9° GLOBAL PENSIONS PROGRAMME
The challenges of pension systems

Nicholas Barr
London School of Economics
http://econ.lse.ac.uk/staff/nb

9th Global Pensions Programme
29 November 2020
The challenges of pension systems

1. Challenges
2. Policies to address the challenges
1 Challenges

1.1 Multiple objectives
1.2 Behaviour of markets and government
1.3 A changing world
1.4 Pension systems do not operate in isolation
1.1 Multiple objectives

What makes a good pension system

• Respects multiple objectives
  • Consumption smoothing
  • Insurance
  • Poverty relief
  • Redistribution

• Respects constraints
  • Fiscal
  • Behavioural
  • Institutional capacity
No single best system

- Objectives: consumption smoothing, insurance, poverty relief, redistribution
- Constraints include
  - Fiscal capacity
  - Institutional capacity
  - Empirical value of behavioural parameters
  - Shape of the income distribution
- No single best pension system because
  - Policy makers attach different relative weights to the different objectives
  - The pattern of fiscal and institutional constraints differs across countries
- Thus
  - What is optimal will differ across countries and over time
  - Pension systems look different across countries; this is as it should be
1.2 Behaviour of markets and government
Choices by individuals: Simple theory, and some reality

• Simple theory assumes what economists call a first-best world, in which everyone
  – Is well-informed
    • About their future needs and circumstances
    • About financial markets and financial products
  – Is rational, with a long time horizon

• What is needed is what economists call second-best analysis
  • Imperfect information (the economics of information, Nobel Prize 2001)
  • Non-rational behaviour (behavioural economics, Nobel Prize 2002, 2017)
  • Search frictions (Nobel Prize 2010)
  • Incomplete markets, incomplete contracts (Nobel Prize 2016)
  • Distortionary taxation (necessary to finance redistribution; addressed in the literature on optimal taxation, Nobel Prize 1996)

• Thus the simple model is right for an imaginary world but in complex areas is a bad basis for policy design
Imperfect information and non-rational behaviour are pervasive

Lessons from information economics

• A survey, 50% of Americans did not know the difference between a stock and a bond
• Most people do not understand the need to shift from equities to bonds as they age if they hold an individual account
• Few people realise the significance of administrative charges for pensions: over a full career an annual 1% charge reduces the worker’s accumulation by about 20%
Non-rational behaviour

- Simple theory predicts
  - Voluntary saving to maximise lifetime utility
  - Voluntary purchase of annuities

- What actually happens
  - Bounded rationality
    - Procrastination: people delay saving
    - Inertia: people stay where they are; in theory it should make no difference whether the system is opt in or opt out – in practice, automatic enrolment leads to higher participation
    - Immobilisation: impossible to process information about 800 different funds (90% go into Swedish default fund)
  - Bounded will-power
    - People do not save, or do not save enough
    - People (including financially knowledgeable people) spend too little time on their pension affairs given time/energy/attention constraints
Example Financial literacy is shockingly limited

• Interest: you have $100 in a bank account paying 2% interest a year. How much would you have in the account after 5 years:
  • less than $102?
  • equal to $102?
  • more than $102?
  • don’t know?

• Inflation: suppose that the interest rate on your bank account is 1% a year and that inflation is 2% a year. After one year, with the money in this account, would you be able to buy
  • more than today?
  • the same as today?
  • less than today?

• Risk. True or false? Using $100 to buy shares in a single company usually provides a safer return than buying $100 of a unit trust (i.e. something that holds a wide range of shares)?
Implications for policy design

- Less choice can be part of good policy design
- Don’t overstate what financial education is capable of achieving
- A good pension system should assist choice by those who want to choose but should also work well for someone who makes no choices

Nicholas Barr, November 2021
Choices by government

• Dominance of short-term politics
  • Failure to increase contributions and/or cut benefits when faced by a projected deficit
  • Failure till recently to raise pension age to reflect rising life expectancy

