

Institute and Faculty of Actuaries

Macroeconomics of Pension Funds



Research agenda

- Rise and fall of DB pensions
- Trustees, governance, and investment advisors

Working Parties

Volunteerind

Research

Financial literacy

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- Psychology of retirement decision making
- Corporate value of retirement savings
- DB vs DC social impact
- DB vs DC financial impact
- **Macroeconomics of Pension Funds**

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Motivation

- Closure of DB schemes and the move to an end game
- De-risking and the move to matching assets
- Micro–level decisions that are taken in isolation
- What implications do pragmatic firm level decisions have for the economy as a whole?





Piecing it together

- Sources of retirement income:
 - State Pension Provision
 - Personal savings for retirement
 - Personal savings not for retirement
 - Occupational public sector pension
 - Occupational private sector pension
 - Healthcare costs largely ignored







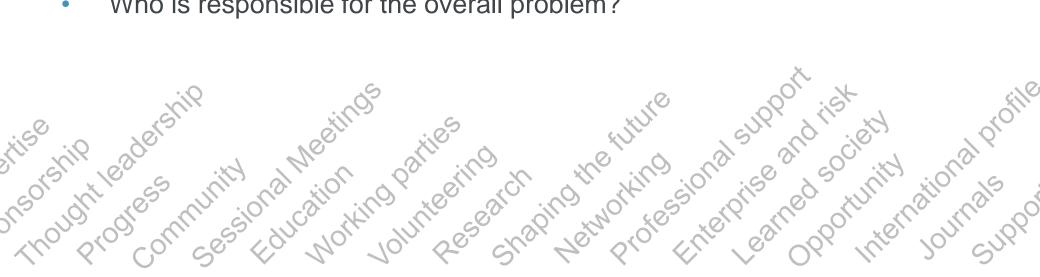
- A key objective of government retirement savings
- Saving for retirement is also a rational thing to do
 - Consumption smoothing
 - Reduce cost to the State
- DB/DC/State it is not clear how this mix provides intergenerational fairness in the current system





Who bears the risk?

- DB A risk sharing agreement to a corporate debt
- DC The individual with a loss of risk pooling
- The Pensions Protection Fund
- Government
- Intergenerational risk transfers
- Who is responsible for the overall problem?





Characteristics of pension funds

- Economic stabilisers (DB but not DC)
- Pools of capital invest in companies or government
- Appropriate investor
- Ease the burden on employers, individuals, government
 - Effective financial intermediary
- Intragenerational risk transfers Vs Intergenerational risk transfers





Pension funds as pools of capital today

Assets	\$3204bn
Assets/GDP	111.90%
Equities	43%
Bonds	37%
Other	18%
Cash	2%
DB/DC	68%/32%





Pension funds as pools of capital today

- \$2,700bn of UK pension fund investment
 - \$2,000bn of UK DB pension fund investment
 - \$700bn of UK DC pension fund investment
- \$1,200bn of equity investment by UK pension funds
- \$1,000bn of bond investment by UK pension funds

Source: Towers Watson Global Asset Study 2013





Pension funds as pools of capital today

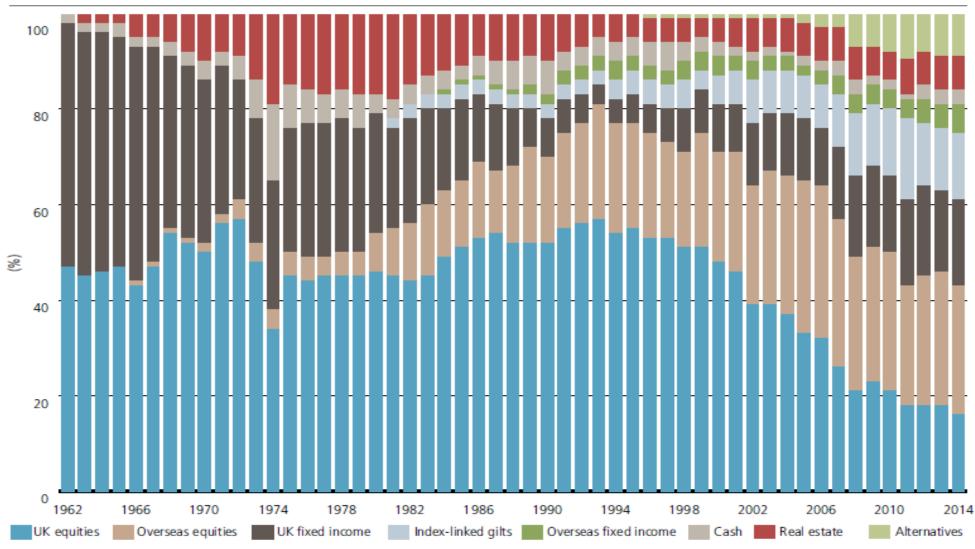
- \$3,204bn of UK pension fund investment
 - \$2,178bn of UK DB pension fund investment
 - \$1,025bn of UK DC pension fund investment
- \$1,378bn of equity investment by UK pension funds
- \$1,185bn of bond investment by UK pension funds

