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The Social Security Earnings Test and Retirement: New Evidence from Behavior Near the Exempt Amount

Alexander Gelber
UC Berkeley and NBER
and
Damon Jones
University of Chicago and NBER
and
Daniel W. Sacks
Indiana University

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Over the past several decades, policy-makers have made the Social Security Retirement Earnings Test (RET) progressively less stringent. Most recently, the Senior Citizens Freedom to Work Act of 2000 eliminated the RET for those above Normal Retirement Age (NRA). A key motivation for reducing the stringency of the RET is the possibility that it may induce Old Age and Survivors Insurance (OASI) claimants to retire. In this paper, we examine the effect of the RET on the decision to remain or stop working. We find that the RET has large effects on whether an OASI claimant continues to work. Our results suggest that if the RET were eliminated, it would increase the fraction of the relevant population that is working by several percentage points.

The RET reduces OASI claimants' current OASI benefits as a proportion of earnings, once a claimant earns in excess of an exempt amount. For example, for OASI claimants aged 62-64 in 2014, current OASI benefits are reduced by 50 cents for every extra dollar earned above $15,480. Reductions in current benefits due to the RET sometimes lead to increases in later benefits through so-called "benefit enhancement."[1] Nonetheless, several factors may explain why individuals' earnings still respond to the RET.[2] Past literature has mostly focused on the effect of the RET on the decision of how much to work, *given* that the individual chooses to work (e.g. Burtless and Moffitt 1985; Friedberg 1998, 2000; Song and Manchester 2007; Gelber, Jones, and Sacks 2013; Engelhardt and Kumar 2014). A smaller literature has examined the effect of the RET on *whether* to work (Gruber and Orszag 2003; Haider and Loughran 2008), by comparing groups over time affected by policy changes in RET rules to groups unaffected by these changes. We add to this literature by investigating how individuals' retirement decisions behave around the RET exempt amount. The data reveal clear patterns that convincingly document the effect of the RET on decisions about whether to work.

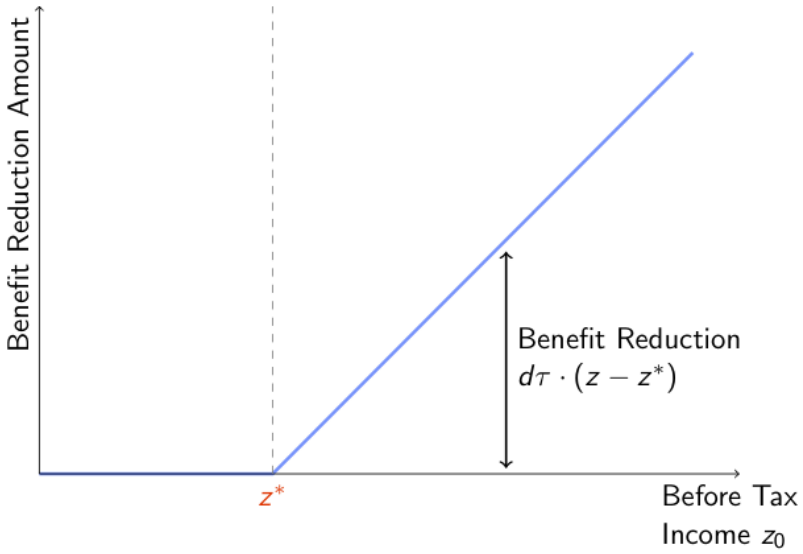
Our method is based on the following observation. At the exempt amount, the rate at which the RET reduces benefits changes sharply: under the exempt amount, benefits are not subject to the RET, whereas over the exempt amount benefits are subject to the RET and reduced at the rate of 50 percent. This is shown in Figure 1, which plots the reduction in benefits (if any)

[1] Prior to 2000, both the actuarial adjustment and the Delayed Retirement Credit sometimes enhanced subsequent benefits when current benefits were reduced by the RET.

[2] These factors are discussed, for example, in Gelber, Jones and Sacks (2013): individuals with short expected lifespan, who face borrowing constraints, or who prioritize current income over future income would be expected to respond to the RET. In addition, the RET was on average roughly actuarially fair for those above NRA only beginning in the late 1990s. Finally, many individuals may not understand the RET or other aspects of OASI rules (Liebman and Luttmer 2011; Brown, Kapteyn, Mitchell, and Mattox 2013).

on the y-axis as a function of yearly earnings on the x-axis. The sharp change in slope at the exempt amount corresponds to the imposition of the RET above this level.

