

## **The Employment Effects of the Social Security Earnings Test**

Alexander Gelber  
University of California, Berkeley, and NBER

Damon Jones  
University of Chicago and NBER

Daniel Sacks  
Indiana University

Jae Song  
U.S. Social Security Administration

Prepared for the 19<sup>th</sup> Annual Joint Meeting of the Retirement Research Consortium  
August 3-4, 2017  
Washington, DC

The research reported herein was pursuant to a grant from the U.S. Social Security Administration (SSA), funded as part of the Retirement Research Consortium. The findings and conclusions expressed are solely those of the authors and do not represent the views of SSA; any agency of the federal government; the University of California, Berkeley; the University of Chicago; Indiana University; the U.S. Social Security Administration; or the NBER Retirement Research Center. All errors are their own.

The Social Security Annual Earnings Test (AET) can have a large effect on Social Security Old Age and Survivor Insurance (OASI) benefits, and therefore could have an important effect on the employment rate of older workers. The AET reduces claimants' current OASI benefits as a proportion of earnings, once a claimant earns in excess of an exempt amount.<sup>1</sup> For example, for OASI claimants before the year of their Full Retirement Age (FRA), current OASI benefits in 2017 are reduced by 50 cents for every extra dollar earned above \$16,920. Over the past several decades, policymakers have made the AET progressively less stringent. Most recently, the Senior Citizens Freedom to Work Act of 2000 eliminated the AET for those above the FRA. A key motivation for reducing the stringency of the AET is the possibility that it may induce OASI claimants not to work.

In this paper, we examine the AET's effect on decisions to remain or stop working. Past literature has mostly focused on its effect on decisions about *how much to work*, given that the individual chooses to work at all (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 AET's effect on *whether* to work (Gruber and Orszag 2003; Song and Manchester 2007; Haider and Loughran 2008; Friedberg and Webb 2009), by comparing groups over time affected by changes in AET rules to groups unaffected by these changes.

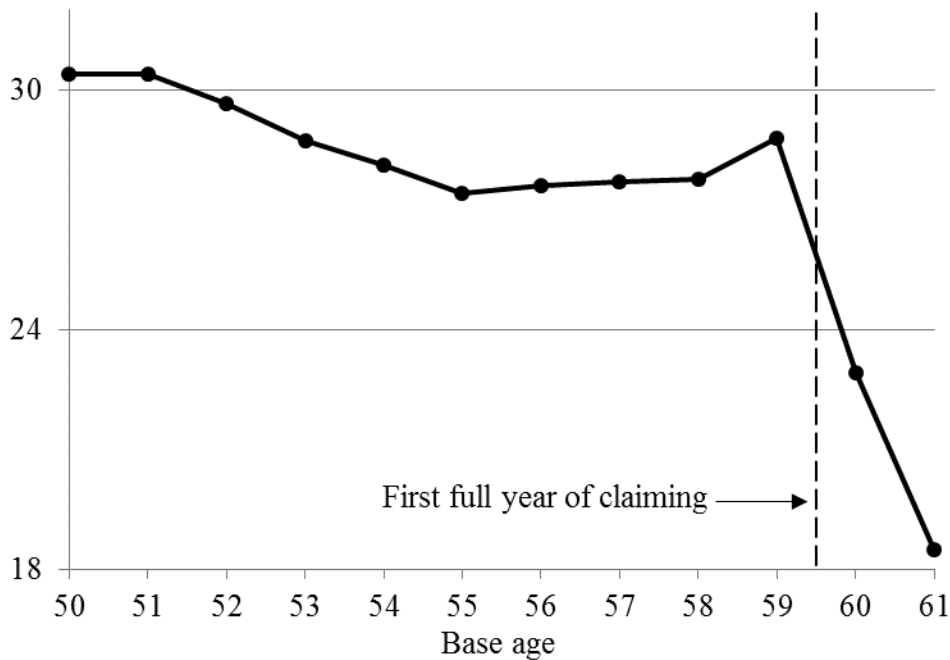
We use a novel methodological approach to study this question. In particular, we focus on employment patterns among those with earnings above and below the AET exempt amount. Using a differences-in-differences design, we compare employment rates after reaching the Social Security retirement age among those previously earning above and below the AET exempt amount, who form the treatment and control groups, respectively. We use earnings three years prior as a proxy for the earnings an individual would desire in the absence of the AET. Figure 1 below shows that among those earning above the exempt amount in year  $t$  relative to those earning below it, the probability of working in year  $t+3$  jumps down sharply when  $t=60$  and  $t+3=63$ . Age 60 is exactly when individuals will first be able to show an employment

