

Bulk Annuities – Creating a Market

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Bulk Annuities – Creating a Market

Agenda:

- Richard Baddon: creating a market
- Richard Willets: mortality issues

Richard Baddon – Brought to you by:



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Pensions Paternoster PIC Swiss Re
Bulks Synesis Wesleyan
Aegon AIG Aviva L&G Lucida
Met Life Prudential Goldmans Axa
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Bulks Swiss Re Scottish Re
XL Re Max Re Synesis Pearl

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Pensions Bulks

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Traditional buy-out market for schemes in wind-up is changing.....

- When a scheme is bought-out the costs are fixed and the employer has no further exposure to:
 - investment risks;
 - mortality risks;
 - operational risks; or
 - Regulatory risks
- Prior to the 2004 Pensions Act, the buy-out market existed only for DB schemes in wind-up

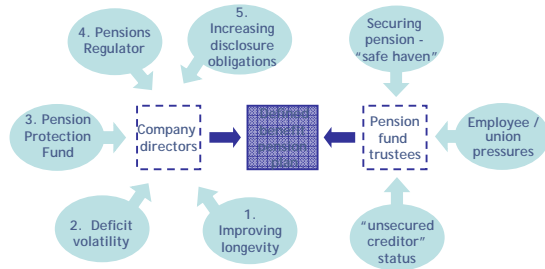
Traditional buy-out market

Key drivers

DB scheme risk transfer market

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Key drivers of growth in the Bulk transfer market



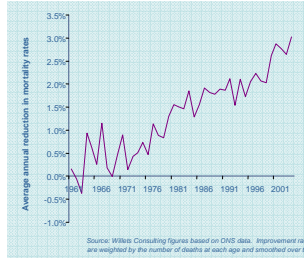
...for many companies the uncertain future cost of providing defined benefit pensions has become a major risk

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1. Improving longevity

Can employers & trustees manage mortality risk?

PACE OF MORTALITY IMPROVEMENT



Source: Willets Consulting figures based on ONS data. Improvement rates are weighted by the number of deaths at each age and smoothed over time.

ASSESSING MORTALITY

- Pricing mortality risk has two components:
 - Base assumptions
 - Future improvements
- Experience over past 40 years illustrates the difficulties!
- Significant Life expectancy improvements

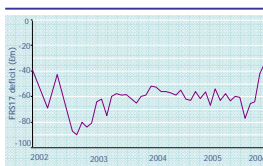
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2. Deficit volatility

...or other sources of DB scheme deficit volatility?

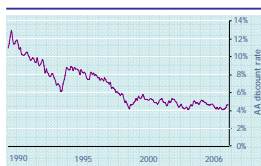
- Poor asset liability matching has driven deficit volatility
- Volatility in FRS17 liabilities even if portfolio well matched

CHANGES IN FTSE100 PENSION DEFICIT



Source: Deloitte

NOMINAL AA FRS17 DISCOUNT RATE



Source: Deutsche Bank

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3. The Pension Protection Fund

Pensions Act 2004 established the Pension Protection Fund and the Pensions Regulator

- Statutory fund established to pay compensation
 - Qualifying **insolvency event**
 - Insufficient assets** to cover obligations
- Benefits of **immediate annuitants fully protected**
- Other scheme members receive **90% of benefits, with £26k cap**

PPF LEVY

- Scheme (20%) & Risk (80%) based levy
- Calculated with reference to **buy-out**
- Total levy has risen from £300m in 2005 to £575m in 2006

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4. The Pensions Regulator

Pensions Act 2004 established the Pension Protection Fund and the Pensions Regulator

- New regulator established to:
 - Protect benefits** for all members
 - Improve **confidence** in DB schemes
 - Minimise claims** on the PPF
- Key powers** to issue:
 - Financial Support Directions
 - Contribution Notices
- Regulator can **intervene** in corporate activity if under-funded
- Must **disclose** funding to members from September 2006