Figure 1. Reduction in OASI benefits due to Retirement Earnings Test



Our method essentially examines whether this sharp change in benefit reduction at the exempt amount leads to a similar sharp change in the pattern of retirement around the exempt amount. Phrased differently, the losses in current benefits due to the RET grow as earnings increase above the exempt amount; we examine whether retirement also grows above the exempt amount, commensurate with the increasing "bite" of the RET. If the RET causes retirement, we would expect increasing prevalence of retirement as we move above the exempt amount, as the losses in current OASI benefits due to the RET steadily increase.

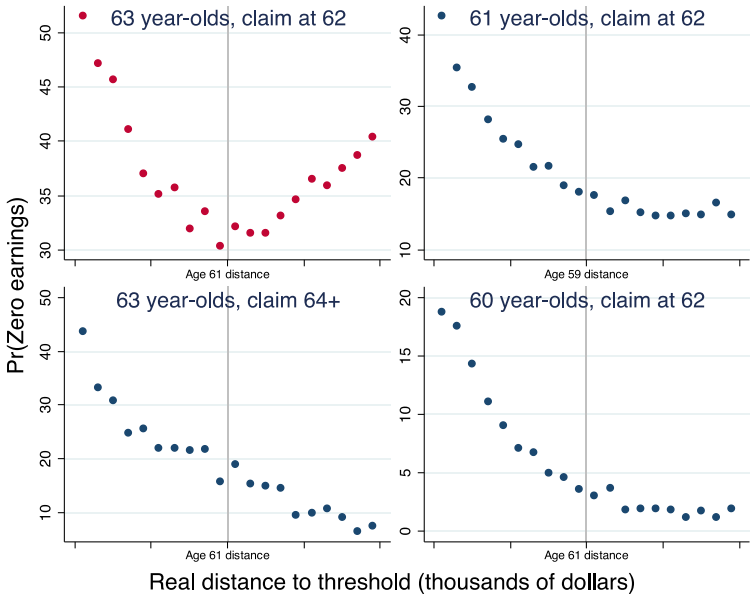
Figure 2 shows the key patterns we rely on, which prove to be visually clear.[3] The upper-left panel of Figure 2 shows that among 63 year-olds under the exempt amount, the probability of retirement slopes downward. However, just at the exempt amount, the pattern changes sharply: the probability of retirement begins to slope upward. Our method effectively relates this sharp change to the sharp change in the RET that also occurs at the exempt amount.[4]

[3] We use the Benefits and Earnings Public Use File, a one percent sample of OASI beneficiaries in 2004 that longitudinally follows earnings in each year from 1951 to 2003, and the Earnings Public Use File, a one percent sample of Social Security Numbers that also longitudinally follows earnings in each year from 1951 to 2006. For some analysis we are also able to use the Social Security Master Earnings File.

[4] This analysis conditions on the claiming decision, which could potentially be affected by the Earnings Test. In our sample (using the Master Earnings File), we find no evidence that the Earnings Test affects claiming behavior: the

Our confidence in these results is reinforced by the fact that no such reversal of slope occurs in any of three "placebo" samples that are not affected by the RET. Figure 2 shows this clearly. Among three comparison groups unaffected by the RET—61 year-olds (upper right panel), 63 year-old non-claimants (bottom left), and among individuals in the year *prior* to claiming OASI (bottom right)—there is no sharp change in behavior around the exempt amount. In fact, in all three of these groups, the proportion retiring continues to slope downward steadily throughout the entire range of earnings.

Figure 2. Pattern of Retirement around exempt amount



We develop an economic model to calculate the effect of the RET incentives on retirement, based again on the observation that the pattern of retirement changes around the exempt amount, where RET benefit reduction also begins. This method shows that for a one percent increase in the fraction of a dollar an individual keeps when working, there is more than a percent increase in the probability of earning a positive amount. Extrapolating these results, if the RET were eliminated for ages 62-64, the fraction working at age 63 would increase by several percentage points (the precise increase depends on a number of assumptions).

Thus, these results suggest that the RET is currently a major factor causing retirement under NRA. More generally, our results suggest that the retirement decisions of the elderly may

slope of the probability of claiming at age 62 is smooth through the exempt amount. Moreover, we obtain similar numerical results when we pool claimants and non-claimants.

be quite sensitive to incentives. However, we also emphasize that in evaluating the desirability of the RET, the retirement response is only one of several important factors. For example, some observers laud the RET's enhancement of benefits for older OASI recipients. Research will continue to illuminate both the magnitude of the costs and benefits of the RET.

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