Public Service Pensions: Long-term financial management and reform of benefits

Mike Scanlon and Paul Butcher

3 December 2015
Agenda

• Mike
  – Public service pension reform 2010-15
  – Fiscal impact

• Paul
  – Financial management of unfunded pensions
  – Actuarial methods and assumptions
Why is this important

- 14 million members
- Benefit expenditure (unfunded): £38 billion per year
- Total liabilities (unfunded): £1.2 trillion
## Private vs Public sector

<table>
<thead>
<tr>
<th>Pension schemes</th>
<th>Private Sector</th>
<th>Public sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set up by</td>
<td>Trust deed and rules</td>
<td>Legislation</td>
</tr>
<tr>
<td>Typical scheme designs</td>
<td>Historically – Defined benefit</td>
<td>Defined benefit</td>
</tr>
<tr>
<td></td>
<td>Now – Defined contribution</td>
<td></td>
</tr>
<tr>
<td>Financing</td>
<td>Funded in advance</td>
<td>Typically unfunded (pay as you go)</td>
</tr>
<tr>
<td>Membership</td>
<td>16 million</td>
<td>14 million</td>
</tr>
</tbody>
</table>
Public service pension reform: timeline

2010: Coalition Government Formed, Pension increases based on CPI

2011: Interim Hutton Report; member contribution increases

Dec 2011: Heads of agreement on design for main schemes

2013: Public Service Pension Act

Apr 2015: Reformed schemes introduced
Case for reform

Demographic changes

Private sector provision

Chart 1.A: Period life expectancies for those reaching age 60 - general population

Chart 1.D: Membership of employer-sponsored pension schemes among UK employees
Case for reform

Cost to taxpayer

Chart 1.A: Historic and projected unfunded public service pensions expenditure as a proportion of GDP

Source: HM Treasury
Case for reform

‘Fairness’

The distributional impact of moving from final salary to CARE

[Bar chart showing the distributional impact for Low Flyer, Mid Flyer, and High Flyer categories, with purple bars indicating proxy to current final salary schemes and gray bars indicating career average scheme.]
Major reforms

- Benefit changes
  - The inflation index changed
  - Member contributions increased
  - Changes to future service benefits

- Other reforms
  - Revision of governance arrangements
  - Introduction of a cost cap mechanism
## Major reforms

### Changes to future service benefits

<table>
<thead>
<tr>
<th>Key Hutton recommendations</th>
<th>Implementation</th>
</tr>
</thead>
</table>
| Pension promises that have been made must be honoured. | • Final salary link maintain  
• Protection for members close to retirement to remain in existing schemes |
| Career average defined benefit schemes with earning revaluation | • Career average defined benefit schemes with revaluation varying by scheme |
| NPA linked to SPA (exceptions for uniformed services - NPA 60) | • Future service benefits linked to SPA  
• NRA 60 for uniformed services |
Reference scheme

The benefits

- CARE pension scheme,
- Normal Pension Age linked to State Pension Age
- Accrual rate of 1/60ths
- Earnings revaluation in service
- CPI increases in payment and deferment
- 12 for 1 commutation
- Protection for those within 10 years of retirement
Yes, but …
# Summary of 2015 schemes

<table>
<thead>
<tr>
<th></th>
<th>NHS</th>
<th>Teachers</th>
<th>Civil service</th>
<th>Police</th>
<th>Armed forces</th>
<th>Fire</th>
<th>Local Govt *</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPA</td>
<td>SPA</td>
<td>SPA</td>
<td>SPA</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>SPA</td>
</tr>
<tr>
<td>Accrual</td>
<td>1/54</td>
<td>1/57</td>
<td>1/43.1</td>
<td>1/55.3</td>
<td>1/47</td>
<td>1/59.7</td>
<td>1/49</td>
</tr>
<tr>
<td>Reval</td>
<td>CPI+1.5%</td>
<td>CPI+1.6%</td>
<td>CPI</td>
<td>CPI+1.25%</td>
<td>Avg earnings index</td>
<td>Avg earnings index</td>
<td>CPI</td>
</tr>
</tbody>
</table>

*scheme came into force in 2014
Major reforms

The inflation index changed

- RPI to CPI

Source: OBR, GAD

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Major reforms

Member contributions increased

- Average increase of 3.2%
Major reforms

Combined impact

Source: OBR, GAD

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## Financial management of unfunded pensions

