The crucial importance of pensions to wellbeing in the United Kingdom

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A consideration of the importance of pensions—both occupational and state pensions—to the state of wellbeing in the United Kingdom.

As well as considering the *direct* impact on wellbeing, the *indirect* impact via pension fund investment in capital markets will also be considered.

Alfred Marshall

- "Economics is a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of material requisites of well-being"
- (1890) 1 Introduction, in *Principles of Economics*. Volume One: An Introductory Volume

Well-being

- Or wellbeing, ***wellness***, *prudential value*, or quality of life
  - What is intrinsically valuable relative *to* someone
  - The well-being of a person is what is ultimately good *for* this person; what is in the self-interest of this person
  - Well-being can refer to both positive and negative well-being
  - There are different types of well-being
    - mental well-being, physical well-being, economic well-being, emotional well-being

A *very* brief history of pensions

- Ancient Rome offered veteran legionnaires (centurions) military pensions
  - Usually in the form of a land grant or a special, often semi-public, appointment
  - 13 B.C.E Augustus established a pension plan for retired soldiers
    - After 16 years of service in a legion and four years in the military reserves a pension (of minimum 3,000 denarii in a lump sum, which at the time was around 13 times a legionnaires' annual salary)
    - This was an attempt to quell rebellion within the Roman Empire

A *very* brief history of pensions

- First modern state pension
- Otto von Bismarck, Germany
  - 1889: Old Age and Disability Insurance Bill
    - Financed by a tax on workers
    - Originally designed to provide a pension annuity for workers who reached the age of 70 years
    - Lowered to 65 in 1916

UK Pensions: In the beginning

- 1908: The Old Age Pensions Act
  - Introduction of the UK state pension
  - Five shillings a week at the age of 70
  - Awarded to people resident in the UK for at least 20 years
  - Could be disqualified if they had made themselves poor to qualify, been imprisoned or convicted under the Inebriates Act

UK Pensions: In the beginning

- 1908 Life expectancy at birth
  - Men: 40 years
  - Women: 43 years
  - Only one in four people (24%) reached the SPA of 70, living on average just a further nine years.
  - 2017: some 85 per cent people reached their SPA with a life expectancy of 24 years

UK Pensions: In the present

- Since April 2022
  - State pension is £185.15 a week
  - Since 2010 its value has risen in line with the triple lock
    - “Triple lock”: the highest of inflation, earnings and 2.5 per cent
    - No guarantees
    - This year the UK government has stepped back from its manifesto commitment, linking it to inflation only
  - US state pension pays less than £9,000 a year on average
  - Thus, around 25% of pensioners are reliant on means-tested benefits to ‘top it up’

UK Pensions: In the present

- The UK government pays just over 12.4mn state pensions
- Around 1.15mn pensions paid outside the UK, often frozen,
- State pension spending is 4.7 per cent of GDP
  - OECD average is 6.5 per cent

Pensions: the three pillars

- First defined in 2005 by the UN
  - Pillar 1: State pension schemes
  - Pillar 2: Occupational pension schemes
  - Pillar 3: Private, individual pension schemes

Pensions: the three pillars

- Pillar 1: State pension schemes
    - Typically unfunded
  - Flat rate
  - Earnings-related benefits
  - Mandatory
    - Government provision
    - Addresses the risks of individual myopia, low earnings, and inappropriate planning horizons due to the uncertainty of life expectancies, and the lack, or risks, of financial markets

- Pillar 2: Occupational pension schemes
  - Private
  - DC or DB
    - Mostly funded
    - Some book-entry
  - Earnings-related benefits
- Pillar 3: Private, individual pension schemes
  - Private
  - DC
    - Funded
  - Earnings-related benefits

Pay-As-You-Go (PAYG)

- Unfunded
- Also referred to as ‘intergenerational transfer’
- Typical of state “social security” systems

Funded pensions

- Payments made to the PF, usually as a percentage of salary by
  - Employee
  - Employer
- Pension schemes are either
  - Defined benefit (DB)
    - Benefits paid as a defined percentage of 'final salary'
- Or
  - Defined contribution (DC)
    - Benefits paid according to what they earn on the financial markets
    - Also known as 'money purchase' schemes

