Does USS provide a model of reciprocity between generations? *Michael Otsuka*

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USS once provided a model of intergenerational reciprocity but no longer does

- As funded, invested, & valued from mid-70s to mid-90s, USS provided a simple and sustainable model of reciprocity between generations.
 - **1990s:** 1/80th final salary, at 20% contributions (14% employer, 6% member)
- With its recent call for contributions of 40% of salaries to fund its ongoing shift from growth assets to bonds, the current scheme represents a failure of intergenerational reciprocity.

What USS was created to replace

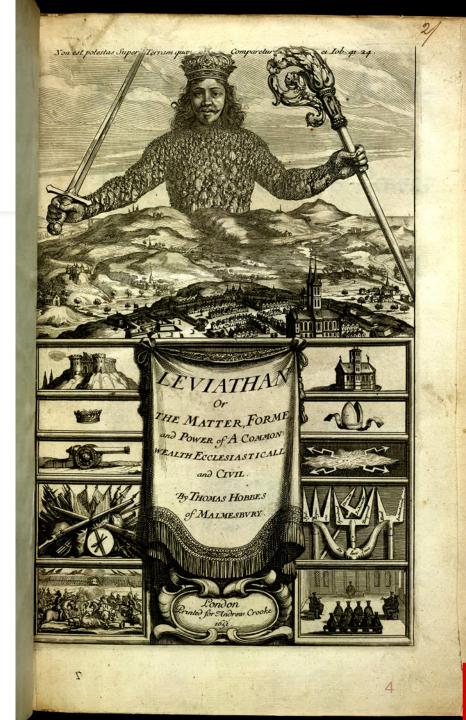
 1913-1975: Federated Superannuation Scheme for Universities (FSSU) provided DC pension pots

1975: foundation of USS DB

- Rather than their having to wait & see how much their pension pots grew and what the annuity rate was at date of retirement under FSSU,
- USS promised each member:
 - an income from retirement to death,
 - bearing a predictable relation (1/80th) to one's final salary,
 - with full protection against erosion by RPI inflation.

Joining together as a collective

- Investment risk tamed by each cohort's entering into covenants with other cohorts
 - thereby binding members together into a multigenerational corporate body
- Cohorts whose invested contributions exceed the expected growth rate agree to transfer to cohorts whose investments fall short,
 - thereby smoothing over investment risks,
 - and allowing continual investment in higher return, higher risk assets



USS 1996 valuation

Assumed that returns on investment would exceed RPI inflation by 3.5% (8.5% - 5%)



Report by the Actuary on the Actuarial Valuation as at 31 March 1996 6.2.3 For this valuation, I have adopted the following financial assumptions (1993 valuation assumptions in brackets):

-	valuation rate of interest =Discount rate	8.5% p.a.	(8.5% p.a.)
-	assumed rate of future salary inflation	6.5% p.a.	(6.5% p.a.)
-	assumed rate of future pension increases Pegged to retail price index (RPI)	5% p.a.	(5% p.a.)
-	assumed rate of future increases in dividends	4.5% p.a.	(4.5% p.a.)
-	assumed rate of future increases in property rents	1.5% p.a.	(4.5% p.a.)
-	assumed rate of future increases to index-linked proceeds	5% p.a.	(5% p.a.)

Returns on assets then and now

- The 1996 portfolio has achieved c. RPI+4% returns from 1996 to 2020
- But USS's 2020 valuation assumes returns of RPI *minus* 0.2%. Why?
 - USS's expected returns on the 1996 portfolio are now a bit lower: c. RPI+3%
 - The 1996 portfolio was 80% equities (stocks & shares), with much higher expected returns than the 2/3rds bonds portfolio USS plans to shift to over the next several years. The shift lowers expected returns to c. RPI+1.25%
 - Change from 'best estimate' expected return assumption, to a prudent downward adjustment to returns that can be achieved at least 75% of the time, lowers assumed returns to RPI – 0.2%

USS on intergenerational unfairness of "higherreturn (and higher-risk) investment strategy"

- "in effect more risk is being taken to meet pensioner liabilities and, if that risk materialises, the cost increase would be split between employers and active members.... This is challenging in terms of intergenerational fairness."
- "Pensions promised now depend on the next generation being willing to pay more in future if necessary to make good on past promises. For the intergenerational contract to work, the current generation must do its best to ensure that the risk of placing too high a burden on future generations is not too big."

1st reply to USS's charge of intergenerational unfairness of investment in growth assets

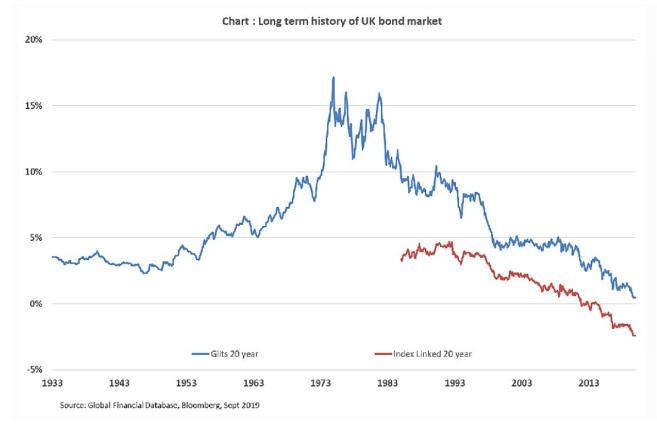
- To protect against downside investment risk, contributions must now rise significantly for certain on USS's approach, beyond the level that previous generations of employers and members paid.
- The certainty of much higher contributions now to fund past pension promises is no fairer to the current generation than the possibility of even higher contributions, combined with the likelihood of a much more modest increase in contributions.

2nd reply to USS's charge of intergenerational unfairness of investment in growth assets

- USS's shift to bonds = a retroactive and costly change to the investments on which contributions for past pensions promises were premised.
 - Member 10+ years ago received pensions promises backed at low cost by a growth portfolio.
 - Current and future members are now being made to pay the high cost of shift to bonds of the portfolio that underwrites these past promises.
- This is especially unfair to those who became a member of USS within the past decade and who will become members in the upcoming years.

Decline in government bond yields (which has increased price of annuities)

UK 20-yr Gilt yields (nominal & inflation linked)



US 10-yr Treasury yield



High price of annuities makes today the wrong time to switch back from DB to DC

Should not shift from DB to DC

• until it becomes possible to replace income drawdown with a more reliable DC source of pension income in retirement, namely:

Collective defined contribution (CDC)

- Greatly mitigates the investment and longevity risks of drawdown
- Now being introduced in the UK