How Has Retirement Wealth Inequality Changed 1992-2010?

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American Economic Association Annual Meeting
Philadelphia, PA
January 5, 2018

How Has Retirement Wealth Inequality Changed 1992-2010?

- We answer this question by comparing distributions of retirement wealth of Health and Retirement Study (HRS) participants aged 51-56 in 1992, 1998, 2004, and 2010.

- Defined contribution (DC) plans have largely displaced defined benefit (DB) plans in the private sector.
  - DC plans may disproportionately benefit high earners.
    - More likely to participate and to contribute more.
    - May earn higher returns and pay lower fees.
    - Less likely to withdraw funds pre-retirement.

Presentation outline

- Description of data
- Literature review
- Results
- Conclusions

Limitations of Previous Research

- Most prior studies of retirement wealth inequality use self-reported data.
  - Survey participants often misreport plan type and benefit formulas.
- Studies using administrative data give incomplete picture.
  - Omit participants for whom administrative data are unavailable.
  - Omit IRAs, where most DC wealth now resides.
- With one exception, studies using administrative data use HRS Pension Estimation Program to calculate pension wealth.
  - Assumes a constant rather than time varying investment returns.
  - Extrapolates back current deferral rates.
  - Has known anomalies

Our Study Uses Health and Retirement Study Data Linked to

- Summary plan descriptions
- W-2 tax records

Research Plan

- Use SPDs and W-2s to calculate retirement wealth for participants where both SPDs and W-2s are available.
- Impute SPDs, when missing.
- Reweight by inverse of probability of W-2 match.
- Add on IRA wealth.
- Calculate level and distribution of retirement wealth
  – Decompose inequality into between and within lifetime income decile components.

Limitations of self-reported data

- Plan type mismatch with SPDs for about half of workers.
- Prior to our study, assumption was that this reflected respondent error.
  - (Gustman and Steinmeier, 2004, Gustman, Steinmeier, and Tabatabai, 2010)
- Workers who report wrong plan type are then asked inappropriate questions.

Limitations of Summary Plan Descriptions

- Collection only attempted for workers reporting inclusion in a retirement plan. Match rate XX percent.
- Only indicate whether an employee is eligible for a 401(k) type plan, not participation.
- HRS may fail to collect SPDs/match SPDs incorrectly.

Limitations of W-2 Data

- Box 12 (DC plan contributions) only collected 1990 onwards, and only for people who gave permission in 2004 onwards. So Box 12 data are missing for one third of the 1992 sample.

- Alternative is to compare Box 1 (earnings chargeable to federal income tax) with Box 5 (Medicare taxable earnings).

  - Medicare tax capped 1993 and previously. DC contributions cannot be identified for workers earning more than the taxable maximum.

  - Employee contributions to state and local DB plans swept up in calculation.

  - DC contributions excluded from Medicare taxable earnings pre-1984.

Analysis of W-2 Box 12 Entries Indicates SPDs Are Missing or Miscoded

- 40% of workers where only SPD is for DB plan have Box 12 deferrals.
- 22% of workers where only SPD is for a money purchase or profit sharing plan have Box 12 deferrals.
- We impute missing SPDs using self-reports as covariate so that SPDs match W-2 data.

The Box 5-Box 1 Calculation is Not a Reliable Measure of DC Contributions

We compare Box 12 with the Box 5 minus Box 1 calculation.

- 14% of workers have a zero Box 12 entry and Box 5 exceeding Box 1.

- Studies that use Box 5/Box 1 data will overstate participation and projected retirement wealth (Dushi and Honig, 2010).

- Even using SPDs to strip out non-voluntary element (Cunningham and Engelhardt, 2002) likely overstates participation and contribution.

Literature review

- No prior study of inequality uses administrative data.
- Studies using Survey of Consumer Finances data show:
  - –Retirement wealth is more unequally distributed than income.
  - –DC wealth is more unequally distributed than DB wealth.