• Failure to grasp the complexity not only of pension design but also of implementation (‘The Minister wants the new system to start in September’)

Nicholas Barr, November 2021
1.3 A changing world
More fluid labour markets

- In 1950 the OECD norm was full time long-term employment
- That is no longer true in OECD countries, and never was true in developing economies
- Greater diversity of labour-market relations
  - Employed, self-employed or outside the paid labour force
  - Full-time, part time or flexible (zero hour contracts, gig economy)
  - Long-term or short-term
  - Formal or informal
- More movement across these relations
  - More dynamic labour markets
  - Need for more, and more frequent, training because knowledge goes out of date more quickly
Population ageing

• Two roots
  – Higher life expectancy
  – Lower fertility
  • Fertility rate, total (births per woman), 1960-2019. OECD
1.4 Pension systems do not operate in isolation

- Need to think about the system as a whole. Pensions, but also:
  - Wider institutions, e.g. the existence of universal medical insurance reduces what pensions need to cover
  - Wider elements: climate change
- Need for reliable adjustment
  - To changing economic, demographic and social conditions
  - To respond to crises such as Covid-19
2 Policies to address the challenges

2.1 Non-contributory basic pensions
2.2 Later retirement
2.3 Saving that is simpler for the individual
2.4 Institutions to assist a long-run view
2.5 Responding to a crisis
2.1 Non-contributory basic pensions (Part of addressing more fluid labour markets)

- A flat-rate tax-financed pension (also called social pensions) based on age and residence
- Country examples
  - Australia (with affluence test)
  - Canada (with affluence test for top 5%)
  - Chile (with affluence test for top 40%)
  - Netherlands (stringent residence test)
  - New Zealand (no affluence test, easy residence requirement)
  - Developing countries
Advantages

• View from the Ministry of Social Security
  • Strengthen poverty relief in terms of coverage, adequacy and gender balance
  • Share risk with taxpayers and hence via government borrowing intergenerationally
  • Can fit different budget envelopes
  • Make fewer demands on institutional capacity than contributory systems
  • Considerable gain in gender balance

• View from the Ministry of Finance: can fit different budget envelopes
  • Level of monthly benefit
  • Age at which benefit starts
  • Whether or not there is an affluence test
2.2 Later retirement (Part of addressing increased longevity)

- The main cause of the ‘crisis’ is a failure to adapt to long-term drivers
  - Longer life expectancy
  - Lower fertility
- There would be a problem of paying for pensions even if there had not been a baby boom
- Policy directions
  - Later retirement
  - Also more flexible retirement
2.3 Saving that is simpler for the individual (Part of addressing bad decision-making by individuals)

- More saving and investment
  - Declining fertility will lead to a smaller workforce
  - A rational response is to make each individual member of the smaller workforce more productive through increased investment in human and physical capital
  - To that end, higher saving is important provided that it leads to investment in productive assets
Many ways to organise saving

• Individual accounts are one way to organise saving, but not the only way
• Within the pension system options include
  • Fully-funded individual accounts from multiple competing providers (Chile, Australia)
  • Simpler, cheaper individual accounts with less choice (US Thrift Savings Plan, UK NEST pensions – more below)
  • Fully-funded industry plans (Netherlands)
  • Partially-funded NDC (Sweden – more below)
  • Partially-funded DB (Canada)
  • Partially-funded DB with risk sharing (New Brunswick)

• Outside pension system: Norway sovereign wealth fund

Nicholas Barr, November 2021
Simple savings products

• The model of choice and competition is the wrong model because
  – Choice has high administrative costs
  – Consumers do not do a good job of choosing because of
    • Imperfect information
    • Bounded-rationality
    • Bounded-will power
Implications for pension design

1. Make pensions mandatory or use automatic enrolment
2. Keep choices simple: highly constrained choice is a deliberate and welfare-enhancing design feature
3. Include a good default option which includes life-cycle profiling if the system requires annuitisation
4. Keep administrative costs low by decoupling account administration from fund management
   – Centralised account administration
   – Fund management
      • Wholesale, competitive; or
      • Sovereign wealth fund; closest example is Norway
Examples