KEY CHANGES TO REGULATION

- Scheme specific** funding
- 10 year plan** for funding deficits
- Buy-out **disclosure**
- Monitoring** of buy-out funding below 60%

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5. Disclosure requirements – FRS17

- Pensions Act 2004 introduced **Scheme Specific Funding** requiring employers and trustees to **agree and disclose** appropriate assumptions
- Accounting bodies** and the **investment community** applying pressure to provide **full disclosure** on company accounts
- ASB has six recommendations for improving disclosure:

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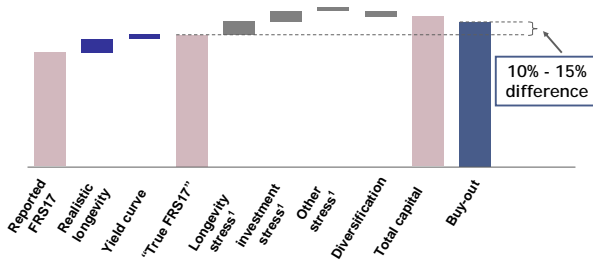
5. Disclosure requirements – FRS17

Employer-trustee relationship	Indication of degree of independence
Principal assumptions	Disclosure of mortality assumptions
Sensitivities	How changes in assumptions could change liabilities
Size of liabilities	Disclosure of buy-out cost - MAY BE BACKTRACKING ON THIS
Funding	Details of regular and special contributions
Scheme assets	Disclosure by class including expected rates of return

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5. Disclosure requirements – FRS17

Pensions Act 2004 is forcing businesses to reassess FRS17 liabilities, closing the gap with buy-out cost...



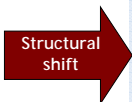
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An inevitable structural shift?

Shift of responsibility to insurance companies...

EMPLOYERS & TRUSTEES

- High deferred costs
- Personal liability
- Regulatory intervention
- Lack of expertise
- Volatile risks



INSURANCE COMPANIES

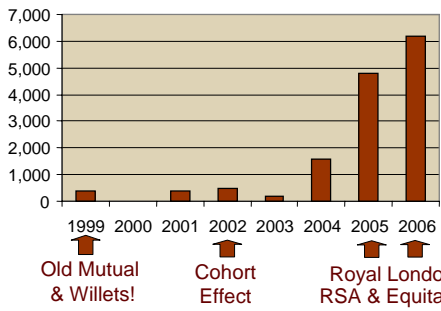
- Risk pricing expertise
- Capital backing
- Appetite for mortality risk
- Able to manage investment risks
- Operational expertise

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Insurance Bulks

Life Company Bulk Annuity Market Development £m



Life Company Bulk Annuity Market Development £bn

Name	1	2	3	4	5	6	7	8	9
Rating (S&P)	A+	AA	AA	N/R	A-	AA	AA-	N/R	N/R
Capital Group	8.5	8.5	19.4	1.0	1.3	N/A	18.9	N/A	N/A
Deal History									
1999	£0.4								
2000									
2001	€0.6								
2002	£0.5								
2003	£0.2								
2004	£0.5		£1.1						
2005	£1.0	£2.2	£1.4	€0.3					
2006		£4.6	£0.7		£0.4	£0.5			

So Why Now?

So Why Now – Life Bulks?

- Companies are either bulls or bears about mortality
- Pillar I v's Pillar II
- ICA means that capital can be released
- Mis-match between duration of Annuities and With-Profits business

So why now – common themes?

- Supply and Demand
 - Pension Bulks – trustees need a way out
 - Life Co - capital release
- Big mortality bet – it can't get worse can it?
- Rapid build up of funds under management
- Increased complexity of investment management techniques
- Significant capital available to the sector
- Respectability of the consolidation market – missed chances?
- Investment Banks double dip: provide both equity & solutions

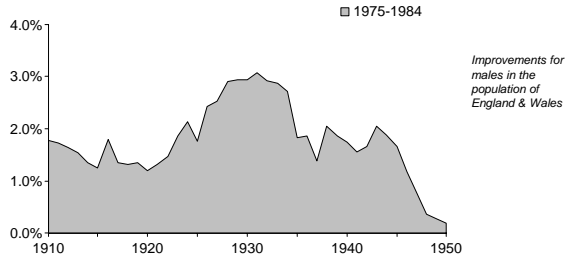
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Mortality issues

