

CONSUMPTION, RETIREMENT AND SOCIAL SECURITY: EVALUATING THE EFFICIENCY OF REFORM THAT ENCOURAGES LONGER CAREERS[†]

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Introduction

This paper studies a hypothetical Social Security reform in which a participant's payroll taxes end after, say, (i) age 54, or, alternatively, after, say, (ii) a career of 34 years, and the participant's subsequent earnings have no bearing on his/her benefits. We first estimate the parameters of a life-cycle model of household behavior. Then we use the estimated model to simulate the effects of the reform. We find that individuals, on average, may be persuaded to lengthen their careers by about 1.5 years; that many households can benefit from the new program (in the sense of having positive equivalent variations); and, that overall federal government income tax revenues per household could rise on average by about \$15,000.

People are living longer, healthier lives. It seems plausible that, health permitting, they should want longer careers. Perhaps, however, the existing tax system impedes their desire to work. That possibility seems, in fact, likely: income taxes, for example, reduce an individual's private gain from earnings.

This paper generates large effects on work incentives because it uses targeted tax-rate changes. Our hypothetical reform lowers the payroll tax only relatively late in life, that is to say, close to retirement. The reform would actually raise the payroll tax earlier in life slightly — making it revenue neutral for the Social Security system.

A general reduction in, for example, income tax rates would not have the targeting feature. Such cuts would tend to increase the (private) reward for work near retirement, but they would also reduce taxes at all earlier ages, when labor supply is (presumably) less elastic. Lifelong cuts could appreciably increase households' lifetime aftertax resources, creating so-called "income-effect" reductions in work incentives. Income-effect disincentives might well entirely offset the work-promoting influence of tax-rate reductions near retirement. Our policy, in contrast, narrowly focuses its tax reduction at the retirement-decision margin.

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Data/Methodology

The basic life-cycle model of household behavior is well-known from the work of Nobel laureate Franco Modigliani and others. We employ two data sources to estimate our specification's parameters.

The Consumer Expenditure Survey, conducted by the BLS, is one source. We use yearly CEX surveys 1984–2001. These provide comprehensive measures of household consumption by age. The data is cross-sectional, but we form pseudo panels — e.g., we look at the average consumption expenditure of 25-year old households in 1985 relative to 24-year old households in 1984, etc. This data enables us to estimate the effects on consumption of children, spouses, retirement, and age.

Our second data source is the Health and Retirement Study, 1992–2002. The HRS provides panel data following older households into retirement. It has linked lifetime earnings histories. We use each household's career-length choice to gauge the strength of its preferences for time away from work.

Results

As stated, we consider a hypothetical reform in which a young worker and his employer pay the OASI payroll tax until the worker reaches age 54. After that, neither the worker nor his/her employer owes further payroll taxes. Thus, the worker's after-tax earnings rise 10.6 percent. The worker can continue working, or stop at any time. Work years beyond age 54 do not affect benefits. As in the current system, the worker can claim benefits at 62, or, with an actuarial enhancement, at a later age.

We calculate that a beginning worker would need to pay about 1 percent per year higher payroll taxes until the vesting age of 54 in order for the Social Security system to break even. We correct for the fact that some workers become disabled at younger ages, forcing them to exit the labor force.

Our targeted tax cuts, which have few, if any, offsetting income effects, yield sizable increases in work lives — 1.60–1.70 years on average. On average, our households gain utility from having the option to extend their careers without the payroll tax. The reform is revenue neutral for the Social Security system. Later retirement ages mean, however, greater revenues for society from the Federal income tax. We estimate an average lifetime income-tax revenue increase per household of \$15,000, which could yield welcome reductions in the Federal deficit.

Not everyone would benefit. Households with a strong preference for very early retirement would pay the slightly higher payroll tax prior to age 54, but leave the labor force before gaining much from the elimination of the payroll tax thereafter. Late retirees would, by the same token, be big winners. Our research shows that alternative (ii) above, vesting after 34 years of work, would tend to protect the less educated better than alternative (i). The point of the reform, of course, is to encourage work by rewarding it.

Provided the hypothetical reform was offered to new labor-force entrants only, implementation could be straightforward. The reform would be revenue neutral for the Social Security system — “legacy costs,” etc., would not create stumbling blocks.

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