Equity, Adequacy and Other Stuff

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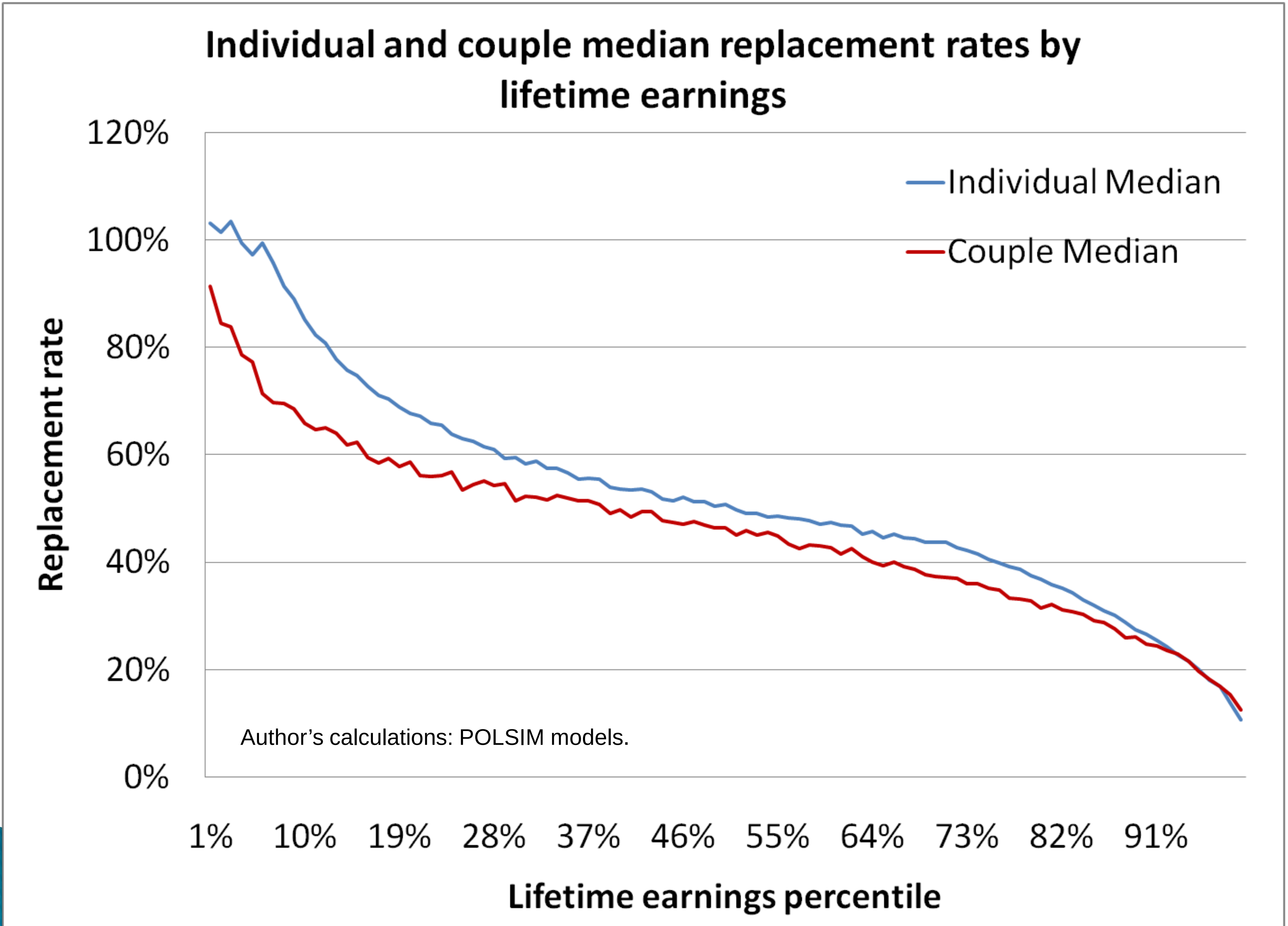
Balancing equity and adequacy