    (Wolff, 2011, Devlin-Foltz, Henriques, and Sabelhaus, 2015)
- Studies using Health and Retirement Study show
  - –Retirement wealth unequally distributed (Mitchell and Moore, 1997)
  - –Stable distribution of retirement wealth by quartile of education quartile

    (Munnell, Hou, Webb, and Li, 2016)

Literature review, cont'd

- High lifetime earners have lower Social Security replacement rates > need higher wealth to income ratios.
- But HRS studies show wealth to income ratios vary enormously, conditioning on lifetime income (Venti and Wise, 1998).

Results – Retirement Plan Coverage Fell

Table 1: Share of Workers 51-56 with Current or Past Job Retirement Wealth 1992-2010				
	1992	1998	2004	2010
Based on self-reported data				
DB only	18%	16%	14%	11%
DC only	26%	28%	37%	39%
Both DB and DC	38%	35%	29%	27%
Any	**82%**	**79%**	**81%**	**77%**
Based on SPDs and W-2s				
DB only	14%	11%	11%	7%
DC only	26%	31%	37%	39%
Both DB and DC	42%	40%	32%	32%
Any	**82%**	**82%**	**80%**	**78%**

Source: Authors' calculations.
Notes: HRS sample weights adjusted for selection into W-2 matching.

Results – Median Retirement Plan Wealth Stagnated

Table 2: Share of Workers 51-56 with Current Job Retirement Wealth 1992-2010

	1992	1998	2004	2010
DB only *Conditional on coverage*	**62000**	**82600**	**66100**	**52900**
DC only *Conditional on coverage*	**23300**	29400	37700	49800
Both DB and DC *Conditional on coverage*	**160200**	236400	237400	185000
Any *Conditional on coverage*	**79100**	109300	107100	93900
Ratio of Mean to Median *Conditional on coverage*	**2.3**	**1.9**	**2.0**	**1.9**
DB for all workers Unconditional	**12800**	**2500**	**0**	**0**
DC Unconditional	**9300**	11700	15300	19500
Any Unconditional	**49400**	63000	54200	52800
Ratio of Mean to Median Unconditional	**1.1**	**1.3**	**1.5**	**1.4**

Source: Authors' calculations.
Notes: See previous table. All amounts are in $2010. DB wealth is valued using prevailing investment grade corporate bond interest rates and cohort mortality tables.

Results – Flat to Rising Retirement Wealth Gini Coefficients

Table 3b: Share of Workers 51-56 with Current Job Retirement Wealth 1992-2010 (bootstrapped)

	1992	1998	2004	2010
Conditional on coverage				
DB - whether or not DC	0.59	0.53	0.56	0.57
DC - whether or not DB	0.69	0.69	0.68	0.65
Any retirement wealth	0.63	0.60	0.62	0.63
Unconditional				
Any retirement wealth	0.70	0.67	0.70	0.72

Source: Authors' calculations.
Notes: See previous tables. DB and DC wealth are each inclusive of wealth from past jobs

