Retirement Income Design with an Ageing Demographic

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The Message

Traditional PAYG pensions become unaffordable with population ageing

Also less effective as tech disrupts employment

For sustainable poverty alleviation and income replacement, rely more on non-contributory pensions + pre-funding

Economics of taxation and experimental economics provides analytic support

But some policy and research issues are outstanding
Traditional PAYG pensions become unaffordable with population ageing

Decomposition of gross public pension expenditure change over 2010-2060 (p.p. of GDP)

As provision of retirement income becomes more important, what form should it take?

Current source of income, age 60+, 2007-2011

- OWN LABOUR
- FAMILY
- GOVT. SCHEMES
- OTHER
Pension design – options

Safety net for adequacy purposes
- Universal
- Targeted

Compulsory saving for income replacement
- Pay As You Go
  - Private provision
  - Public provision
- Pre-funded
  - Private provision
  - Public provision

Voluntary saving for income replacement
- Employment related
  - Tax preferred
  - Non tax preferred
- Other
Pension design – common OECD approach

- Safety net for adequacy purposes
  - Universal
    - Targeted
      - Public provision
        - Pay As You Go
          - Funded
            - Employment related
              - Employment
            - Other
              - Tax preferred
                - Non tax preferred
              - Other
                - Other
      - Private provision
      - Germany’s main earnings/points related pension
      - Germany’s means-tested safety net (low)
  - Pay As You Go
    - Funded
      - Public provision
      - Private provision
      - Germany’s main earnings/points related pension
  - Voluntary saving for income replacement
    - Employment related
      - Tax preferred
    - Other
      - Non tax preferred
      - Other
  - Compulsory saving for income replacement
    - Universal
      - Targeted
        - Germany’s main earnings/points related pension
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Pension design – Australia

Safety net for adequacy purposes

Universal

Targeted

Pay As You Go

Pre-funded

Public provision

Private provision

Employment related

Public provision

Private provision

Other

Tax preferred

Non tax preferred

Compulsory saving for income replacement

Australia’s Age Pension

Australia’s Superannuation Guarantee

Australia’s tax preference for voluntary Super contributions
The case for non-contributory pensions

• Large informal sector

• The “gig” economy

• Sustainability in the face of declining fertility and labour force

• New research insights

• Ageing, the mortality differential and equity
But these must be designed well

- Adequate maximal benefit
- Highly targeted
- Comprehensive resource base to measure means
- Steep taper
- Indexed to changing social norms:
  - Access age indexed to RLE
  - Benefit indexed to wages/earnings
- and must be complemented with a mandatory saving pillar
Why mandate saving?

• To offset saving disincentives of a safety net (Hayek, 1960)

• To offset dynamic preference inconsistency (e.g., Thaler 1981)
How to think about preference inconsistency?

When both small and large rewards are further away in time you want the larger reward.

But this reverses when time to small reward is short, and you take small reward.

When both small and large rewards are further away in time you want the larger reward.
Empirical evidence

Experiment example (Thaler, 1981)

- $15 now was found to be on average equivalent to...
- $20 in a month (with implied discount rate of 345%), and...
- $50 in one year (with implied discount rate of 120%), and...
- $100 in 10 years (with implied discount rate of 19%)
The Australian Age Pension

- Access age: 65, moving to 67
- Non-contributory, tax financed, means tested
- 28% of average f/t male earnings for singles
- 50% full, 25-30% part, 20-25% get nothing
- Costs 2.7% of GDP in 2010; 3.9% in 2050
Efficiency and incentives

• **Labour supply**: For those not anticipating the pension, only the tax rate on their labour income counts, not transfers at retirement (should means test income from exertion differently)

• **Saving**: a very high proportion of aggregate private saving in developed countries is by the rich. A means tested pension does not impact the rich

• **Longevity insurance**: Is available to the poor through the Sage Pension, and also the rich as resources are depleted in late age and they become eligible for the Age Pension
Equity

• The poor: Get a full pension, which can be set to remove poverty (Poverty normally defined in relative terms.) They tend to have lower life expectancy (the mortality gradient)

• The rich: Get no unfunded benefits. The implicit regressivity of a PAYG earnings related plan, induced by the mortality differential and earnings related benefits, goes away.
Sustainability

• Fiscal costs are kept low because transfers are flat rate, not earnings related, and the longer lived rich do not get a full pension, and in many cases, none at all.

• Growth is stimulated through additional saving via mandated pre-funding
So…

It is possible to deliver a poverty alleviating pension sustainably: Australia is a real live example

A means-tested pillar + compulsory pre-funded second pillar + tax preferred voluntary retirement saving

Economic analysis (economics of taxation and behavioural economics) provide analytic support

An excellent model for emerging economies with large informal sectors
The Role of Housing: a caveat

- Australian example works because most own their own homes, and principal residence is exempt from the Means test
- Poverty alleviation occurs with housing security (not necessarily ownership)
- Most elderly poverty is concentrated among single renters
- So housing policy is an important piece, not treated here