There are two distinct elements to mortality assumptions for bulk annuities:

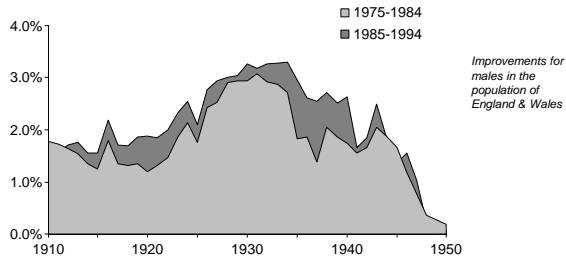
- Base mortality
- Future mortality improvements

Average annual rate of mortality improvement by birth cohort and decade



Source data: ONS

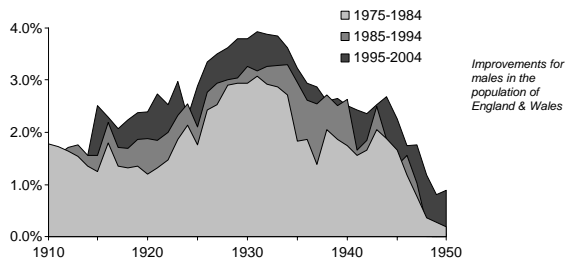
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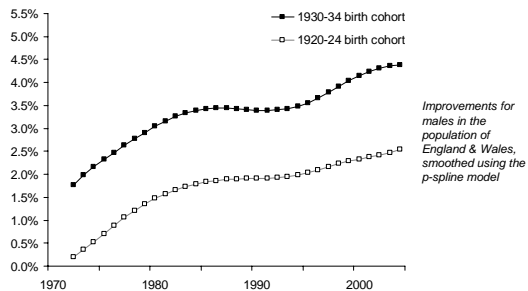
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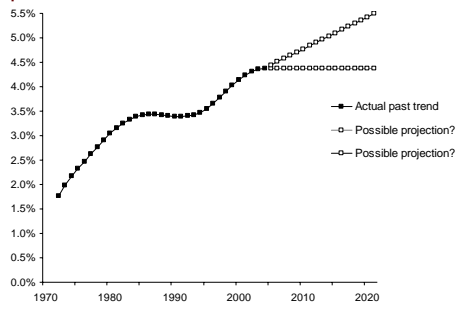
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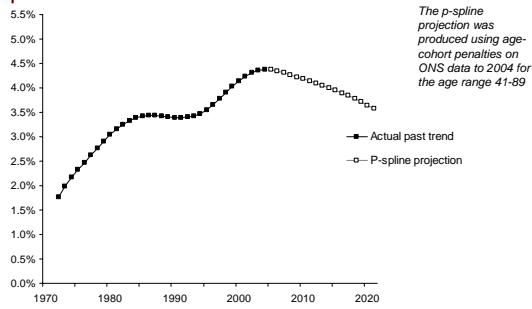
Average annual rate of mortality improvement for the 1930-34 birth cohort



Source data: ONS

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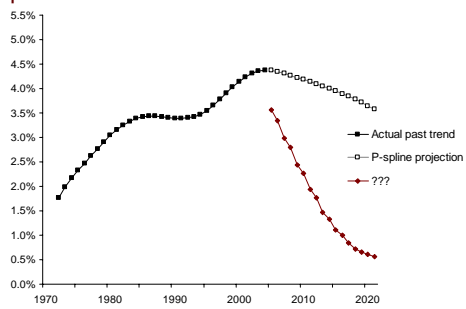
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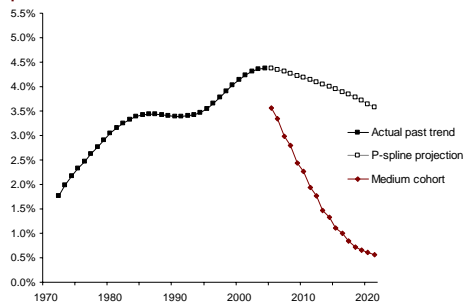
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Market practice