<table>
<thead>
<tr>
<th>Liability</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Off</strong> balance sheet</td>
<td>Cash flow (benefits paid less employee contributions)</td>
</tr>
<tr>
<td><strong>On</strong> balance sheet</td>
<td>Accrual (cost of new benefits accruing to current workers)</td>
</tr>
</tbody>
</table>
Balance sheet – National Accounts

Source - OBR
Balance sheet – Whole of government accounts

Source - OBR
## Balance sheet reconciliation

<table>
<thead>
<tr>
<th>Description</th>
<th>2013-14 £bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net liabilities (WGA)</td>
<td>1,852</td>
</tr>
<tr>
<td>Net public sector pensions liability</td>
<td>(1,301)</td>
</tr>
<tr>
<td>Provisions</td>
<td>(142)</td>
</tr>
<tr>
<td>Non-current assets</td>
<td>1,063</td>
</tr>
<tr>
<td>Asset Purchase Facility</td>
<td>45</td>
</tr>
<tr>
<td>Other</td>
<td>(115)</td>
</tr>
<tr>
<td><strong>Public sector net debt (National Accounts)</strong></td>
<td><strong>1,402</strong></td>
</tr>
</tbody>
</table>
## WGA liability breakdown

<table>
<thead>
<tr>
<th></th>
<th>2013-14 £bn</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unfunded schemes (gross)</strong></td>
<td></td>
</tr>
<tr>
<td>Teachers (UK)</td>
<td>288.1</td>
</tr>
<tr>
<td>NHS (UK)</td>
<td>391.6</td>
</tr>
<tr>
<td>Civil Service</td>
<td>193.2</td>
</tr>
<tr>
<td>Armed Forces</td>
<td>129.6</td>
</tr>
<tr>
<td>Police and Fire</td>
<td>148.5</td>
</tr>
<tr>
<td>Other unfunded</td>
<td>54.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,205.8</strong></td>
</tr>
<tr>
<td><strong>Funded schemes (net)</strong></td>
<td></td>
</tr>
<tr>
<td>Local government</td>
<td>85.6</td>
</tr>
<tr>
<td>Other funded</td>
<td>10.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,301.9</strong></td>
</tr>
</tbody>
</table>
Pension cash flow

Payments and contributions in pay-as-you-go pension schemes

Source: National Audit Office
Government’s spending rules

• the fiscal mandate:
  – “a forward-looking aim to achieve cyclically adjusted current balance by
    the end of the third year of the rolling, 5-year forecast period”.

• the supplementary target:
  – “an aim for public sector net debt as a percentage of GDP to be falling in
    2016-17”

• The Deficit (PSNB): (2014/15 estimate: £89.2bn)
  – Deficit on current budget: £58.3bn + Net investment: £30.9bn
    • Current expenditure (PSCE): £668.6bn + Depreciation: £36.0bn –
      Current receipts: £646.4bn
      – RDEL\textsuperscript{1,2}: £317.4bn + AME: £351.2bn
    • Various items including Net public service pension payments: £12.1bn

\textsuperscript{1}Employer contributions are showing up as positive DEL and negative in public sector pensions
\textsuperscript{2}Employee contributions could be netted off against staff salary costs

OBR Economic and fiscal outlook July 2015
Pension accrual

• Accrual measures of cost
  – Fund accounts reflecting IAS 19
  – A supplementary table to the national accounts
  – Management charge (via actuarial valuation)
Actuarial methods and assumptions

• Actuarial valuation
  – Management charge
  – Cost cap mechanism

• Discount rate

• Process of valuation
Cost cap mechanism

• Set as the ‘long term’ employer contribution rate of the new scheme

• At future valuations, compare the cap with:
  – the new future service cost,
  – past service costs

• Return costs to the level of the cap, if change by 2% of pay
  – Future accruals of benefits; or
  – Members contributions
Discount rate

• Discount rate methodology options
  – Consistent with private sector and other funded plans
  – Yield on index-linked gilts
  – Expected GDP growth
  – Social time preference rate

• Consultation process

• Government decided to select a rate based on expected long-term GDP growth
Valuation process

• Valuation Directions (prescribed methods) set by HM Treasury
• Financial assumptions set by HM Treasury
• Demographics based on scheme specific experience
• Notional assets to track the impact of actual demographic experience relative to that expected
Practical challenges, updates and wrap-up

- Observations about capturing saving
- Questions about pension design for the future
- Practical challenges
Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.