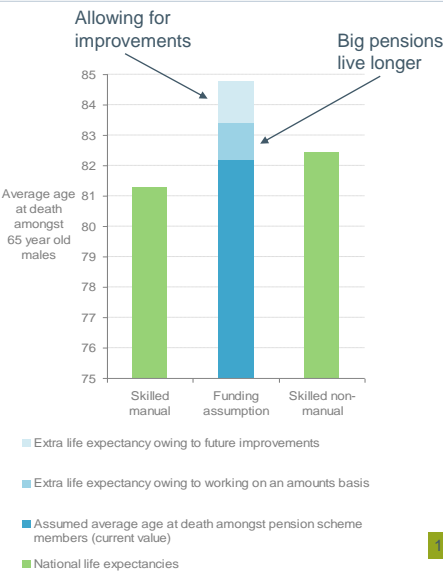
Longevity allowance	Technical Provisions
Recent experience assuming no changes in the future	£100M
Provisions for future increases in life expectancy	£112M

The above is illustrative based upon what the authors understand to be a reasonably typical valuation basis. It does not represent the personal views of the authors, or their employers, as to what a reasonable allowance for future improvements is, nor does it constitute a recommendation.

2. A common language

Use **life expectancies** or **survival probabilities** to convey assumptions...

...and **reconcile** these with numbers clients will see in the media

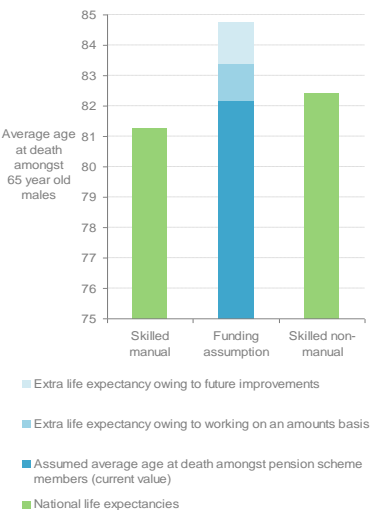


3. Keep it real

Use **scenarios** to help clients understand how a particular projection might arise....

Consistent with:

- Cohort effect in short term
- Short term reductions in heart disease and cancers in line with government targets
- Gradual reduction in numbers dying from cancer and heart disease by 90% amongst under 75s and 70% amongst over 75s by 2205 (with deaths from other diseases reduced by 70% and 50% respectively)



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4. Don't be blinkered

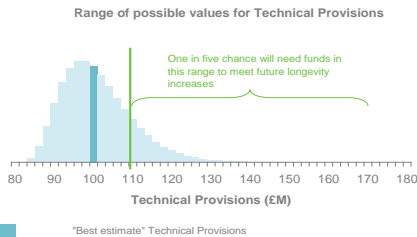
Do not be afraid of the unknown...

...instead **show a range of possibilities**

...and **monitor emerging experience**

Mortality allowance	Technical Provisions
Medical advances faster than government targets	£110M
Best estimate	£100M
Medical advances slower than government targets	£95M

The above is illustrative. It does not represent the personal views of the authors, or their employers, as to what a reasonable spread for future improvements is, nor does it constitute a recommendation.



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Effective communication

1. Know your limitations
 - Separate the knowns from the unknowns
2. A common language
 - Consistent and accessible communication
3. Keep it real
 - Relate the assumptions back to the real world
4. Don't be blinkered
 - Show the uncertainty and monitor experience

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Questions or comments?



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