Discussion of

How Much Do Public Employees Value Defined Benefit versus Defined Contribution Retirement Benefits?

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Background

- Public-sector DB plans are **shockingly** underfunded
  - MV unfunded liabilities? **$6.5 Trillion** in 2021 (@ r_{rf})
- No magic bullet to reduce gap between current assets and current liabilities... *without reducing promised benefits*...
- ... but could improve future plan finances by freezing DB benefits and shifting future ER contributions into DC...
- ... if participants are willing to accept lower DC contribution rates from employers than would be required to fund their incremental DB benefits

This Paper

Surveys emailed to **357,253** public employees in **16** US states

- **7,674** responses (**2.1%**)
  - Low response rates to random surveys are fact of life... but not obvious there will be *sample selection* based on research question
  - Responses skew older, more years of service, higher incomes... so *could* reweight responses to get at population estimates
- **5,524** (**1.5%**) answer whether they are willing to freeze DB benefits and switch to DC... *so some attrition during survey*
- **89.2%** who answer 'Yes' then answer series of questions to determine minimum required DC contribution rate

Lack individual-level admin data... but able to match **82.5%** of those claiming to invest in DB plan to one of 52 public plans

General Questions

1. Could public employers save money by freezing DB benefits and introducing DC contributions?
   - **Survey says yes!**
   - *Holding accrued benefits constant*, **89.2%** willing to switch for mean DC rate of **18.2%** (median of **10.0%**)
   - Crucially, **78.2%** willing to accept DC rate lower than estimated cost of servicing **their** continuing DB benefits
2. How much would plans save in practice if switching were voluntary? If switching were compulsory with DC rate(s) negotiated by public sector unions?
3. Is it realistic to hold accrued benefits constant given massive levels of underfunding?

Personal Anecdote (based on my fuzzy memory)

- University of Oregon used to offer choice of PERS vs. OUS
- PERS was complicated, underfunded DB plan *(Chalmers, Johnson, Reuter JPubE 2014)*
- OUS was traditional DC plan *(Chalmers & Reuter JFE 2020)*
- I joined in June 2003, chose OUS, and received **~21%** ER contribution rate, the required ER rate for PERS Tier 2
- Robin joined in September 2003, chose OUS, and received **~14%** ER contribution rate, required rate for new Tier 3
- We chose DC because we worried about **(a)** possible job turnover and **(b)** renegotiation due to DB underfunding
- We had no idea how DC rates compared to actual plan costs and likely would have accepted any DC rate ≥ 10%

Survey Design

- Estimating counterfactual DC rates is a major contribution
- Survey explicitly asks about 2.5%, 5%, 7.5%, 10%, 15%, 20%, 25%, 30%, 40%, 50%, and 60%

Q20 If your employer offered to contribute an amount equal to 2.5% of your income each year into an investment account, would you enroll in this hypothetical plan if it meant you would stop earning additional benefits under your current plan?

Q21 If your employer offered to contribute an amount equal to 5% of your income each year into an investment account, would you enroll in this hypothetical plan if it meant you would stop earning additional benefits under your current plan?

Q22 If your employer offered to contribute an amount equal to 7.5% of your income each year into an investment account, would you enroll in this hypothetical plan if it meant you would stop earning additional benefits under your current plan?

- Does beginning at 2.5% prime respondents? Is 25% the 75th percentile because respondents get tired of clicking no?
- Would distribution of DC rates be similar if you'd provided empty text box? Provided a slider between 0% and 100%?

Measuring Cost Savings

- Much of the paper calculates univariate correlations between participant/plan characteristics and minimum acceptible DC rates
- Best way to quantify expected cost savings is by exploiting author's individual-level estimated DB servicing costs
- *Delta = MV individual DB service cost – individual DC rate*

  this took tons of effort to calculate!
- Authors should include regressions of Delta on participant characteristics and plot distributions of Delta by plan
- Authors could forecast cost savings assuming
  - 78.2% participants with positive deltas switch to DC
  - All participants switch to DC at preferred DC rate

Tradeoffs?

- DB formulas reward long job tenures (up to a point)
- To the extent DB participants prefer flexibility of portable DC plan (or worry more about plan solvency) potential gains from trade from freezing existing DB benefits...
- Indeed, authors find largest savings for youngest workers
- But fact more generous DB plans have lower acceptance rates and higher required DC returns may suggest some appreciation of DB benefits or tradeoff with salary
- When public retirees given choice: annuity vs. lump sum
  - Only 15% chose lump sum (*Chalmers Reuter RFS 2012*)
  - Demand for lump sum positively correlated to recent market returns (see also *Previtero JFE 2014*)

Practical Implementation?

- It is easy to require new employees to invest in a DC plan with contribution rate of 10%
- For everyone else, it might work best to offer a single rate and provide a one-time choice
  - Rate could be sample median of 10% or vary across plans
  - *Given positive correlations between generosity and acceptable DC rates, likely to result in adverse selection*
- Given heterogeneity in value of continued participation in DB plan, union would want to negotiate different rates for employees in different years of service, age, income bins
  - *To extent DC rates are set higher than necessary (as in Oregon) cost savings will be reduced*

Holding Accrued Benefits Constant?

- While authors ask respondents to hold accrued benefits constant when considering hard freeze on DB benefits...
- ... acceptance of DC plan is highest when DB plan perceived as “not stable” and lowest when perceived as “very stable”
- Difference is modest (93% vs. 87%), and doesn’t control for differences in plan generosity, but one interpretation is that participants in “not stable” plans are more likely to fear renegotiation...
  - 7.7% say “not stable” while 47.4% say “very stable”??
- To extent that low pension returns *could* potentially trigger benefit renegotiation, appropriate discount rate *should* be (slightly) higher than risk-free rate

Conclusion

- Reducing the cost of public sector pension plans requires employees to accept DC contribution rates below DB rates required to fund additional benefits
- This paper:
  - Collects data on whether/what DC contribution rate participants willing to freeze DB benefits
  - Carefully estimates individual-level servicing costs of additional DB benefits
  - 78.2% of DC rates < DB rates → **some savings possible**
- Authors could say more about expected cost savings under different schemes to allow for voluntary/forced transition to DC plans