- Pricing bases are not generally available
- However, medium cohort is thought to have been an almost universal standard
- Prudent assumptions for statutory reserving are published. Assumptions for year end 2005 were as follows:

	Males	Females
Prudential	100% of medium cohort (with 1.25% p.a. floor)	75% of medium cohort (with 0.75% p.a. floor)
Legal & General	Average of medium and long cohort (with 0.80% p.a. floor)	100% of medium cohort (with 0.80% p.a. floor)

Source data: FSA Returns

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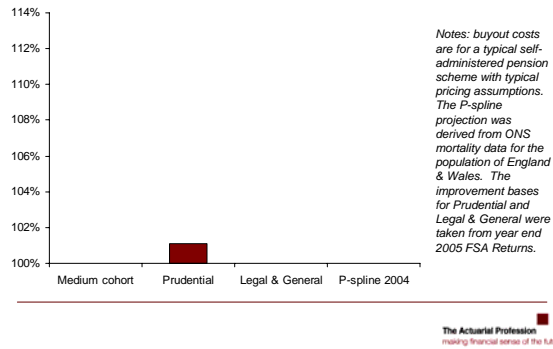
Sample buyout costs using various improvement assumptions relative to medium cohort



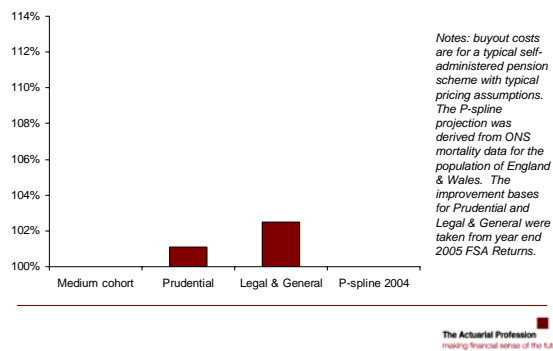
Notes: buyout costs are for a typical self-administered pension scheme with typical pricing assumptions. The P-spline projection was derived from ONS mortality data for the population of England & Wales. The improvement bases for Prudential and Legal & General were taken from year end 2005 FSA Returns.

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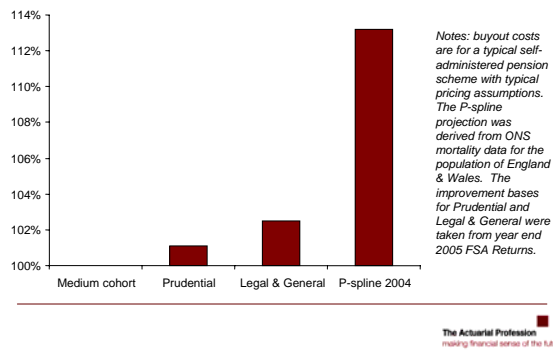
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Sample buyout costs using various improvement assumptions relative to medium cohort



The mortality improvement debate

- There is a wide gap between current practice and an (unadjusted) extrapolation of the recent trend
- Many parties are likely to play a role in the debate:-
 - The CMI
 - The Board for Actuarial Standards
 - The FSA
 - The Pensions Regulator
 - Equity analysts

The mortality improvement debate

- In the bulk market “old” and “new” players will have different perspectives
- Old players will be concerned about:
 - The impact on in-force business
 - Consistency from year to year
 - Equity analysts
- New players have a fresh canvas
- All players are concerned about price competitiveness

The mortality improvement debate

- In practice, it's not easy to be objective!
- In setting mortality improvement assumptions the primary concerns should be:-
 - Policyholder security
 - Profitability of future new business

One view...

"...the CMI's p-spline model ... would actually require the elimination of all deaths from circulatory disease and all deaths from cancer within just 30 years ... the world would need to be a very different place for this to happen within this kind of timescale."

