Is There Really a Difference?

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<tbody>
<tr>
<td>Contribution</td>
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<tr>
<td>Tax</td>
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<td>Net investment return</td>
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<td>33</td>
<td>44</td>
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<td>Fund at retirement</td>
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<td>144</td>
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<td>Tax on pension</td>
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<td>-36</td>
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<td>Net pension</td>
<td>121</td>
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<td>108</td>
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Tax rate of 25% and Annual Investment Return of 10%
Distributional Issues for Tax Treatment

- How are contributions treated in relation to the public pension system?
- What are the distributional outcomes – Share of the value of “Tax Expenditures” by Income Quintile in the US - 2013

<table>
<thead>
<tr>
<th>Per Cent of Tax Expenditure</th>
<th>Lowest</th>
<th>Second</th>
<th>Middle</th>
<th>Fourth</th>
<th>Highest</th>
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<tbody>
<tr>
<td></td>
<td>2</td>
<td>5</td>
<td>9</td>
<td>18</td>
<td>66</td>
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How Does This Compare to the Overall Income Tax Payments?

Value of Pension Tax Expenditures in Relation to the Value of Overall Income Taxes United States in 2010 and 2013

<table>
<thead>
<tr>
<th>Income Quintile</th>
<th>Lowest</th>
<th>Second</th>
<th>Middle</th>
<th>Fourth</th>
<th>Highest</th>
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</thead>
<tbody>
<tr>
<td>Share of Income Taxes Paid</td>
<td>-6</td>
<td>-3</td>
<td>3</td>
<td>13</td>
<td>93</td>
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<tr>
<td>Value of Pension Tax Expenditures</td>
<td>2</td>
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<td>9</td>
<td>18</td>
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<tr>
<td>Difference</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>-27</td>
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</table>
Tax Preferences Can Also Have Indirect Objective

- Availability of preferential tax treatment can be linked to minimum standards or design of pension system.
- Common approach in Anglo Saxon countries with occupational systems – limit minimum value, terms and distribution of pension benefits to prescribed standards to receive tax treatment.
- Principle is to link interests of higher income workers and/or owners to moderate or low income - create incentive to extend complementary coverage.
What Other Possible Challenges May Arise?

- A. There is not enough interest to get the system going
- B. The rich just move their savings into a where they can get some subsidies
- C. Saving for retirement is a difficult problem that people don’t want to face up to
- D. The decisions are too complicated and difficult to make for the average person
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Coverage in Voluntary Systems

- Factors Associated with Coverage within systems
  - Income of workers – Strongest predictor in nearly all settings
  - Age of worker – Significant increases at about age 35 - 50
  - Size of Firm has similar effect – Very low participation in firms below 25 and informal sector
  - Job Tenure

- All of the factors however interact to create more complex puzzle

- Mitigated by presence of union, employee organization and industry wide funds

- Association of factors with coverage is only moderate – many workers with high expected participation do not – others with low expected probability participate. This suggests many other influences

- Limits of “rational economic” model to explain patterns of coverage and participation have led to increased interest in behavioral issue
Does it create new savings: “crowd out” or “crowd in”?  

- Studies of the 401(k) system in the US are contradictory
  - Some find very high substitution through both decreased private savings and leverage suggesting tax arbitrage and substitution
  - Other find conclude net positive additions but at moderate levels – Some estimates (Engen and Gale 2000) estimate that at best 30% represent net additions to savings

- Many other more complex issues arise from secondary effects (eg form of assets, how government finances tax subsidies)

- Preliminary analysis of developing countries and mandatory systems find some net additions

- Key factor may be level of development of financial markets – suggests higher potential for substitution in US and Europe
Design and Behavioral Issues

- Start up or Matching Provisions
- Defaults: Auto enrollment and active decision
- Programmed Deferrals
- Financial Literacy and Trust
- Marketing and Information
Start Up Incentives and Matching Contributions

- Likely the most direct and easily understood incentive – immediate high percentage rate of return
- Common practice in U.S. 401(k) plans – contribution matching of ½ of employee contributions up to 6% of pay
- Studies of effects however are mixed:
  - Show range of effects from very small to 25% increase in contributions
  - Seem to be related to composition of the group
- More effective at getting workers to join and for low income workers than increasing longer term savings
- Some contradictory effects – may actually reduce worker contribution levels through substitution or providing reference point.
- Key issue is interaction with other factors – Initial evidence is that effects are small when combined with other factors
Behavioral Incentives

“Escape From Freedom”