- Equity: Paying benefits according to contributions
  - In base OASDI formula, higher earnings/contributions generates higher benefits
- Adequacy: Providing low earners with enhanced protections against poverty
  - While dollar benefits rise with earnings, replacement rates fall
  - Low earners receive higher benefits relative to earnings/contributions


Individual and couple median replacement rates by lifetime earnings
Individual Median
Couple Median
Replacement rate
120%
100%
80%
60%
40%
20%
0%
1%
10%
19%
28%
37%
46%
55%
64%
73%
82%
91%
Lifetime earnings percentile
Author’s calculations: POLSIM models.

But it’s not *all* about equity and adequacy

- Much of the distribution of OASDI benefits is driven by factors other than equity or adequacy
- Quirks in benefit formula mean that individuals/couples with same lifetime earnings can receive very different benefits
- These aspects of benefit formula rarely have strong policy justification

How can people with the same earnings get different benefits?

- “Same earnings” = total lifetime earnings discounted at a safe interest rate
  - Reflects total amount available to consumer over lifetime, using saving/borrowing
- What factors cause benefits to differ even when lifetime earnings are the same?
  - 35-year AIME calculation
  - Relative earnings between spouses
  - 10-year marriage for divorced spouse benefits
  - Wage indexing of past earnings
  - 40-quarter benefit eligibility
  - Maximum taxable wage


Individual replacement rate by lifetime earnings
300%
250%
200%
150%
100%
50%
0%
Replacement rate
0%
20%
40%
60%
80%
100%
Lifetime earnings percentile

