

Labor Supply Responses to the Social Security Tax-Benefit Link

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It is commonly argued that investment-based Social Security reform will improve economic efficiency by increasing the perceived link between retirement contributions and retirement benefits. Under this argument, individuals perceive the OASDI payroll tax as a pure tax – they fail to recognize that the payment of Social Security taxes will increase their future Social Security benefits. With personal retirement accounts, in contrast, the link between contributions and future income would be clear, and the economic distortions would be reduced.

There is little evidence, however, as to whether people perceive the Social Security tax as a pure tax or whether they perceive a link between the tax and some relevant increment in their future benefits. In this study, we develop a methodology for estimating the incentive effects of the marginal Social Security benefits that accrue with additional earnings on three measures of labor supply: hours, labor earnings, and retirement. We show how three sources of discontinuities in the marginal Social Security benefit formula can be exploited to identify these incentive effects; and we use one of them to test empirically for a behavioral response.

Three features of Social Security are considered in the study: (i) Social Security benefits depend only on the 35 highest years of indexed earnings, thus creating jumps in effective Social Security tax rates that depend on which years are included among the 35 highest years. (ii) The 1993 Omnibus Budget Reconciliation Act increased the fraction of Social Security Benefits that would be added to taxable income for higher-income individuals, thus increasing effective Social Security tax rates for some individuals. (iii) The rules for the Social Security benefits of widows and widowers create discontinuities in both the total level of Social Security benefits and marginal Social Security benefits. These discontinuities vary by the earnings of the individual relative to those of the deceased spouse.

For each of these features of the Social Security system, one can identify some individuals for whom additional work will significantly increase future benefits; and some “similar” individuals for whom additional work has little or no effect on future benefits. The question is whether people perceive, and respond differently, to these incentives. The methodological work reported in the study illustrates how all three sources of variation can be exploited to estimate whether the effective marginal Social Security tax rate affects labor supply on the extensive margin, as measured by retirement, as well as on the intensive margin, as measured by hours and earnings. The empirical work focuses on the first of these design features: the fact that only the 35 highest years of indexed earnings enter into the Social Security benefit formula.

The empirical results provide mixed evidence on the labor supply response to the retirement incentives created by Social Security. Basic graphs show that retirement probabilities are nearly flat in years when current earnings do not replace previous earnings in the Social Security benefit formula, but rise sharply after 35 years of credited service, when current earnings start to replace prior years’ earnings. This

suggests that people do have a behavioral response to the incremental benefits they do, or do not receive from work. However, in our regression models, which include many control variables (including age dummies), the evidence of an incentive effect is less pronounced, and dependent on the specifications of the model. In future research, we will explore additional specifications and determine which specifications are most credible. We will also explore the effects on behavior of the other two aspects of the Social Security benefit formula.

The full working paper is available on our website www.nber.org/programs/ag/rrc/books&papers.html as paper NB06-12.

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