Retirement saving and tax incentives

Lessons from the UK experience

Richard Disney
University of Nottingham & Institute for Fiscal Studies, London
Two broad strategies for pension reform in Europe

• Rely on the public pension programme but fix it up so that it is ‘sustainable’:
  – ‘parametric’ reforms (IMF) – benefit cuts, later retirement etc.
  – ‘notional defined contributions’ – link individual pensions to contributions via ‘actuarial’ system (Sweden, Italy, Latvia)
  – ‘Actuarial’ parameters but not NDCs (Germany).

• ‘Multi-pillar’ system with greater emphasis on funded private pensions (as in World Bank, 1994):
  – Cut back public benefits & replace with mandatory private coverage
  – Allow people to opt out of part of the public programme and take-up a private pension instead (UK, Hungary etc.). I’ll focus today on some issues that arise in this strategy!
The opting out reform strategy

• I take the following stylised setting:
• There is a mandatory ‘floor’ to the programme plus an additional (earnings-related) component to the programme.
• Individuals can ‘opt-out’ of the second stage into a private retirement saving account.
• If they opt out, they pay lower contributions to the public system but cannot accrue public pension rights during their ‘opted out’ period.
• The ‘terms’ of the contract must allow the PAYG system to remain viable.
An adverse selection problem?

• Opting-out of public provision causes adverse selection and fall in provision?

• E.g in health, the rich will opt out because they can afford private treatment, leaving the low risks in the residual public programme (despite this, Chile has done it)

• In pensions, not such a problem:
  – The ‘high risk’ is living longer! – and the rich live longer…
  – With ‘dynamic efficiency’, \( r>n \), higher return on funded plan can be shared with those who remain in programme, so PAYG programme remains viable.
Two crucial reform parameters…

• The ‘rebate’ on contributions from opting out:
  – Set it too high, the PAYG programme may not be viable and optants will attract an intramarginal subsidy
  – Set it too low, nobody will opt out.

• The tax treatment of additional savings in private retirement accounts:
  – Too high, and you incur wealth effect so reducing saving
  – Too low, people may prefer assets with higher short-term gains e.g. investment in housing
  – (this issue is true also for programmes with no opting-out but opportunities for private retirement saving)
Trajectory of UK social security

- Three components to public programme
  - A flat contributory benefit (Basic State Pension)
  - An earnings-related contributory benefit (SERPS/S2P) since mid-1970s.
  - An income-tested component (now MIG/Pension Credit)
What the UK’s public programme pays:
to someone on median male earnings retiring at t
What the UK’s public programme pays:
to someone on median female earnings with
career break retiring at age 65

- Pension Credit
- SERPS / S2P
- Basic State Pension
UK retirement saving

• A UK feature: workers can opt out of part of the social security programme (SERPS/S2P) into a private pension (as well as joining both)

• **Reform Strategy**: increase fraction of workforce opting-out of earnings-related benefits (SERPS/S2P):

  *opting out implies forgone payroll tax revenues to government in return for lower future spending*

  – In the mid-1970s, DB company pensions could opt out.
  – In the late 1980s DC plans could opt out and *Personal Pensions* introduced
  – In the late 1990s *Stakeholder Pensions* introduced
Personal Pensions (introduced 1988)

- Individual contracts with insurance companies to provide an annuity from accumulated fund.
- Individuals opting for Approved Personal Pension (APP): contracted-out rebate of 5.8% of salary + an extra incentive payment of 2% of salary + tax relief = 8.46% of salary, deposited by DSS in their APP account instead of in social security system.
- DSS forecast ½ to 1½ million ‘optants’ – in first year, 6 million!
- Cost to taxpayers – cost of rebates in first 5 years: £9.3 billion. Saving of public pension payments: £3.4 billion (NAO).
- High administrative charges.
- Obviously a poorly designed policy but what does it tell us about household behaviour? – incentives vary across households…
Take-up of Personal Pensions by age-group
The incentive for 30 year old in 1988 to opt into Personal Pension (and revert later to SERPS)
The Reform of Approved Personal Pension incentives *(introduced 1997)*

- The rebate incentives were biased towards young people in practice – a policy intention??
- For reasonable expectations of rates of return, we can calculate the rebate at each age that would just induce opting out (i.e. avoid intramarginal subsidies)
- This was calculated at IFS (and elsewhere) in mid-1990s. The government was persuaded to introduce age-related rebates in 1995 legislation (coming into force in 1997).
- Unlike 1988, this was evaluation-based policy.
Age-related contracted out rebates: calculated & actual

Median neutral rebate (%)

Age
20 25 30 35 40 45 50 55 60 65
0 2 4 6 8 10 12 14 16 18 20

- 1.50%
- 2.50%
- 3.50%
- Actual rebate 1992
- Actual rebate 2002
And age shares of new optants changed accordingly…
Did Approved Personal Pensions increase retirement saving?

