How Progressive Are the Combined Net Benefits of Social Security and Tax Benefits for Retirement Saving?

Karen E. Smith and Eric J. Toder
Urban Institute

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The federal government promotes retirement income security through the mandatory Social Security Old Age and Survivors Insurance (OASI) system and through tax incentives for private saving in qualified retirement plans. The Social Security system also provides disability insurance (DI) benefits for disabled workers.

This paper estimates the net combined distributional effects of Social Security and tax incentives for defined contribution (DC) retirement plans for workers born between 1950 and 1989. We use the Urban Institute's Dynamic Simulation of Income Model (DYNASIM), a longitudinal model that simulates lifetime earnings, wealth accruals and spend-down in retirement, demographic events (longevity, marital status, and fertility), timing of retirement and benefit take-up, health status and incidence of disability, Social Security retirement and disability benefits, pension contributions and benefits, and federal taxes. We divide people into four 10-year birth cohort groups (1950-59 through 1980-89) and into quintiles of the earnings distribution, with a breakdown of the top quintile between the 80-95th percentiles and the top 5 percent. We classify people and measure their well-being before taxes and benefits as the present value of their shared lifetime earnings, where shared earnings are the worker's own earnings when single and one-half the couple's earnings when married.

The estimated net distributional effect of federal programs depends on how one assumes they are financed. Following previous authors, we assume that Social Security benefits, net of taxes on benefits, are financed by the payroll taxes dedicated to the OASI and DI trust funds. We use three alternative assumptions of how retirement tax incentives are paid for: 1) an across-the-board constant percentage increase in marginal income tax rates; 2) an across-the-board constant percentage-point increase in marginal income tax rates; and 3) an equal per-person tax on all people ages 15 and over, indexed to the growth in average earnings. In reality, no one knows exactly what the tax structure would look like absent these programs, so we consider a range of reasonable possibilities.

Previous research has examined the distributional effects of Social Security and of tax incentives for retirement, but none of these prior studies have combined the two into an overall estimate of the effect of federal support for retirement income. Moreover, previous research has estimated the distribution of the benefits of the tax preference in a single-year, cross-section framework, while we estimate the tax benefits using projections over a lifetime of earnings, contributions to DC retirement accounts, investment returns, and spend-down in retirement.

Our results confirm earlier findings that OASDI benefits net of OASDI payroll taxes are much higher as a percentage of lifetime earnings for workers with low lifetime earnings than for workers with high earnings. This result reflects a combination of the higher replacement rates in the OASI benefit formula for workers with lower lifetime earnings and the higher incidence of disability among lower-earning workers. These two effects offset the relatively higher retirement benefits that higher earners receive because of their increased average longevity.

We also confirm earlier results that tax benefits from retirement saving generally favor higher-income workers. For all our financing assumptions, net benefits as a share of lifetime earnings are higher for workers in higher than in lower quintiles of the income distribution. The amount of redistribution, however, is highly sensitive to how the tax benefits are financed. The relative benefit for the top-earning workers is largest when the benefit is funded by per-capita tax increases and smallest when the benefit is funded by across-the-board increases in marginal tax rates. If one assumes a proportional increase in all marginal tax rates, then workers in the 80-95th percentiles benefit at least as much or slightly more than those in the top 5 percent.

Adding the results for both programs, we find that the progressive tilt of Social Security dominates, with the combined net benefits of both programs larger as a share of income for low-earning than for higher-earning workers. Our findings are tentative, however, because our methods understate the benefits of the tax incentives relative to Social Security by including only the effects of tax incentives on post-1992 contributions, while including all Social Security benefit accruals, and because we omit defined benefit plans. Future work on this project will correct for these omissions and raise the relative importance we assign to the tax incentives.