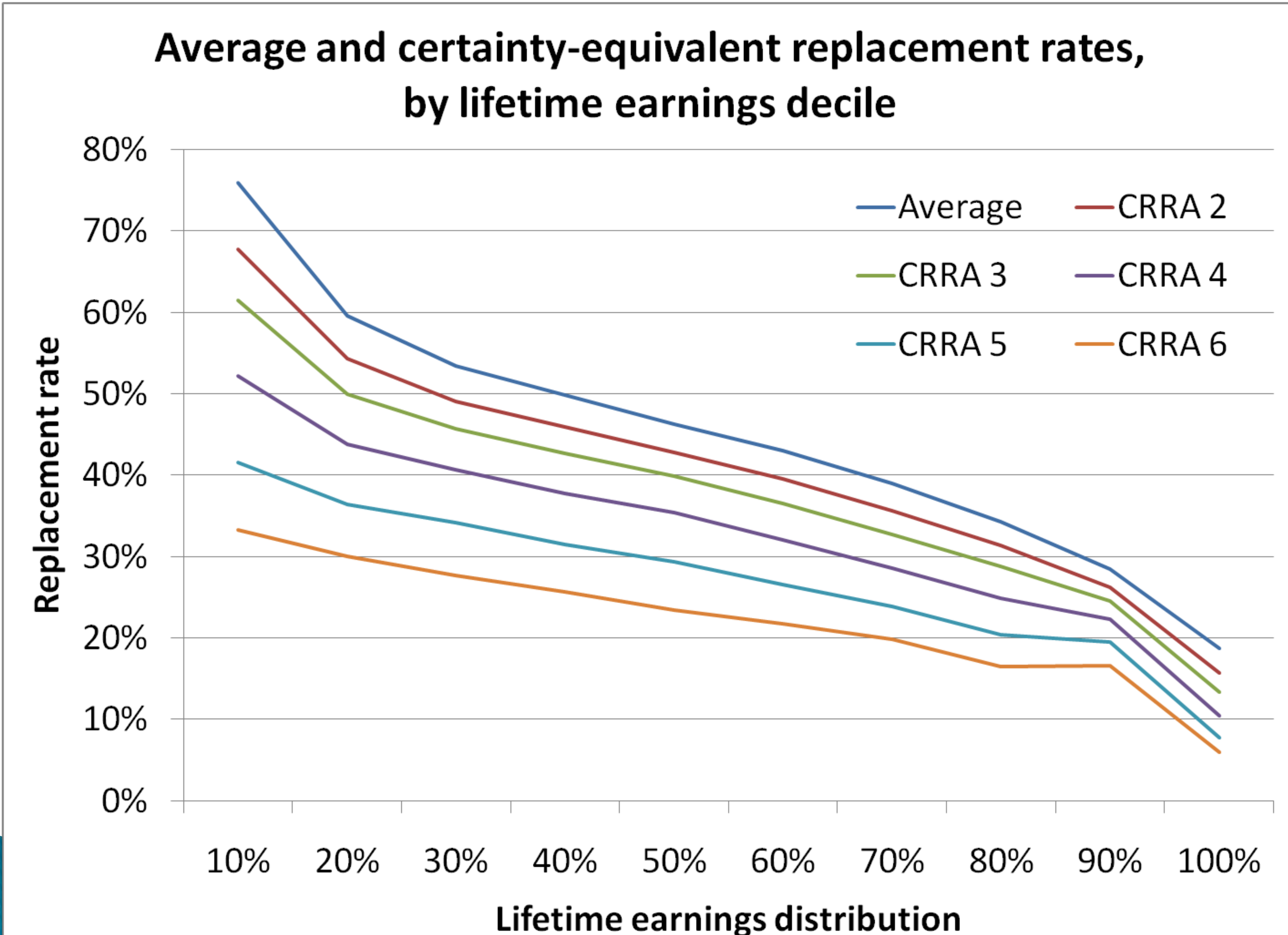

Couple replacement rates by lifetime earnings
Replacement rate
300%
250%
200%
150%
100%
50%
0%
0%
20%
40%
60%
80%
100%
Lifetime earnings percentile

Poor benefit targeting

- Despite the goal of basing benefits on earnings, lifetime earnings are actually a poor predictor of benefits
  - R^2 of 0.31 for individuals; 0.55 for couples
  - Much or most of benefit distribution explained by factors *other* than equity or adequacy
- Benefit uncertainty particularly large for low earners
  - Some do very well, others poorly