---

<sup>1</sup> Reductions in current benefits due to the RET sometimes lead to increases in later benefits through so-called "benefit enhancement." Prior to 2000, both the actuarial adjustment and the Delayed Retirement Credit sometimes enhanced subsequent benefits when current benefits were reduced by the RET. Nonetheless, several factors may explain why individuals' earnings still respond to the RET: 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 the FRA only beginning in the late 1990s. Finally, many individuals may not understand the RET or other aspects of OASI rules (Liebman and Luttmer 2015; Brown et al. 2013).

reaction to the AET three years later, when they are age 63.<sup>2</sup> This is followed by another sharp decrease, from 63 to 64, consistent with a lagged adjustment to the AET (Gelber, Jones, and Sacks 2013). In other words, those who tend to be subject to the AET show a large decrease in the probability of employment once they are subject to the AET, relative to a control group less likely to be subject to the AET.

Figure 1. *Employment Rates in Year  $t+3$ , Among Those Earning Above and Below the Exempt Amount, by Year- $t$  Age*



Our results show larger effects on employment than most previous literature had indicated: our point estimates suggest that the AET reduces the employment rate of older Americans ages 63-64 by several percentage points. This finding reinforces and extends the conclusions of Gelber, Jones, Sacks, and Song (2017) – who found strong employment responses to the AET in a more limited region closer to the exempt amount – with a new and complementary method. These results suggest that the AET is currently an important factor that is causing retirement under the FRA. However, we also emphasize that in evaluating the

<sup>2</sup> The AET first applies to claimants when they reach OASI eligibility at age 62, but it does not make sense to examine the effect of the AET on whether an individual has positive earnings in the calendar year that s/he turns 62. The reason is that we observe calendar year earnings. If an individual claims OASI at 62, the AET applies only to earnings in the months after the individual claims. If the claimant earns at all during this calendar year – even during months prior to claiming OASI – then s/he will have positive earnings in this calendar year.

desirability of the AET, some observers laud the AET's enhancement of benefits for older OASI recipients. Research will continue to illuminate the magnitude of the AET's costs and benefits.

## References

- Burtless, Gary and Robert A. Moffitt. 1985. "The Joint Choice of Retirement Age and Postretirement Hours of Work." *Journal of Labor Economics* 3: 209-236.
- Engelhardt, Gary V. and Anil Kumar. 2014. "Taxes and the Labor Supply of Older Americans: Recent Evidence from the Social Security Earnings Test." *National Tax Journal* 67(2): 443-458.
- Friedberg, Leora. 1998. "The Social Security Earnings Test and Labor Supply of Older Men." In *Tax Policy and the Economy*, edited by James M. Poterba, 121-150. Chicago, IL: University of Chicago Press.
- \_\_\_\_\_. 2000. "The Labor Supply Effects of the Social Security Earnings Test." *Review of Economics and Statistics* 82: 48-63.
- Friedberg, Leora and Anthony Webb. 2009. "New Evidence on the Labor Supply Effects of the Social Security Earnings Test." In *Tax Policy and the Economy*, edited by Jeffrey R. Brown and James M. Poterba, 1-35. Chicago, IL: University of Chicago Press.
- Gelber, Alexander, Damon Jones, and Daniel Sacks. 2013. "Earnings Adjustment Frictions: Evidence from the Social Security Earnings Test." Working Paper 19491. Cambridge, MA: National Bureau of Economic Research.
- Gelber, Alexander, Damon Jones, Daniel Sacks, and Jae Song. 2017. "Using Kinked Budget Sets to Estimate Extensive Margin Responses: Evidence from the Social Security Earnings Test." Working Paper 23362. Cambridge, MA: National Bureau of Economic Research.
- Gruber, Jonathan and Peter Orszag. 2003. "Does the Social Security Earnings Test Affect Labor Supply and Benefits Receipt?" *National Tax Journal* 56: 755-773.
- Haider, Steven and David Loughran. 2008. "The Effect of the Social Security Earnings Test on Male Labor Supply: New Evidence from Survey and Administrative Data." *Journal of Human Resources* 48(1): 57-87.
- Liebman, Jeffrey B. and Erzo F.P. Luttmer. 2015. "Would People Behave Differently If They Better Understood Social Security? Evidence from a Field Experiment." *American Economic Journal: Economic Policy* 7(1): 275-299.
- Song, Jae and Joyce Manchester. 2007. "New Evidence on Earnings and Benefit Claims Following Changes in the Retirement Earnings Test in 2000." *Journal of Public Economics* 91: 669-700.