Irish Occupational Pensions: An Overview and Analysis of Scale Economies

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Overview of Presentation

- Research objectives
- Methodology
- Key descriptives
- Findings
- Economies of scale analysis
- Findings (2)
- Limitations & future trajectories
Research Objectives

- To conduct an analysis of Irish occupational pension schemes across industry sectors.

- To determine the costs involved in administering different pension plans.

- To establish if scale economies exist and if members benefit from their existence.
Methodology

- Triangulated approach
- Postal Questionnaire to the membership of the (IAPF). Dispatched to 284 firms ➔ 45% response rate.
- 4 - Interviews with key people in the industry.
- Econometric Analysis.
Key Descriptives

Breakdown of the type(s) pension plan of respondent firms

- DB Only: 45%
- Both DB & DC: 31%
- Hybrid scheme: 1%
- DC only: 21%
- Missing: 2%
IAPF Benefits Survey 2002

- DB only: 69%
- DC only: 13%
- Both DB & DC: 15%
- Hybrid: 3%
### Key Descriptives across sample pension schemes

<table>
<thead>
<tr>
<th>Key Descriptives</th>
<th>DB Only</th>
<th>DC Only</th>
<th>Both DB &amp; DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age of Schemes (years)</td>
<td>32.8</td>
<td>20.0</td>
<td>32.5</td>
</tr>
<tr>
<td>Average age of all employees (years)</td>
<td>41.5</td>
<td>36.6</td>
<td>39.6</td>
</tr>
<tr>
<td>Average age of Male employees (years)</td>
<td>43.4</td>
<td>39.2</td>
<td>41.7</td>
</tr>
<tr>
<td>Average age of Female employees (years)</td>
<td>38.5</td>
<td>32.3</td>
<td>36.9</td>
</tr>
<tr>
<td>Average Number of Active members</td>
<td>824.4</td>
<td>211.7</td>
<td>1616.5</td>
</tr>
<tr>
<td>Average Number of Retired members</td>
<td>490.2</td>
<td>64.4</td>
<td>486.4</td>
</tr>
<tr>
<td>Average Number of deferred members</td>
<td>132.0</td>
<td>30.5</td>
<td>457.3</td>
</tr>
</tbody>
</table>
Findings (1)

- Increasing trend away from DB pension plans towards DC plans.
- FRS 17 and/or IAS 19 deemed to have limited impact on Irish occupational pensions.
- In most cases of ↑ contributions to schemes it is the employer who makes these.
- 2/3’s of employers provide access to PRSA’s but take-up is minimal.
- Perceived adequacy of a pension arrangement varies significantly according to scheme type and industry of respondent firm...
## Perceptions of Adequacy

<table>
<thead>
<tr>
<th>Perceptions of Adequacy Across Scheme Types</th>
<th>DB Only</th>
<th>DC Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree / Agree</td>
<td>52%</td>
<td>13%</td>
</tr>
<tr>
<td>Neutral</td>
<td>14%</td>
<td>26%</td>
</tr>
<tr>
<td>Strongly Disagree / Disagree</td>
<td>33%</td>
<td>52%</td>
</tr>
<tr>
<td>Missing</td>
<td>0%</td>
<td>9%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Economies of Scale Model

\[(PPE) = Con + b_1 \text{Act.Mem.} + b_2 \text{Ret.Mem.} + b_3 \text{Def.Mem.} + b_4 \text{TMV} + b_5 \text{IV Cont.} + b_6 \text{IVBM}\]

Reduced to:

\[(PPE) = Con + b_1 \text{Ret.Mem.} + b_2 \text{TMV}\]

Where:

- \(PPE\) = Pension Plan Expense
- \(Con\) = Constant term
- \(b\) = Coefficients
- \(Ret.Mem\.) = Retired Membership of the scheme
- \(TMV\) = Total Market Value of the pension fund

Having run the model for the data set obtained for the questionnaire this implies:

\[PPE (€) = 66587 + 0.00135199 (TMV) + 348.875 \text{ (Ret.Mem)}\]
Economies of Scale

Pension Plan Expenses by Pension Plan Size

<table>
<thead>
<tr>
<th>Size of pension plan</th>
<th>Cost as a % of assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very small</td>
<td>3.64%</td>
</tr>
<tr>
<td>Small</td>
<td>1.64%</td>
</tr>
<tr>
<td>Average charge</td>
<td>1.25%</td>
</tr>
<tr>
<td>Medium</td>
<td>0.64%</td>
</tr>
<tr>
<td>Large</td>
<td>0.32%</td>
</tr>
</tbody>
</table>
Economies of Scale (2)

- **Expense ratio** (% of pension fund assets absorbed by costs associated with the operation of their pension schemes).
  - For respondent schemes = 125 bps
  - Bateman & Mitchell (2002) corresponding figures for Aust. = 109 bps, for US = < 90 bps
  - Possibly due to differences in mean scheme size.
  - Economies of Scale are important from both an employer and employee perspective.
  - Smaller schemes do not appear to be able to leverage the same value from service providers.
Findings (2)

- Pensions viewed as complex and the regulatory burden deemed heavy and complex.
- Pensions are not well understood by the public.
- Pensions industry has image and communication problems.
- Despite PRSA’s and repeated pension awareness campaigns perception of no significant ↑ in pension coverage.
- Govt. target of 70% pension coverage considered unattainable in a voluntary system.
Summary

- Perhaps there are methods for smaller schemes to leverage value.
- The prevalence of DC schemes is increasing.
- Perceptions of Adequacy differ by scheme type and industry.
Limitations / Future Trajectories

- Cost model employed on a limited data set.
- Identifies costs at one point in time, trend needs to be identified.
- Future research trajectories:
  - Inter-industry analysis. (adequacy, coverage & cost)
  - Examine costs from service provider perspective
  - International comparisons
Acknowledgements

- To all at the IAPF
- To all respondents to the questionnaire and interviewees
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Conclusion of Presentation

Any Questions?

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