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Adjusting the Payroll Tax to Promote Longer Careers

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In times of lower fertility and longer life spans, the rate of labor force participation for older households is a topic of great interest. Reducing the payroll tax beyond some age — in effect, allowing a household's rights to Social Security benefits to become fully vested — has been proposed as a way of encouraging longer careers. Longer careers could help to maintain a higher ratio of working-to-retired households and, see below, promote economic efficiency. Laitner and Silverman's (LS) "Consumption, Retirement and Social Security: Evaluating the Efficiency of a Reform that Encourages Longer Careers," J. Public Economics, 2012, analyzes such a policy. That analysis is based on simulations of a life-cycle model that has been estimated from panel data. The present work seeks to re-examine the LS results with the aid of recent data and a more elaborate methodology. This paper finds that the life-cycle model can be estimated more precisely with the benefit of recent data and that simulation results, though qualitatively similar to the earlier work, show somewhat smaller projected gains.

LS (2012) used Consumer Expenditure Survey data on household consumption at all ages and Health and Retirement Study (HRS) panel data on households 51 to 61 in 1992. The later covered 1992-2002 and provided data on household retirement ages. The current analysis uses HRS data 1992-2014. A big advantage of the new data is that virtually all of the original HRS households are retired by 2014 — whereas by 2002 only about half had finished their careers.

The life-cycle model can predict both a household's retirement age and its wealth accumulation, say, at retirement. Both retirement and wealth accumulation data have been used to estimate life-cycle models in the past. In the present work, we attempt to use both types of data in our analysis. This has two advantages. First, it allows us to test our model. LS (2012), for example, show that one can estimate the model's parameters with consumption data and HRS retirement ages alone. We show here that the estimation can be performed,

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alternatively, with consumption data and HRS wealth accumulation information. In fact, if we do the estimation both ways, we can test whether the estimates are the same. We find that the estimates are not statistically significantly different. Second, by constraining our two sets of estimates to be the same, we can hope to enhance their precision. We find that is the case.

We then simulate policy reforms. We eliminate the OASI payroll tax —currently 5.3 percent on both employers and employees — at various ages, assuming that household after-tax earnings at that age and beyond would rise by 10.6 percent per year. To pay for the reduction, we raise the payroll tax at all earlier ages enough so that the present lifetime value of tax revenues per household on average remains unchanged. Then we calculate how household average retirement ages change.

If the tax elimination begins at age 65 or older, we find small increases in the average retirement age — amounting to several months or less. The required tax increase at earlier ages is correspondingly small — only a small fraction of 1 percent per year. For payroll tax elimination at ages in the mid 50s, however, more substantial labor force participation gains arise. With an elimination age of 54, the average delay in retirement is 1.27 years, for example. The required increase in the payroll tax at earlier ages is 1.69 percent/year.

LS (2012) shows that the overall efficiency gain per extra year of work can be large: $10,000 per household in terms of new income tax revenue and about $2,500 per household in additional gain from the availability of enhanced options. The key is that existing taxes of all types create initial distortions that the payroll tax change (partially) offsets. The overall results support findings in earlier work in qualitative terms. However, the quantitative impacts of reform are somewhat smaller than LS (2012). We believe the short HRS panel utilized in the earlier work tended to emphasize the behavioral responses of households that otherwise retired young, for whom the policy reform turns out, in retrospect, to have the largest impact.