

PRELIMINARY

**The Effect of Pension Income on Elderly Earnings:  
Evidence from the Social Security Notch and Full Population Data<sup>1</sup>**

Alexander Gelber  
UC Berkeley and NBER

Adam Isen  
U.S. Department of the Treasury

Jae Song  
Social Security Administration

December 2015

**Abstract**

We estimate the effect of Social Security benefits on earnings by examining the Social Security “Notch,” which cut Old Age and Survivors Insurance (OASI) benefits by around \$500 per year on average for individuals in the 1917 birth cohort relative to the 1916 cohort. This led to sharply different benefits for similar individuals born one day apart. Using Social Security Administration microdata on earnings in the full U.S. population by day of birth, we document a very large, visually clear, and statistically significant increase in elderly earnings when moving from the end of the 1916 cohort to the beginning of the 1917 cohort. The evidence suggests that the effect of OASI benefits on earnings is driven primarily by an income effect, and we are able to rule out more than a modest substitution elasticity. Our results suggest that the slowdown in the growth rate of mean OASI benefits in the mid-1980s can account for a substantial fraction of the sharp increase in the yearly growth of the elderly employment rate around this time.

---

<sup>1</sup> We thank Alan Auerbach, David Card, Dora Costa, Elizabeth Handwerker, Hilary Hoynes, Larry Kotlikoff, Alan Krueger, Steve Pischke, Jesse Rothstein, John Sabelhaus, Daniel Sacks, Emmanuel Saez, Danny Yagan, and Noam Yuchtman for helpful comments. We thank seminar participants at UC Berkeley, UCLA, UC Santa Cruz, and the Women Working Longer working group for comments. This paper does not necessarily reflect the views of the Social Security Administration or the U.S. Treasury. We thank the UC Berkeley IRLE, CGIF, CEDA, and Burch Center, NIH (2P30AG012839), and the Wharton Pension Research Council and Trio grant, for support. We are grateful to Nicole Danna, Jonathan Holmes, and Harsha Mallajosyula for outstanding research assistance. All errors are our own.