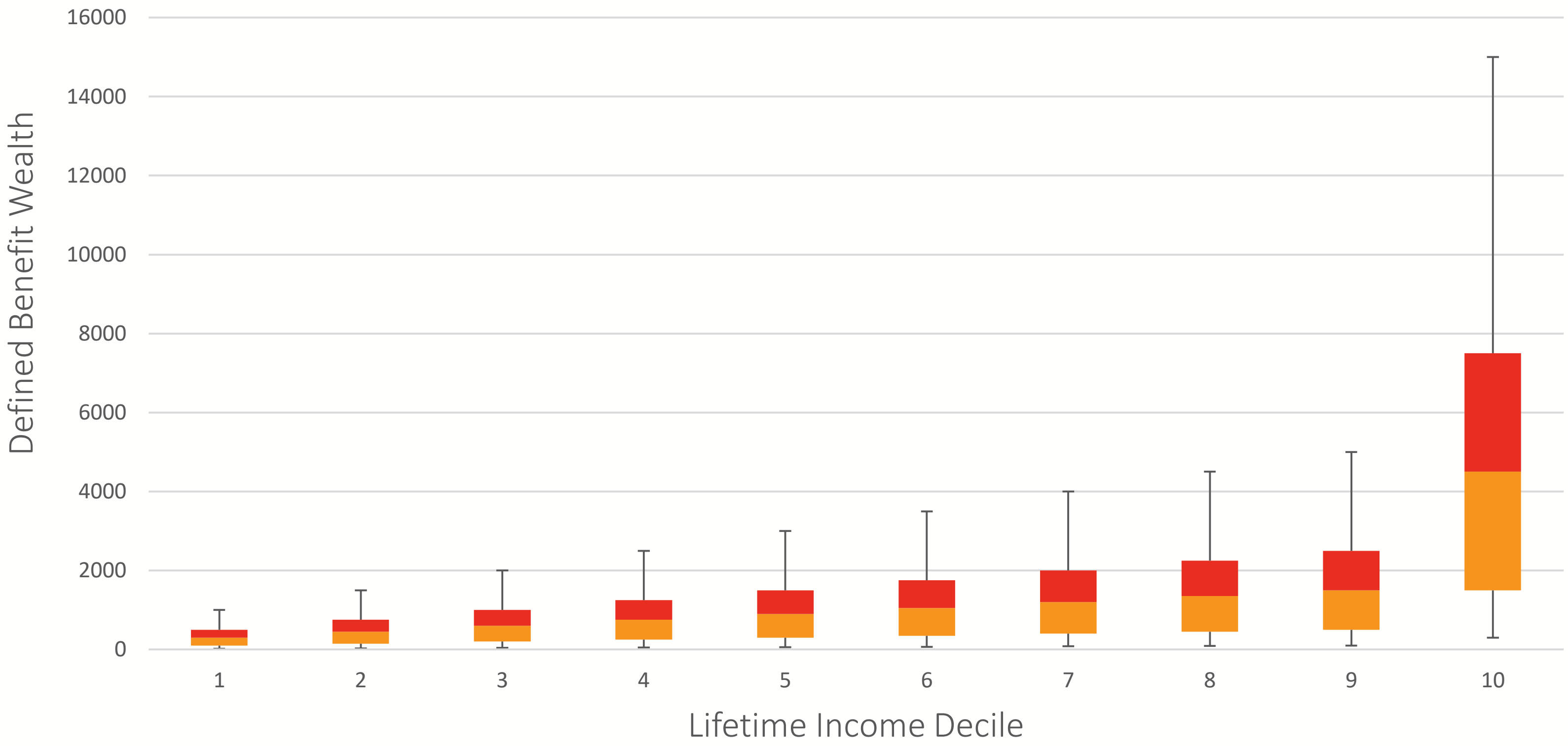
Results – Retirement Wealth Theil Coefficients

Table 4: Retirement Wealth Theil Coefficients 1992-2010

	1992	1998	2004	2010
Conditional on coverage				
DB - whether or not DC				
Total	0.65	0.46	0.59	0.57
Between lifetime income decile	0.16	0.05	0.14	0.09
Within lifetime income decile	0.49	0.41	0.45	0.47
DC - whether or not DB				
Total	1.05	0.89	1.05	0.66
Between lifetime income decile	0.35	0.23	0.34	0.23
Within lifetime income decile	0.71	0.66	0.71	0.43
Any retirement wealth				
Total	**0.77**	0.61	0.79	**0.62**
Between lifetime income decile	**0.28**	0.16	0.26	**0.17**
Within lifetime income decile	**0.49**	0.45	0.52	**0.45**
Unconditional				
Any retirement wealth				
Total	**0.97**	0.81	1.02	**0.87**
Between lifetime income decile	0.40	0.26	0.41	0.34
Within lifetime income decile	0.58	0.54	0.61	0.53

Source: Authors' calculations.
Notes: See previous tables.

