Inequality, Cumulative Advantage, and Retirement Security

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The Urban Institute

September 2014

The distribution of earnings across the labor force has become increasingly unequal over the past generation, as wages soared for those near the top of the earnings distribution while falling or stagnating for those in the middle and near the bottom. A recent study, for example, found that the top 10 percent of workers collected more than half of the nation's earnings in 2012, the highest share ever recorded (Saez 2013). These trends may reverberate into old age, long after workers have retired, because retirement income depends on how much is earned at younger ages. For example, higher earnings lead to higher Social Security benefits. Workers who earn more are able to save more in employer-sponsored tax-deferred savings accounts—such as 401(k) plans—and other vehicles, which they may spend in retirement. And healthier workers tend to earn more each year and work longer than their less robust counterparts, boosting lifetime earnings and retirement incomes. Scholars refer to the tendency for retirement income to reinforce economic advantages at younger ages and magnify economic inequality experienced earlier in the lifecourse as cumulative advantage (Dannefer 2003). Ongoing demographic trends, such as the increasing tendency for low-income adults to experience health problems and lack the economic support of a spouse, compound these advantages and disadvantages.

However, the relationship between earnings and retirement well-being is complex. One's relative economic position based on a single year may diverge substantially from that based on their lifetime earnings (Favreault and Haaga 2013). More importantly, some aspects of the retirement system redistribute benefits from high earners to those who earned relatively little when working, perhaps partially offsetting the effects of cumulative advantage. Social Security

retirement benefits replace relatively large shares of lifetime earnings for those who did not earn much over their careers, and Social Security disability benefits provide income supports to those with serious health problems, many of whom earned relatively little (Favreault, Johnson, and Smith 2013). Because health problems tend to be inversely related to income, Medicare generally provides more benefits to retirees with limited incomes than their affluent counterparts, and Medicare premiums are also linked to income. Better information on the current and future distribution of income at older ages could help policymakers develop reforms to make the retirement system work better for Americans at all income levels.

This paper examines recent trends in economic inequality at older ages, measures how inequality changes as generations enter old age, projects the impact of growing earnings inequality on future retirement incomes, and identifies policy options that could promote greater equality in later life. It addresses the following research questions:

- Accounting for earnings and other major income sources, such as Social Security, pensions, and savings, as well as expenses like personal income taxes and out-of-pocket health care spending, how has the overall retirement income distribution shifted over the past two decades?
- Does economic inequality increase at older ages?
- How do changes in women's earnings and benefits affect these trends?
- How do changes in survival rates influence income distribution as cohorts age?
- Changes in the earnings distribution have complex effects on Social Security (Favreault 2009; Favreault and Haaga 2013).[1] How adequate are Social Security benefits and how

[1] Earnings increases for the very top earners depress revenues because payroll contributions are capped each year (currently at $117,000). However, extreme outliers can boost benefit replacement rates, especially for lower-wage workers, because Social Security's benefit formula is progressive benefit and initial benefits are wage indexed

secure are the system's finances given increasing inequality in employment, earnings, and marriage?

- How has increased inequality in employment, earnings, employer pension offers, and the structural shift from defined benefit to defined contribution employer pensions affected the distribution of pension income over the past 20 years? How do tax preferences for these vehicles, described by some as "upside down" (Orszag 2004), contribute to retirement income inequality?
- At older ages, how have asset holdings and asset income, which reflect compounding earnings disparities, changed in the wake of housing and stock market booms and busts that affect various birth cohorts and regions of the country differently?
- What policy changes could boost overall retirement security and fill gaps in income adequacy at older ages? For example, how could Congress adjust Social Security so both revenues and benefits would be less susceptible to large changes in the earnings of a relatively small share of earners? How should tax incentives for employer-sponsored pensions and personal savings be restructured?

Data and Methods: We begin by examining recent data from the Health and Retirement Study (HRS) to measures changes in old-age economic inequality across cohorts and changes in inequality as a cohort ages. The HRS is uniquely suited for this effort. It has been following various cohorts of Americans ages 50 and older since 1992, collecting detailed, high quality data on income and assets. We compare income and assets for age groups ages 70 and older in 1993, 2002, and 2012. Our focus on those 70 and older reduces the risk of confounding retirement

(Gustman, Steinmeier, and Tabatabai 2011). Growth in these replacement rates may lead more people to claim Social Security disability benefits (Autor and Duggan 2006; see also Muller 2008).

income with earned income, because few people work past age 70. An early version of the 2012 wave of data was recently released; final data will soon be available. HRS respondents are matched to government earnings records, which we will use to compare earnings inequality at younger ages with income inequality after age 70 within a cohort. Given challenges measuring assets (Smith, Michelmore, and Toder 2008), we will calibrate some HRS estimates to other sources, including the Survey of Consumer Finances (SCF) which oversamples higher wealth holders.

Because many of the key trends observed in historical data are continuing, we must project economic outcomes to assess how old-age inequality will unfold for today's workers. Consequently, we incorporate our findings on inequality trends into DYNASIM, the Urban Institute's dynamic microsimulation model. DYNASIM is the only tool outside the federal government that can generate reliable distributional estimates of the future population's retirement income. Its development began nearly 40 years ago. It is continuously updated with funding from a variety of sources, including the National Institutes of Health, U.S. Department of Health and Human Services, and the Ford, Mellon, and Rockefeller Foundations. We have used it extensively to assess the Baby Boomers' retirement preparedness, examine distributional effects of Social Security reform, and measure future long-term care needs.

Starting with a representative sample of individuals and families, the model "ages" the data year by year, simulating such demographic events as births, deaths, marriages and divorces, and such economic events as labor force participation, earnings, hours of work, disability onset, and retirement. The model simulates Social Security coverage and benefits, as well as pension coverage and participation, benefit payments, and pension assets. It also simulates home values and financial assets, health status, living arrangements, income from non-spouse family

members, and health and long-term care needs. Simulations are based on hundreds of equations that utilize the latest available data, and outcomes are benchmarked each year to forecasts made by the Social Security trustees. The model incorporates special algorithms for generating the earnings and wealth of the very highest earners and wealth holders given these distributions' skewness. In 2014, we are updating the model's starting sample to use data from the 2004 and 2008 Survey of Income and Program Participation (SIPP), insuring that we will capture key changes in pensions and population composition over the past two decades.

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