

Ronald Lee: Comments on Englehardt and Gruber, “Social Security and the Evolution of Elderly Poverty”

This is a very useful paper, which makes a good case that variations in Social Security benefit levels have caused variations in the poverty rates of the elderly in the past. I discuss three issues related to their argument.

Framing the Question

We wish to know how the introduction of Social Security has affected poverty rates of the elderly in the United States. The answer to this question will depend on the extent to which individuals are permitted to adjust in response to the program. At one extreme, we could imagine that individuals do not adjust at all. Then we could just subtract out Social Security benefits from the household incomes of the elderly, recompute poverty rates, and see to what extent they rise. Or we might allow for adjustment of the post-retirement behavior of retirees, as they alter their living arrangements and perhaps labor supply in response to lower benefits. Or we might in addition allow for individuals to adjust their ages at retirement. At the other extreme, we would allow for full adjustment, and try to imagine what the poverty rates of the elderly would be today if a government program like Social Security had never existed. In this case, people would presumably save more throughout their life cycles, perhaps get different educations, perhaps marry different spouses, have larger employer provided pensions, and so on.

These different ways of framing the question imply different analytic strategies. Englehardt and Gruber, henceforth EG, rely on the unexpected variations in benefit associated with the notch generations. Since their instrument abstracts from age at retirement and other aspects of labor supply behavior, the effects of these kinds of adjustments to the benefit changes are implicitly taken into account. But since the variations in benefit level associated with the notch and subsequent policy changes were not anticipated far in advance, only adjustments late in the working years are taken into account. Therefore their research design cannot tell us how the *existence* of Social Security has affected elderly poverty rates. It can only tell us how an unexpected variation in benefit levels affected poverty. The more fundamental question could only be answered by deep and inevitably uncertain life cycle modeling, or possibly by cross-national analysis, as in Gruber and Wise (2001) where a substantial effect on elder poverty rates was found for public spending on the elderly.

The Instrument for Benefits

The paper reports both OLS results, which simply use the observed benefit levels as a regressor for elderly poverty rates, and IV results, which replace the observed benefit levels by those that would have resulted solely from SSA rule changes. The IV approach turns out to make very little difference to the results, particularly on the household level. The use of a log transform of benefits has a much larger effect on the results, and the reason for this difference should be checked.

One feature of the IV approach used here is that all information on variation in benefits after age 65 is effectively discarded. Figure 1 shows the simulated benefits by age and period, based on a figure in the earlier draft of EG. In the figure, I have added lines connecting the points for the same birth cohort at different ages. It can be seen that these lines are all horizontal, showing that virtually all the variation in the figure reflects benefit levels between cohorts, while simulated benefits are constant within cohorts across age. Almost all the information in the instrument for a cohort is conveyed by its level at a single age, say at age 65. Comparison of the simulated benefit level at age 65 (not shown here) indicates that almost all of its variation is due to variation in the cohort replacement ratio.

In contrast to the simulated benefits shown in Figure 1, actual benefits vary a great deal by age for a given generation. Figure 2 plots these actual real benefits based on administrative data. It can be seen that the lines labeled 1967 and 1970 show rapid increase, ending up 2.5 to 3 times as high as they begin, while those labeled 1975 to 1990 all look similar and rise much less. Why would real benefit levels change after age 65 for a generation? There are several reasons: 1) Some people postpone retirement, and when they retire at later ages they receive higher benefits, raising the average. 2) Mortality is selective. Those who survive to older ages are disproportionately those with higher life time incomes and therefore higher benefit levels. 3) A married couple receives 1.5 times the primary benefit amount of a single person with the same earnings history. When a spouse dies, as happens increasingly with age, the remaining partner's benefit drops to 1.0 times that level, and the family per capita benefit level rises by 33%, at least under current rules.

All this cross-cohort age variation is discarded by the IV, as we saw in Figure 1. However, much of it is independent of life time earnings, such as the effects of any rule changes for benefits to survivors, widows and divorcees, and a weakening selectivity of mortality as mortality falls and (perhaps) Medicare reduces inequalities in mortality. Perhaps there is a baby in that bathwater!

Another potentially useful source of variation is the increase in the proportion of the elderly population covered at older ages. By 1967, the proportion of 65 year olds covered had reached its mature level at about 90 percent. But the proportions of those covered at older ages were still rising, and these might be used to identify an effect on poverty.

Family vs Household

EG find that elderly poverty rates on a household basis are less responsive to benefit levels than on a family basis. They suggest this is because when benefits rise, older people move out of shared households into independent quarters, where they are more likely to be poor, but feel better off. This observation raises serious concerns about the measurement of poverty, much like those when one prosperous household splits into one prosperous and one impoverished: both wellbeing and the poverty rate rise. Here, benefits may sometimes partially substitute for familial support through co residence, permitting the elders to move out and live in independent poverty.

Literature Cited

Jonathan Gruber and David Wise (2001) "An International Perspective on Policies for an Aging Society" in Stuart Altman and David Shactman, eds. *Policies for an Aging Society* (Johns Hopkins Press, Baltimore) pp.34-59.

Figure 1. Simulated Benefits by Age and Year Show There Is No Variation By Age Within A Cohort

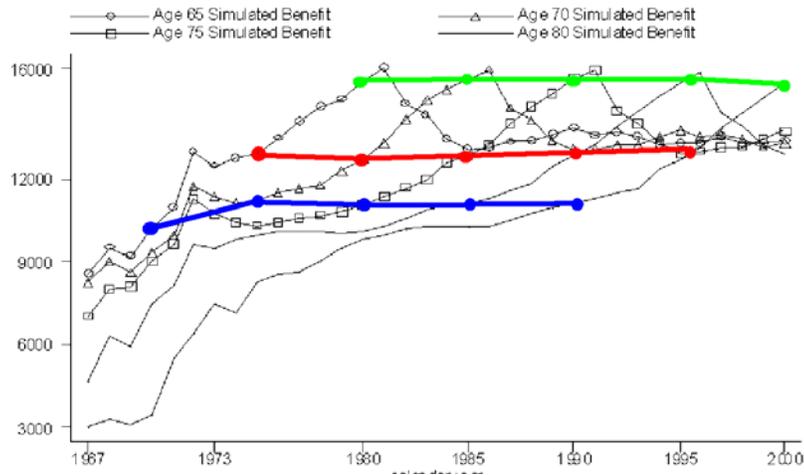


Figure 2. How Actual OASI Benefit Levels Changed with Age for Cohorts Reaching Age 65 in the Years 1967, '70, '75, '80, '85, '90 (Benefit Level at Age 65 = 100)