Source: www.legalandgeneralgroup.com

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One view...

"30% of crimes currently involve violence. A fall in the total crime rate of 30% would therefore require the elimination of all violent crime ... the world would need to be a very different place for this to happen."

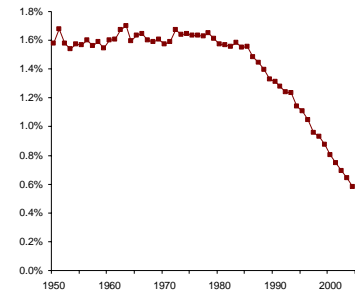
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The mortality modelling by cause of death

- "Cause elimination" is unlikely to be of any real value
- Modelling mortality trends by cause of death can yield useful insights

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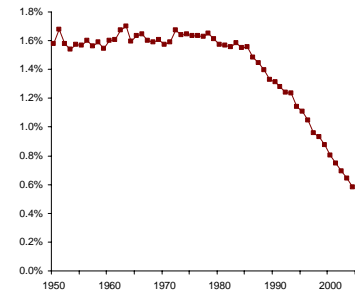
Mortality rate from heart disease, males in England & Wales, aged 65-74



Source data: ONS

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Mortality rate from heart disease, males in England & Wales, aged 65-74

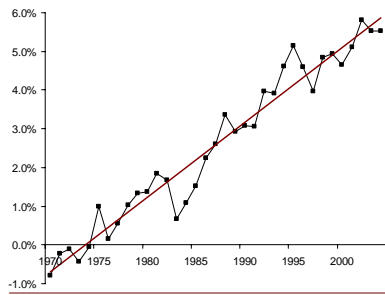


"Premature deaths from heart disease could be eliminated within 10 years"
Prof. Roger Boyle, 2004

Source data: ONS

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The pace of improvement in heart disease mortality has accelerated at a near constant rate



Average annual rate of improvement in male heart disease mortality for England & Wales, 1968-2004. Improvements derived using a model developed by Willets Consulting which controls for cohort effects.

Source data: ONS

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Increase in NHS prescriptions for selected treatments

NHS prescriptions (millions per annum), England

	1984	1994	2004
Beta-blockers	11.8	14.0	26.4
Anti-hypertensive therapy	4.6	9.7	38.6
Lipid regulating drugs (incl. statins)	0.2	1.7	29.4
All prescriptions for circulatory disease	52.3	81.0	200.6

Source: Department of Health, 2005

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It is likely the number of prescriptions for statins in 2006 will exceed the total for the entire period from 1981-2000

Source: Department of Health, 2005

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Views on potential cancer improvements

▪ "It is a realistic goal to eliminate death and suffering from cancer by the year 2015."

Director of the National Cancer Institute

▪ "Cancer will be as controllable as diabetes by 2050."

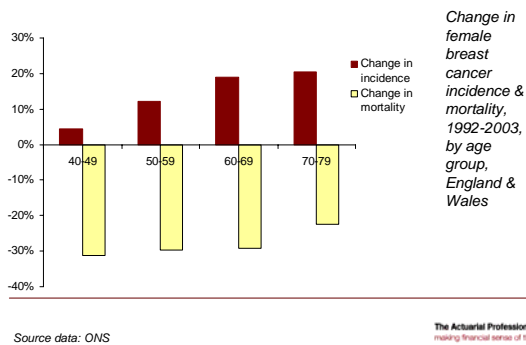
Professor Gordon McVie

▪ "95% of cancers will be controllable by 2054"

Professor Karol Sikora

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Breast cancer mortality rates are reducing, whereas incidence rates are rising



Pension schemes are often using more out-of-date assumptions

- *"It's been very difficult to persuade clients to move all the way to medium cohort"*
- Perhaps 50% of schemes assume medium cohort future improvements
- Most of the remainder assume less rapid improvements
- The Pensions Regulator is aware of this issue
- The gap between FRS17/IAS19 valuation and buyout cost is likely to narrow

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