Results – DB Retirement Wealth by Lifetime Income Decile



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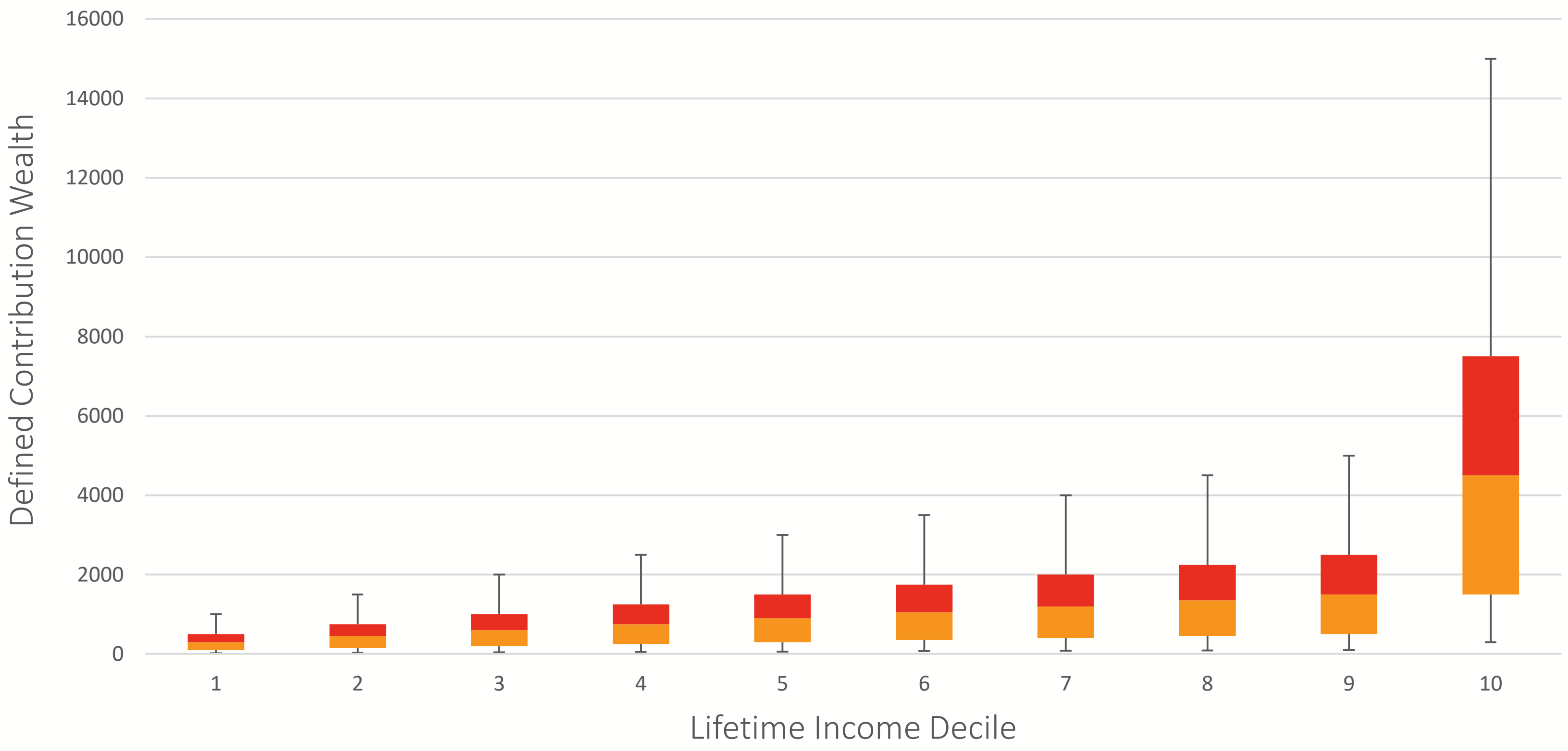
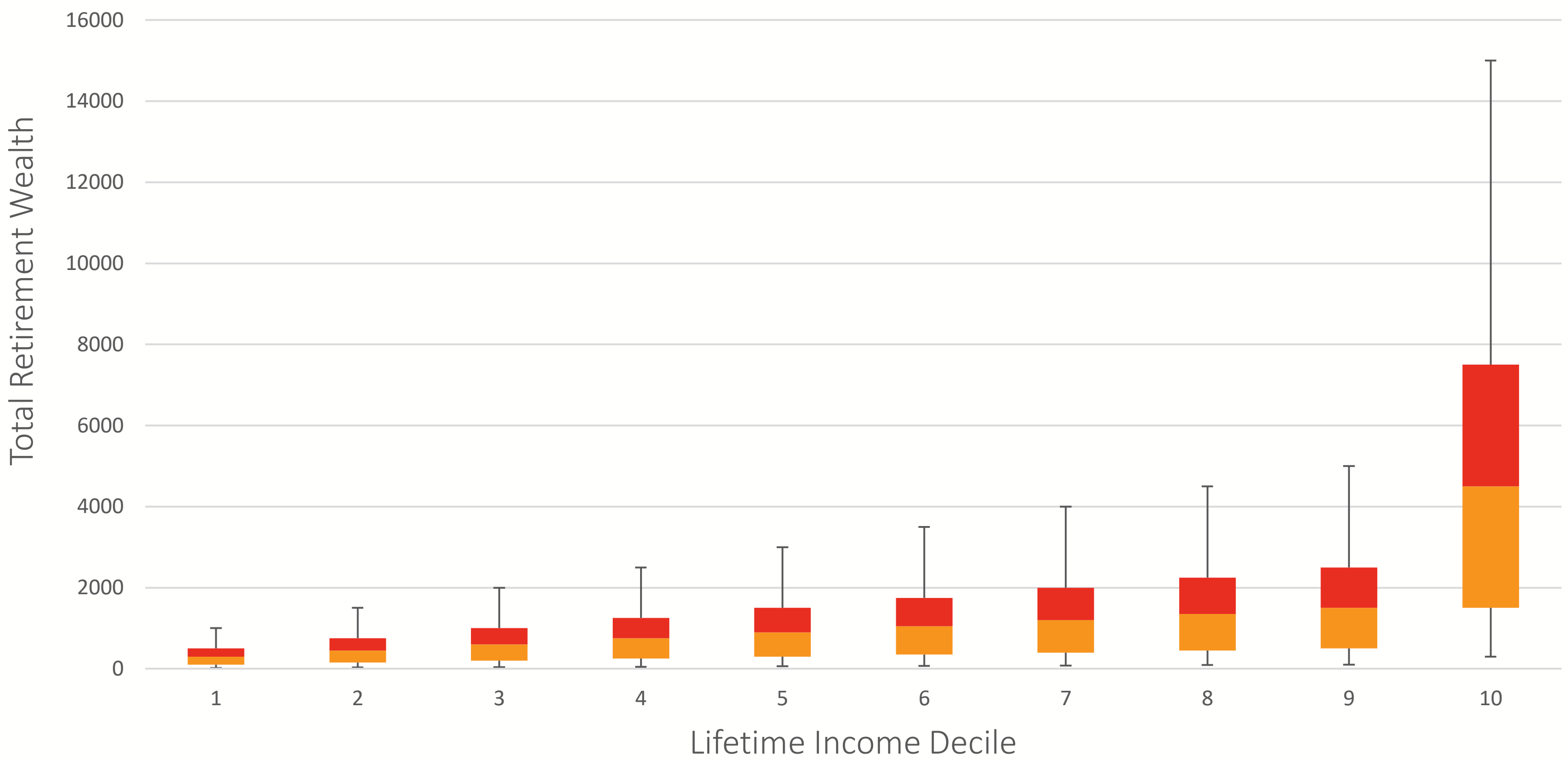
Results – DC Retirement Wealth by Lifetime Income Decile



Results – Total Retirement Wealth by Lifetime Income Decile



Conclusions

- Is retirement wealth inequality a problem?
  - May reflect differences in tastes and preferences.
  - Although some disagree, believe most households are undersaving.
  - Although a small minority is accumulating dynastic wealth, most high earners are falling short.

Conclusions, cont'd

- Retirement tax expenditures disproportionately benefit high earners.
- They are not effective, equitable, or efficient.
  - Effective – go mainly to those who would save anyway.
  - Equitable – benefit mainly high earners.
  - Efficient – much of the benefit is misappropriated by the financial services industry through excessive fees.

Conclusions, cont'd

- Financialization of pensions contributes to increasing retirement wealth inequality.
- In theory, financialization can benefit society by allocating risk to those best able and willing to bear it.
- In practice, it has reduced risk pooling:
  - DC wealth rarely annuitized.
  - DC plans lack a mechanism for pooling risk across birth cohorts.

Thank you

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