Source: Towers Watson Global Asset Study 2016





Figure B.1 Asset allocation - average pension fund, 1962-2014



Source: Office for National Statistics (until 1995), WM (1996 onwards). As at end December 2014



Pension funds as future pools of capital

- De-risking: \$1.4tn of equity potentially being sold over time
 - £220bn of disinvestment from UK Plc.
- Regulatory pressure to de-risk(?) at scheme level forcing maturity
 - De-risking is purchasing UK government debt (by accident or by design?)
- Matching assets limited capacity in the market
 - (£2.1tn estimated buyout liability for DB schemes)

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£800bn deficit

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Government trying to reduce debt?

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Who fills the gap if UK pension funds don't buy UK equity?

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What does this imply for UK Plc. UK growth and governance?

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Future of the DB actuary ...

- £2.1tn with £800bn asset shortfall
- £10-20bn per annum of buy-out business written per annum
- Increased demand impacts prices vicious circle
- Insurance company buy-out is "value destroying" (profit margins and restrictive investment policy)
- Legacy DB schemes require management
- Liability matching (minimal risk) portfolios, capital investment decisions





Pension funds as an appropriate investor

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- The role of trustees in DB
 - Capital investment decisions
 - High levels of liquidity
 - Scope for large illiquid investments e.g. infrastructure
- The role of individuals in DC

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- Passive DC may lead to poor macro investment decisions
- Behavioural biases in individuals when DC investments are made
- Risk preferences & default funds



Consequences for individuals

- Retiring on insufficient pensions who picks up the tab?
 - Flat rate State Pension + auto enrolment "protects" low earners
- Current annuity market, rates of saving, and the tax system
 - No incentive to save
 - Compulsion to buy "gilt backed" annuities in retirement
- The lucky generation intergenerational fairness and social contracts
- Freedom and choice?

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It's not about pensions - cost of health care - the transfer is huge earned socie Net no partie ering the the fut of a start and a start and a start a s

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Who makes investment decisions?

- Buying government bonds
 - Increased Government debt not necessarily a bad thing
 - Government makes real asset investment decisions
 - Investment in infrastructure supply side policy (cf increasing demand)
 - History of regulation encouraging government borrowing in difficult times •

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Buying equity

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- Investment decisions made by companies (better governance?)
- Less government control



Challenges for Government

- Public sector and State pensions mostly unfunded
- Debt and taxes impact on growth sovereign default?
- Public sector social contract

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Who should make the investment decisions?

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- The PPF and TPR changing economic circumstances
- Incentives to de-risk Vs. incentives to invest in the real economy
- A role for properly designed defined ambition? (best endeavours)

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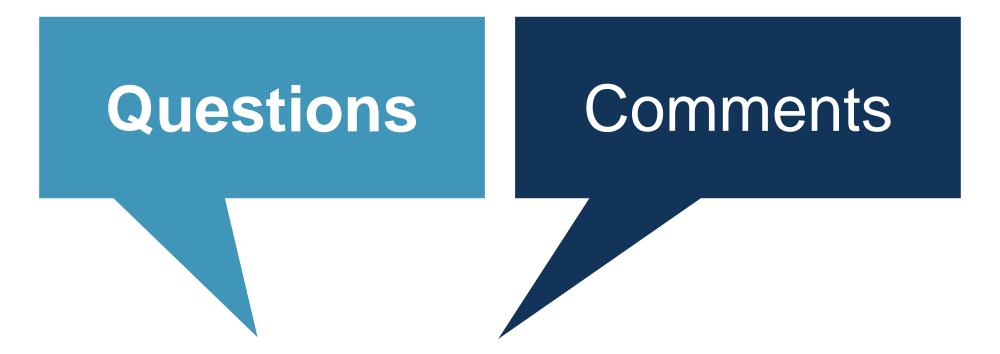
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Challenges for the Profession

- Public interest government, employers and individuals
- Intergenerational risk transfers
- Design of retirement savings pension and healthcare
- Real investment decisions companies or government
- Individual outcomes setting expectations
- Managing the DB legacy sustainable solution
- Managing the DC legacy financial literacy, power to the consumer
- Creating the sustainable fair retirement solution





Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.

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