Funded pensions

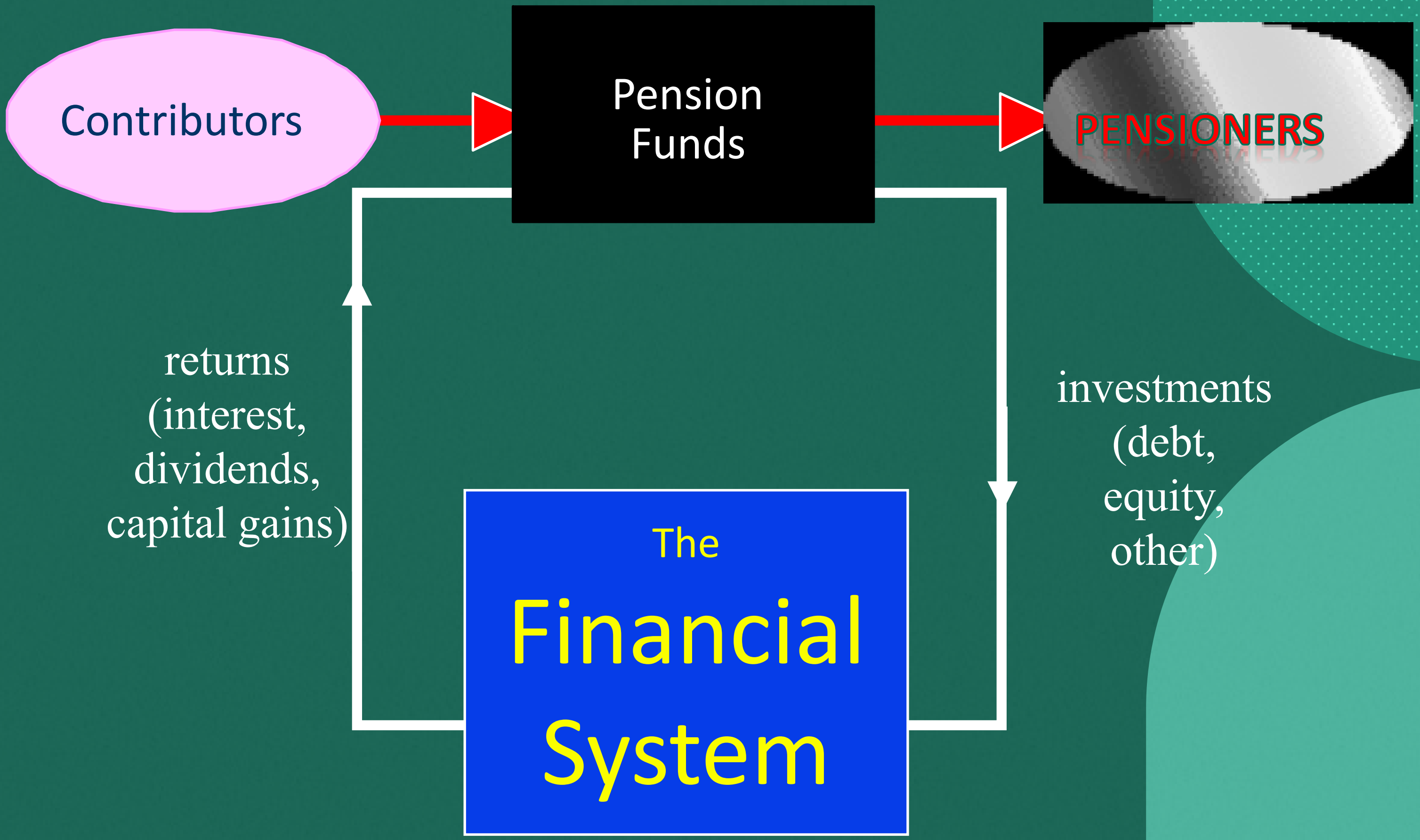
Defined benefit (DB)

- Benefits paid as a defined percentage of "final salary"
- PF and employer assume risk
  - May need to "top up" fund if actuarially in deficit

Defined contribution (DC)

- Benefits paid according to what they earn on the financial markets
- PF members assume risk
  - May end up with reduced benefits if markets are down on the day of retirement!!

Defined Contributions / Defined Benefits



Sources of funds

- Employee contributions
- Employer contributions

- Interest payments
- Dividend payments
- Capital gains

Uses of funds

- Payment of pensions
  - To pensioners
  - To widows/widowers
- Investments
  - Equity
  - Corporate bonds
  - Government bonds
  - Land, property and ground rent
  - Loans and mortgages
  - Other

Economic Theory of Pensions

- In the frictionless world of standard neoclassical economic theory pensions would be irrelevant
  - No worker would care how much (if any) of their earnings were deposited into a pension fund
  - For every dollar accumulated in the pension fund a worker would reduce their private wealth holdings by $1
  - Lifetime work patterns, and in particular the retirement decision would be unaffected by pensions
- The ’proof’ of this “neutrality of pensions” follows from five key assumptions

Blinder, Alan S. (1982) *Private Pensions and Public Pensions: Theory and Fact.* NBER

Economic Theory of Pensions

Blinder, Alan S. (1982) *Private Pensions and Public Pensions: Theory and Fact.* NBER

- The 'proof' of this "neutrality of pensions" follows from five key assumptions
  1. There is no uncertainty of any kind
  2. There are no taxes, no governmentally-imposed pension system, and no laws regulating private pensions
  3. Capital markets are perfect
  4. Every worker is paid, in the form of explicit wages (*w*) plus contributions to his pension fund (*p*), an amount precisely equal to the value of his marginal product
  5. No job has compulsory retirement, nor is it necessary to retire to receive pension benefits

Why pensions exist: Pensions and well-being

- Whose well-being?
  - Individual well-being
    - Tax advantages
  - Firm well-being
    - Direct: Labour turnover reduction
    - Indirect: Improved supply of capital via capital markets
  - Government well-being
    - Improved supply of debt capital via capital markets
  - Other
    - A better intertemporal distribution of capital
      - Offsetting the risks of individual myopia (via changes to the discount rate) and inappropriate planning horizons caused by the uncertainty of life expectancies

Final notes

- Cost of Capital
  - $WACC = \pi_d k_d + \pi_e k_e$
  - Depends on supply and demand of capital

  - Pension funds are a key supplier of capital
    - Both equity and debt

- Dependency ratio
  - The ratio of pensioners to contributors