

Pension plans and pension systems

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Pension plans and pension systems

1. Non-contributory plans
2. Contributory plans
3. The pension system as a whole

1 Non-contributory plans

The problem

- Structural shortcomings of contributory systems
 - Limited coverage, in large part because of informality leading to incomplete contribution records
 - Impact of bad DB design, e.g. regressive (more below)
- A changing world: declining coverage of contributory plans based on a worker's employment status
 - Increased diversity of labour market relations, both LMICs and OECD countries
 - Implications: convergence between OECD countries and LMICs; contributions via a person's employment status no longer generates the coverage it once did

Non-contributory pensions work (reprise)

- Non-contributory pensions
 - Strengthen poverty relief in terms of coverage and adequacy
 - Reduce inequality
 - Provide insurance against shocks
 - Considerable gain in gender equity
 - Broader social benefits, e.g. family poverty relief via Grandma
 - Can be combined with income test, pension test, affluence test
- Coverage
 - 2000: 1 million people, 3.4% of elderly LAC population
 - 2022: 20 million people, 31%
 - 2023: 28 of the 33 countries in LAC has some sort of non-contributory pension
- Poverty relief: multiple examples of success, including Chile, Brazil, South Africa

That success is no accident

- Good economics
 - Targeting
 - Sustainability
- Good social policy
 - Adequacy
 - Coverage
 - Gender equity
- Good politics: popular across the political spectrum
- Technical: easy to implement: requires proof of age and residence but not of employment history

2 Contributory plans

2.1 More saving: a rational response to population ageing

- Most countries save too little ([*Economist*](#))
- A rational response to population ageing is to make each member of the future smaller workforce more productive by investing in their human and physical capital
- Higher saving is part of that policy direction

But higher saving does not necessarily require funded individual accounts

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

2.2 Individual accounts

- Will look at individual accounts
 - Because they have figured prominently in LAC, including the Marcel Commission and Bravo Commission in Chile
 - Because there have been recent advances in design

2.2.1 Simple models as a starting point (but only a starting point)

- Simple models
 - Physics starts with models that assume zero gravity and/or a perfect vacuum
 - Engineering assumes zero friction.
 - These models are useful for identifying some of the main driving forces
 - But building a car assuming zero friction means that the car would have no lubrication or cooling
- Economics, similarly, starts from a simple model: what economists call a ‘first-best’ economy assume
 - Perfect competition
 - Perfect information
 - Rational behaviour
 - No externalities

Why might markets not do things efficiently? (reprise)

- Imperfect information (addressed by the economics of information, Nobel Prize 2001)
- Behaviour different from narrow economic rationality (addressed by 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)

Financial literacy is shockingly limited

Lusardi, Annamaria and Olivia S. Mitchell. 2014. "The Economic Importance of Financial Literacy: Theory and Evidence." *Journal of Economic Literature*. 52(1): 5-44.

- 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)?

Conclusion: consumer choice in pensions is over-rated (reprise)

- Consumers often
 - Do not save enough
 - Retire too soon
 - Delay choice or make no choice (Sweden)
 - Choose an unsuitable portfolio
- Choice has high administrative costs
 - Over a full career, an annual management charge of 1% results in an accumulation 20% smaller than without that charge
- Firms exploit asymmetric information
 - High charges, often with little relation to fund performance
 - Biased advice
 - At worst, fraud

2.2.2 Implications for pension design (reprise)

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

Example: The UK National Employment Savings Trust (NEST)

(www.nestpensions.org.uk)

- Key elements
 - Automatic enrolment
 - Limited choice
 - Centralised account administration
 - Wholesale fund management

Limited choice

<https://www.nestpensions.org.uk/schemeweb/nest/aboutnest/investment-approach/other-fund-choices.html>

- Workers are automatically enrolled in a simple savings plan
- The default: a target-date fund that moves the balance of a worker's account from equities towards bonds as they approach pension age
- A limited menu of additional options
 - 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

Centralised account administration

- NEST maintains all individual records
- Decides in-house on overall exposure to building block funds and asset classes
- Outsources fund management to the private sector
- Publishes quarterly updates

A rainy day fund

- NEST is experimenting with a [hybrid savings product](#) such that, alongside illiquid retirement saving is an element that can be drawn down for short-term reasons, e.g. a medical emergency or expensive car repair
- Thus pension saving would be invested for the long term, while giving workers access to an amount of liquid savings
- A ‘rainy day’ fund is particularly relevant where informality is widespread

Assessment

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

- Simplifies choice for workers
- Competition in the right place
- Keeps administrative costs low
- Plan can be *instead of* or *as well as* other plans
- Can incorporate a liquid element

