Motivation

• Well-being is better measured based on lifetime earnings/income rather than point-in-time earnings/income

• “Insurance company with a standing army”: analysts often evaluate insurance through expected value (actuarial fairness, insurance value)
  – Requires looking at tax contributions (payroll, personal income, other) and benefits over a lifetime, not just at a point in time
  – Separate analyses by age partially address this
Poverty at a point in time and over longer periods

Shares in Poverty Using Different Accounting Periods

Annual 2012: 15.0
At least 2 months over 3 years (2009 - 2011): 31.6
At some time before age 65: 51.4

Sources: DeNavas-Walt, Proctor and Smith (2013), Rank and Hirschl (1999)
Transitions between quintiles similarly differ by accounting period

Source: Favreault and Haaga (2013) based on Survey of Income and Program Participation matched to earnings records

URBAN INSTITUTE
Why do relatively few analysts examine redistribution over a lifetime?

• Enormous data demands
  • A girl born in 2000 can expect to live for 85.7 years
  • Few panel data sources
  • Can use administrative data; privacy concerns limit

• Families/tax units change over time

• Sensitive to assumptions, including about many things that have not yet happened
  • Current law vs. current policy
  • Interest (“discount”) rates, mortality, earnings inequality
  • Inclusion of migrants, those who die early, etc.
Mortality differs greatly by social status, affecting lifetime redistribution.

**Life Expectancy Difference by Economic Status**

<table>
<thead>
<tr>
<th>Economic Status</th>
<th>Difference in Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>7.8</td>
</tr>
<tr>
<td>Education</td>
<td>5.4</td>
</tr>
<tr>
<td>Community income</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Sources: Meara et al. (2008); Singh and Siahpush (2006)
Example: Contrast Social Security at a point in time vs. on a lifetime basis

- Just one component of federal budget, but large
- Tax side
  - Flat payroll tax (subject to maximum, $117,000 in 2014)
  - Taxation of benefits for higher income beneficiaries
- Benefit side
  - Retirement, survivor, and disability benefits
    - Marriage-based benefits and children’s benefits
  - Mortality (increasingly disparate by income)
- Will look by race/ethnicity
A cross-sectional view of Social Security redistribution

Aggregate Benefit to Tax Ratios by Year and Race/Ethnicity

Source: Based on Steuerle, Quakenbush, and Smith (2013)
A lifetime view of Social Security redistribution

Lifetime Benefits to Contributions by Birth Year and Race/Ethnicity

Source: Computations from DYNASIM3
Distribution versus mean or median: lifetime perspective

**Distribution of the Ratio of Lifetime Benefits to Contributions**

Ratio of 1 or higher indicates lifetime Social Security benefits exceed lifetime payroll taxes

- **Hispanic**
- **Non-Hispanic black**
- **Non-Hispanic white**
Conclusions

• Looking at cross-sections alone gives an incomplete picture of redistribution
  – Many of us are likely to be poor at some point, to change income or earnings quintiles, and to face risks
  – Lifetime calculations are difficult but necessary

• Looking at measures of central tendency (mean or median) alone masks diversity within groups like quintiles or broad age groups
  – A high group-specific mean may result from a subset of that group having very high outcomes, even though many or even most individuals in the group do not
Interpretation

• Big-ticket budget items (Medicare, Social Security, and Medicaid)
  – Manage lifetime risks, especially from very large shocks to income
    • Health crises that will incur massive debts absent insurance
    • Permanent disability
    • Long-term unemployment
  – Affect multiple generations
    • Aged “pre-paid” benefits with decades of payroll taxes (“earned right”): majority have at least 35 years of contributions
    • Public redistribution to aged reduces need for private transfers
Disclaimer

All views are my own and not those of the Urban Institute, its board, or sponsors.

Please visit us at:

www.urban.org and www.retirementpolicy.org