American Enterprise Institute for Public Policy Research

"The Future of Replacement Rates"

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Background

- Replacement rates are rule-of-thumb for retirement planning and policy analysis
  - Compare retirement income (or Social Security benefit) to pre-retirement earnings
  - Must be simple and usable for policymakers and public
- VERY important how replacement rates are defined
  - Honest differences in methodology: “retirement crisis” versus manageable saving shortfalls
- Little attention until past several years
  - 2014: Social Security Trustees pulled replacement rates from annual report
- Two main areas of disagreement
  - Denominator: CPI or wage-indexed career earnings?
  - Whether to adjust for child-rearing costs

Defining the denominator

- Wage-indexed average earnings
  - Past earnings increased by ratio of average wage in year of retirement to average wage at time earned
  - Increases measured pre-retirement earnings, lowers replacement rates
    - E.g., factoid that average Social Security replacement rate = 40% measured relative to wage-indexed earnings
  - Reflects relative income, “Keeping up with Joneses” outlook: individuals wish to maintain their place in earnings distribution (Munnell 2014).
- Inflation-indexed average earnings
  - Past earnings indexed to growth of prices; compares purchasing power of retirement income to purchasing power of pre-retirement earnings
  - Reflects simplified life cycle approach of maintaining consumption between work and retirement
- Differences very important
  - E.g., CBO: average individual born in 1960s will receive Social Security replacement rate of 46% (vs wage-indexed earnings) or 58% (vs CPI indexed)
- My take:
  - Relative income approach too controversial assumption to embed without discussion
  - CPI-indexed earnings more understandable; important for rule of thumb

Family size/composition adjustment

- How do children affect need to save for retirement?
  - Do parents save to maintain *their own* pre-retirement standard of living?
  - Or to maintain the *household's* pre-retirement standard of living?
  - W/ cost of raising child at ~$250k, *plus college*, it makes big difference.
- Large effect on measured retirement income adequacy
  - Differences between Gale, Scholz and Seshadri (2009) and National Retirement Risk Index heavily driven by GSS's use of family-size adjustment
  - If NRRI included adjustment, 55% "at risk" in retirement falls to 18%
- Method
  - In any given year, respondent's earnings/benefit equal household total divided by number of adults equivalents
  - *Adult equivalents* = $(A + PK)^F$
- My take: Adjustment makes sense, but parameters deserve more research
  - I assume P & F = 0.7.

Illustrations

- Using Policy Simulation Group microsimulation models
  - U.S. population, projects Social Security and employer-sponsored pensions
  - Illustrate using 1940 birth cohort, measured at age 70
- Median household Social Security replacement rates:
  - Wage-indexed earnings, no family-size adjustment: 54%
  - CPI-indexed earnings, no family-size adjustment: 65%
  - CPI-indexed earnings, no family-size adjustment: 82%
- Median Social Security + pension replacement rates
  - CPI-indexed earnings, no family-size adjustment: 126%
  - 75% of households have replacement rates >85%
  - 90% have replacement rates >50%
    - Note: above figures do not include non-pension asset income, earnings, SSI, etc.

Conclusions

- How you define adequacy matters a lot
  - Probably more than differences in how models project incomes
- All “replacement rates” aren’t the same
  - Often used interchangeably without regard to definition differences
- Most retirees will have retirement incomes higher than real average pre-retirement earnings
  - The question is, how much do they want? Would they accept lower pre-retirement standard of living to raise retirement income?
- More research needed!