2.3 Mistakes to avoid

Pathologies (1): Avoid regressive tax concessions

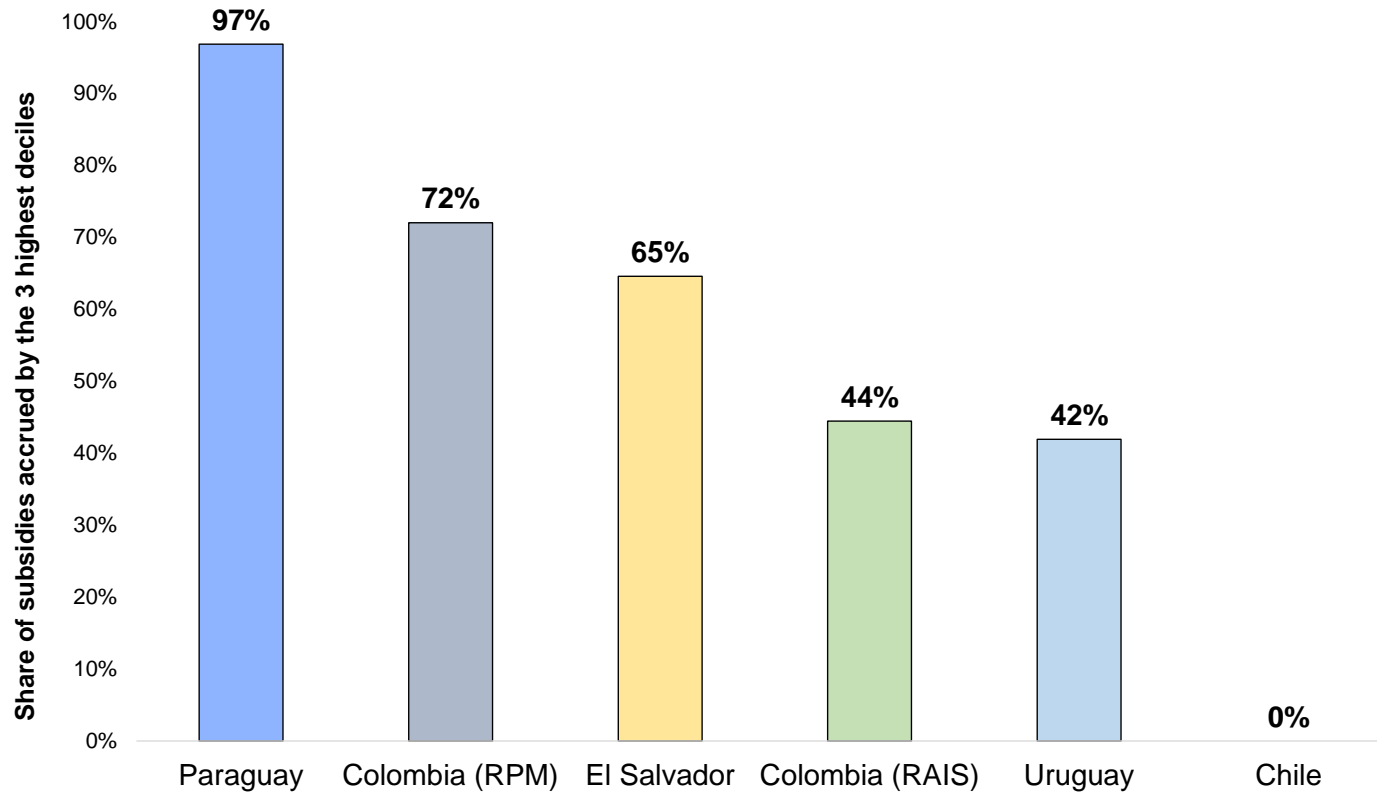
- Increasing inequality
 - Most unequalising: pension saving deducted at marginal rate of tax with a high (or no) upper limit
 - Smaller increase in inequality: tax concession at a flat rate
- Reducing inequality
 - Taxpayer match with upper limit the contribution on median income
 - Stronger effect: flat-rate contribution
 - Strongest effect: flat-rate but tapered for higher incomes

Pathologies (2): Avoid onerous contribution conditions

- In many countries in Latin America, many workers (typically low income) have incomplete contribution records because of informal-sector work
- Thus
 - Have low contributory pensions; and
 - May not qualify for the minimum pension
 - Thus (next slide), subsidies typically go to high-income deciles
- The outlier: Chile
 - DC + non-contributory pension with taper produces subsidies that are highly progressive, focused on bottom 60% of distribution
 - This outcome is the result of deliberate design (Marcel Commission)

Share of subsidies that accrue to the three highest income deciles

(Bancalari *et al.* forthcoming)



Pathologies (3) Avoid regressive annuity pricing

- Richer people live longer but poorer people don't get appropriately-priced annuities
 - 'Researchers have long known that the rich live longer than the poor. Evidence now suggests that the life expectancy gap is increasing, at least here the United States, which raises troubling questions about the fairness of current efforts to protect Social Security' [The growing life-expectancy gap between rich and poor | Brookings](#)
- Addressing the problem requires wide-ranging social policy initiatives (Michael Marmot's lecture)

3 The pension system as a whole

- Useful to distinguish between ‘pension systems’ and the different elements of pension systems, i.e. pension plans
- Since pensions have multiple objectives, a well-designed system generally comprises multiple plans, e.g. a non-contributory pension and individual accounts
- For many purposes need to look at the system as a whole

No single best pension 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

Integrating non-contributory and contributory plans

- As noted, the solidarity pension in Chile is tapered for higher AFP pensions
- Other examples of tapering
 - Canada (limited affluence test)
 - Sweden (pension test)
 - Australia (income and assets test)
 - New Zealand (only an age and residence test)

Conclusion

- As noted, the world has changed, including changes in work, families and skills
- Particularly relevant is increased diversity and fluidity of labour market relations – a change that is true both in LMICs and OECD countries
- Thus the design of welfare states suitable for the 21st century needs to recognise that
 - In advanced economies, fluid labour market relations will persist
 - In LMICs informality will not disappear

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