Benefit risk undermines social insurance value of OASDI

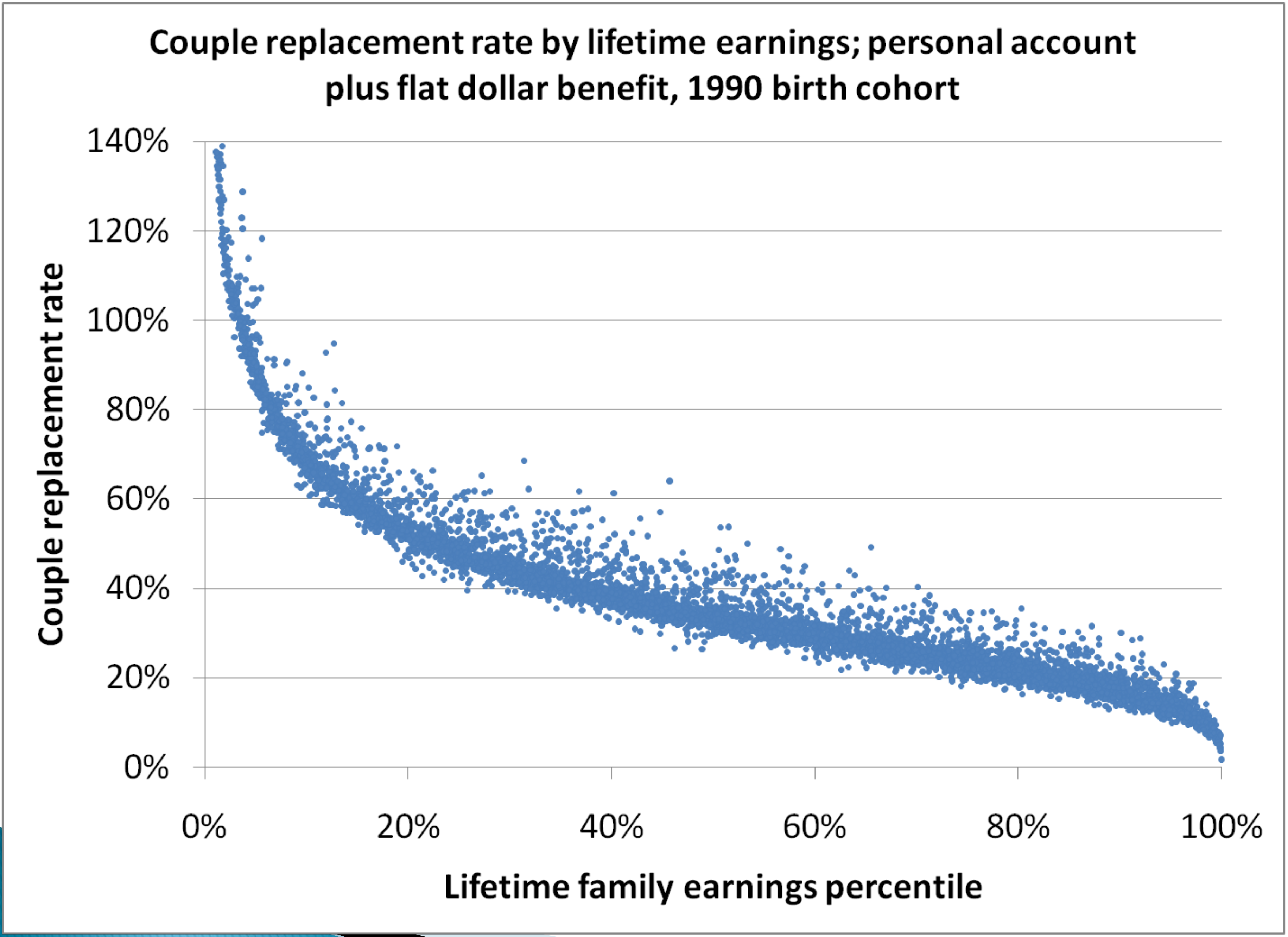
- Value of Defined Benefit (DB) plan over Defined Contribution (DC) plan lies in predictability of future benefit
  - Predictability makes other saving and retirement decisions easier
- Individuals/couples with same lifetime earnings should save roughly same amount
  - But when OASDI benefits vary, saving decisions complicated
- Benefit variability raises poverty/income inadequacy
  - For low earners, OASDI is a high-returning but risky investment



Average and certainty-equivalent replacement rates, by lifetime earnings decile
Replacement rate
80%
70%
60%
50%
40%
30%
20%
10%
0%
Average
CRRA 2
CRRA 3
CRRA 4
CRRA 5
CRRA 6
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Lifetime earnings distribution

Can reform improve benefit targeting?

- Universal, flat benefit at poverty line (wage-indexed)
  - Paid regardless of earnings/labor force participation
- Personal accounts: 3% of payroll
  - Can be add-on, carve-out, or notional account
- Combination of two designed to mimic the generosity and progressivity of current law OASDI
  - But with better targeting, less uncertainty!



Couple replacement rate by lifetime earnings; personal account plus flat dollar benefit, 1990 birth cohort
Couple replacement rate
140%
120%
100%
80%
60%
40%
20%
0%
0%
20%
40%
60%
80%
100%
Lifetime family earnings percentile

Opportunities

- Poor benefit targeting is an inefficiency in Social Security design
- But that means reform can produce better outcomes at the same cost
- Reform needs to think beyond solvency or progressivity
- A simpler benefit design with less fine-tuning might actually work better than current law