- **Automatic enrollment** – Series of studies of US and UK show that requiring workers to “opt out” or make active decision within specified time frame increases participation by up to 60% in first year and 15 to 30% over longer terms
  - Several studies conclude that automatic enrollment has greater overall effect than matching contributions over longer term
  - McDonalds achieved 93% participation – but many were small accounts that were not cost effective or sustained
  - Strongest effect among younger and low wage (Nessmith, Utkus and Young, 2007)

- **Default investment choices** – When these provided have strong effect on initial choices with significant persistence – Workers seems to view as implicit investment advice

- **Deferred Savings Decisions** – Evaluation of program in which savings is taken from future salary increase (Benartzi and Thaler, 2003) finds much higher long term savings rates
Recent study (Agnew et al, 2007) concludes that degree of financial literacy has effect on participation in retirement savings that is equivalent to financial incentives.

Consistent with earlier findings (Munnel et al 2001) report that planning horizon of individual is significant factor in participation in employer sponsored retirement savings.

Experiment with provision of tax credit in US (Duflo et al 2005) indicates that use of incentive increases greatly with explanation and advice – Provider of advice found to be significant factor.

Trust in financial institutions is important – Person expressing lack of trust did not respond to economic incentives even with efforts to explain immediate value of savings.

Provision of information has some effects – in Swedish Premium Pension system majority made active choices when information program was in place – 60% chose default in later period.

Lusardi (2004) found greater effect of seminars for less educated.
Two Paradoxes: Choice and Liquidity

- **Choice increases participation**...But too much choice lowers rates of participation and Investment decisions
  - One study (Papke 2004) finds that ability to choose investments raises participation in savings and amounts saved by 3 to 8%
  - Another (Iyengar et al) finds that an additional 10 investment choices decreases participation rates by 1.5 -2%

- **Availability of loans increase participation but ability to cash out dissipates retirement savings**
  - One study (Munnel et al 2001) finds that loans increase savings by 1% of earnings – another (GAO 1997) find increases savings rates by a third
  - Experience over 20 years indicates that half of workers take cash out when changing jobs – although now about 80% of the money is ultimately saved for retirement purposes
  - The greater the amount of the fund balances the less is cashed out.
Suggested Explanations for Observed Behavior

- Reluctance to make decisions in the face of uncertainty – Seeking reference points – Safety of the crowd
- Present Orientation – “Hyperbolic Discounting”
- Inertia and Procrastination
- Nominal Loss Aversion – fear of loss greater than desire for gain
- Information Overload – Inability to make decision with too many choices
- Signaling and Framing Effects – Choices interpreted as providing advice - Employer or Government perceived as endorsing choices
Where is the “best” voluntary pension system

- A. In the United States because it is the largest in terms of accumulated assets
- B. In the Netherlands because it has the highest proportion of the population
- C. In New Zealand because it is one of the newest
- D. In Germany because it provides more subsidies depending on how many children you have
- E. In Chile and Mexico because it is closely integrated with a mandatory savings system
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[Bar chart showing percentages: 20%, 52%, 0%, 12%, 16%]
Some Interesting Innovations

- Group Savings Arrangements – ROSCAEs
- Prize linked savings
- Reister Pensions in Germany –
  - Tax exemption and fixed subsidy with additional subsidies for number of children
  - No withdrawals until age 60
- U.S. Pension Protection Act 401(k) revisions
  - Auto enrollment, default options and investment advice
- The Kiwi-Saver system in New Zealand
KiwiSaver – Rules Based Solutions

- Attempt to incorporate lessons learned from existing forms

- Design Principles
  - All new workers enrolled – can then opt out within specified time period
  - Five year or retirement age lock in
  - Employer can contribute – also substitute scheme
  - $1,000 government start up contribution
  - Public clearinghouse of contributions
  - Limited investment options
  - Individual choice with defaults
Kiwi-Saver Refinements

- Short opt out window - 2 to 8 weeks only
- 3 month holding period to facilitate choice
- Minimum balance before transfer to control fees in relation to balance
- Optional contributions holiday – but only after one year – 5 year maximum but renewable
- Hardship exceptions
- One half of contribution can be directed to qualified mortgage
- Providers established though government tender process – Multiple funds but one default with long term orientation
Some General Conclusions

- Size and perception of public system matters a lot
- Tax incentives are effective but not sufficient condition
  - greatest effect on higher income groups creates distributional hazards
- Evidence is that “rational economic” model only partially explains outcomes
- Behavior issues are very important – Inertia, financial literacy, loss aversion, information and trust – especially for lower income groups
- How and by whom choices are presented is very important