



MEASURING REPLACEMENT RATES AT RETIREMENT

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TO JUDGE THE ADEQUACY OF SOCIAL SECURITY payments, analysts often compare current benefits to a recipient's previous wages. They determine the percentage of the old wage that the new benefit replaces, or its "replacement rate." While the replacement rate is revealing, it is susceptible to the accuracy of the measures on which it is based. For example, if a recipient's previous wage is assumed to be larger than it actually was, then the replacement rate appears too small—and a benefit that is adequate, or even generous, seems to be neither.¹ Replacement rates have important consequences. If they are indeed larger than we think, so that benefits more closely resemble old wages, then policymakers who are trying to achieve a specific replacement rate may be aiming for the wrong target and, in some cases, unwittingly inducing workers to retire.

Replacement rates usually compare a worker's initial benefit at age 65 (called the primary insurance amount) with his or her presumed wage at age 64. Figure 1 shows the earnings pattern that the Social Security Administration assumes for an average-income worker. Today this worker would be entitled to a benefit of \$11,854 at age 65, yielding an initial replacement rate of 40 percent of his or her earnings of \$29,732 in the previous year (point A).

1. In addition, measuring replacement rates is complicated by the fact that the needs and wages of workers continue to vary after retirement. This Straight Talk addresses alternative measures of replacement rates at the time of retirement; a subsequent Straight Talk will explore the issue of replacement rates during the retirement span.

As indicated in recent research sponsored by the Social Security Administration (SSA), however, this traditional presumed earnings pattern is not very representative. First, the pattern is based on the average wage of workers who actually work in any given year—it does not include those who skip work that year.² Thus, it significantly overestimates average earnings. Second, this average wage across all age groups will always be constant relative to the average wage in the economy. But, in fact, younger people and older people generally have lower earnings than do people in their middle ages.

Figure 1 also displays the earnings pattern of an average-income worker, based on actual earnings records, developed under the SSA's Modeling Income in the Near Term (MINT) project. This worker would be entitled to a benefit of \$9,728 at age 65. Depending on how her preretirement earnings are measured, her benefit's replacement rate varies. For example, the benefit is 44 percent of the worker's highest indexed wage of \$22,295 (point B). If the worker's earnings in her 35 highest-earning years are averaged, as is currently done in the calculation of Social Security benefits, then the replacement rate rises to 52 percent (point C). But if the benefit is compared with the retiree's recent earnings, which have declined to \$14,823 by age 60, her replacement rate is actually 66 percent (point D).

Each of the above replacement rates is based on wages that have been manipulated to account for wage growth. That is, they reflect growth that goes beyond improvements in the cost of living—they reflect improvements in the standard of living. However, many retirees may be satisfied just to maintain their ability to purchase: They want the same purchasing power they've had all along. If this is the case, replacement rates could be derived from individual wages adjusted for inflation instead of

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wage growth (see box). Since prices usually rise more slowly than wages, this would result in lower past wages and higher replacement rates.

Other factors increase benefits in relation to wages, resulting in higher replacement rates; for example, spousal benefits often increase the value of Social Security benefits. In addition, retirees generally have fewer expenses than do workers and therefore do not require as much income to maintain the same standard of living. They pay no Social Security tax, and most are not subject to income tax. Most do not have child care or transportation expenses, both of which effectively reduce the net wage from work.

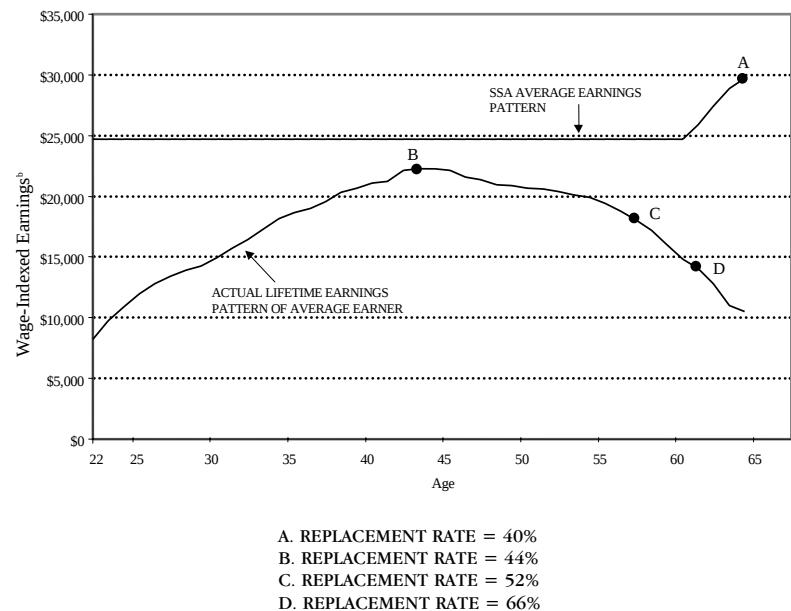
As the reform process proceeds, it may be helpful to develop different ways of determining the adequacy of Social Security benefits. Replacement rates can be conceptualized in a variety of ways—perhaps several ought to be shown simultaneously. Policymakers should consider how their target replacement rate will affect work behavior and retirement decisions. If replacement rates are higher than we think they are, then it is understandable that some people choose to retire earlier than otherwise might be expected.

Wage Indexing vs. Price Indexing

Analysts studying past wages sometimes try to make them consistent with current wages. One way to do this is to “index” past earnings to reflect wage increases that have occurred since the year they were earned. Such indexing accounts for increases in the standard of living. For example, consider a worker retiring at age 65 in 2000 who always earned the average wage in the economy. This worker earned \$3,642 in 1957 and \$24,706 when she turned 60 in 1995. In that time period, average wages increased almost sevenfold. To account for this growth, her \$3,642 wage is multiplied by 7. Each year’s earnings are similarly indexed for someone always earning the average, creating a constant earnings pattern—expressed as a flat line in figure 1.

Analysts can also price index past wages to reflect inflation, which accounts for changes in the cost of living. But prices grow more slowly than wages—from 1957 to 1995 prices increased only fivefold—creating a past earnings history that looks different from the one created by wage indexing.

FIGURE 1. Alternative Measures of Replacement Rates^a



Source: Eugene Steuerle, Adam Carasso, and Christopher Spiro, The Urban Institute, 2000.

a. Replacement rates for average earners retiring at age 65 in 2000.

b. Top line suddenly rises because only earnings before age 60 are wage indexed by Social Security.

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