• The US Thrift Savings Plan (www.tsp.gov)
  • Initially voluntary for federal civil servants, now auto-enrolment
  • Workers choose from five funds
  • Centralised account administration
  • Wholesale fund management

• UK National Employment Savings Trust (NEST) (www.nestpensions.org.uk)
  • Similar design to TSP for similar reasons
  • Currently being phased in (hence perhaps useful lessons)
Key features of NEST

• If a country wishes to have funded individual accounts as part of its system, the NEST approach is the way to do so (www.nestpensions.org.uk)

• Design explicitly based on the findings of behavioural economics

• Key elements
  • Auto enrolment
  • Limited choice
  • Centralised account administration
  • Wholesale fund management
Limited choice: additional options

• Alongside the default, 5 other choices
  • A higher risk fund, i.e. potentially higher growth
  • A lower growth (hence lower risk) fund
  • An ethical fund
  • A Sharia fund
  • A pre-retirement fund

• For details, see

https://www.nestpensions.org.uk/schemeweb/nest/aboutnest/investment-approach/other-fund-choices.html
Centralised account administration and wholesale fund management

- Account administration: NEST maintains all individual records

- Fund management
  - Decides in-house on overall exposure to building block funds and asset classes
  - Some investment is managed in house
  - Some is outsourced to private fund managers on a competitive basis

- Publishes quarterly updates: see
  https://www.nestpensions.org.uk/schemeweb/nest/aboutnest/investment-approach/other-fund-choices/fund-factsheets.html
Assessment

The approach respects the lessons from the economics of information and behavioural economics

• Simple
  • Simplifies choice for workers
  • Auto-enrolment

• Keeps administrative costs low
2.4 Institutions to assist a long-run view (Part of addressing short-term politics)

- Rules-based adjustment
  - Indexing to address changes in prices, wages, life expectancy
  - Mandatory regular independent projections and rules for adjustment to a deficit (e.g. the Canada Pension Plan)

- Arms length institutions (Sweden pensions group, Canada Pension Plan Investment Board)

- Periodic independent review, e.g. to address social change. Useful to include a variety of people, possibly including some international members

- Investment to help addressing climate change
  - Internationally agreed definitions of characteristics of ESG funds
  - Transparent reporting
2.5 Responding to a crisis: Is allowing early access a good response to Covid-19?

- Will people make good choices? Might give priority to today at expense of long-run well being because of
  - Liquidity constraints
  - Present bias (a finding from behavioural economics)
- Will governments make good choices? Short term electoral politics may dominate longer-term considerations
- Is allowing early access a good idea?
  - Earlier contributions in a DC plan are worth more than later ones because they earn interest for longer
  - Filling in contribution gaps later often does not happen, especially for the least well off
- What should happen?
  - Support pensions as part of current public spending (government as insurer of last resort: Velasco 2020)
  - ‘Continue contributing to retirement plans. Governments may provide income transfers or subsidise the income of people as part of the many programmes to assist the populations facing the economic fall from COVID-19, the lockdown and the associated economic downturn’ OECD, 22 June 2020, [https://www.oecd.org/coronavirus/policy-responses/retirement-savings-in-the-time-of-covid-19-b9740518/](https://www.oecd.org/coronavirus/policy-responses/retirement-savings-in-the-time-of-covid-19-b9740518/)
Generally a bad idea

- Government is, in effect, using workers’ future pensions to reduce current public spending
- In social policy terms puts future pensions at risk
  - Especially for poorer workers, who are most likely to need the money now
  - Contrast people who could work from home with no loss of income – typically higher earners
- In macroeconomic terms: given declining fertility, reducing saving is the wrong way to go
- The argument against allowing early access is stronger
  - The lower coverage of (e.g.) medical insurance
  - The smaller is any non-contributory pension
References

General


Country specific