• Initially, almost certainly not:
  – The enhanced return on contracted-out rebates (relative to remaining in SERPS) induced a wealth effect inducing very little new saving

• With reform of contracting-out provisions, ‘net’ saving increased:
  – Once intramarginal subsidies disappeared in late 1990s, ‘extra’ saving component of APP contributions increased (evidence from admin data)
Contributions to Personal Pensions, by type of contribution (1998-99 prices)

Source: Disney, Emmerson, Wakefield, OXREP 2001, administrative data
Stakeholder Pensions

- Introduced **2001** – New Labour’s response to rethink Personal Pensions
- Same principle as PPs but all firms 5 or more employees must offer a SP nominated-provider (however employees were not ‘auto-enrolled’)
- Ceiling on admin. charges and other simplifications.
- Nevertheless take-up was disappointingly low.
The government announced a target group for Stakeholder Pensions:

- “People on middle incomes want to save more for retirement but current pension arrangements are often unsuitable or expensive. Our new secure, flexible and value-for-money stakeholder pension schemes will help many middle earners to save for a comfortable retirement.” (DWP Green Paper, 1998)

- ‘Middle earners’ defined in Green Paper as those earning £9k to £18.5k (subsequently rising with real earnings)

- ‘High earners’ (i.e. above £18.5k) assumed to have a pension. ‘Low’ and zero earners to be better off in state scheme i.e. SERPS/S2P
Coverage of private pensions by pension type and by level of earnings

Pension coverage by type of pension and earnings band
1999/00 to 2002/03

Panel B: All individuals of working age

<table>
<thead>
<tr>
<th>Year</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>Δ99-02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage by earnings band</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Zero</td>
<td>3.4</td>
<td>3.6</td>
<td>3.5</td>
<td>3.5</td>
<td>+0.1</td>
</tr>
<tr>
<td>Low</td>
<td>34.0</td>
<td>34.2</td>
<td>35.6</td>
<td>35.2</td>
<td>+1.2</td>
</tr>
<tr>
<td>Medium</td>
<td>68.2</td>
<td>66.9</td>
<td>67.3</td>
<td>65.5</td>
<td>−2.7</td>
</tr>
<tr>
<td>High</td>
<td>86.2</td>
<td>85.4</td>
<td>84.6</td>
<td>83.8</td>
<td>−2.4</td>
</tr>
<tr>
<td>Self-employed</td>
<td>46.2</td>
<td>46.1</td>
<td>46.0</td>
<td>43.1</td>
<td>−2.9</td>
</tr>
</tbody>
</table>

Source: own calculations, Family Resources Survey 1999/00 to 2002/03. ‘Working age’ is defined as age 16 to state pension age (65 for men, 60 for women).

Overall coverage change around −1.0%
We model formally the changes in take-up of private pensions by earnings group.

- Assume the ‘control’ (unaffected) group is the ‘high income’ group. Use a treatment model & a multivariate approach. It’s a non-linear model so the ‘common trend’ assumption is applied to the value function. The standard errors are bootstrapped.

- The only significant effect is on low earners, where the SP reform is associated with a rise in coverage of 3.6 ppts.

- There is no effect on middle earners.

- When we allow for partners’ earnings: the only significant effect is among low earners with a high or middle earning partner: a rise in coverage of 5.2 ppts.

- So something else is going on…..
Tax reliefs by age on personal pensions pre-2001

Gross relevant earnings

Maximum gross contribution

- 61-74
- 56-60
- 51-55
- 46-50
- 36-45
- 35 or under
Tax reliefs by age on personal pensions post-2001

![Graph showing maximum gross contribution by age and gross relevant earnings.](image-url)
Effect of reform of tax limits

• Treatment effects:

  Had a limit increase: 2.4ppt (0.9ppt)*
  Had a limit increase and zero earnings: 0.6ppt (0.3ppt)*
  Had a limit increase and positive earnings: 3.3ppt (1.4ppt)*

*(standard errors in brackets, estimated by bootstrapping with 1,000 repetitions).

• In fact the SP reform ‘worked’ through change in tax reliefs – allowed better-off families to shift retirement tax reliefs to minimise tax bill.

“The changes will also make it easier for partners to contribute to each other’s pensions, again within the overall contribution limits, should they choose to do so.” (DSS, Green Paper, 1998, p.63)
Summary on Stakeholder Pensions

• At first sight, a failure:
  – Overall coverage fell (but is this surprising?)
  – Coverage fell among target group (middle earners)
  – Coverage rose among low and even zero earners, especially with richer spouses
  – This a result of associated change in tax reliefs?
  – This fits with people responding to ‘true’ incentives, not the headline….
Conclusions

• Public programme has provided income security, especially to low income groups.

• A central strategy has been to increase attractiveness of private saving alternatives and to encourage individuals to leave SERPS/S2P

• Getting the incentives ‘right’ has proved difficult – trial and error.

• People seem to respond to actual incentives, so:

• We need less emphasis on individual ‘irrationality’ in retirement saving and more on good policy design!