

# Is working longer a good prescription for all?

Authors: Geoffrey T. Sanzenbacher, Steven A. Sass

Persistent link: <http://hdl.handle.net/2345/bc-ir:107661>

This work is posted on [eScholarship@BC](#),  
Boston College University Libraries.

---

Chestnut Hill, Mass.: Center for Retirement Research at Boston College, November 2017

These materials are made available for use in research, teaching and private study, pursuant to U.S. Copyright Law. The user must assume full responsibility for any use of the materials, including but not limited to, infringement of copyright and publication rights of reproduced materials. Any materials used for academic research or otherwise should be fully credited with the source. The publisher or original authors may retain copyright to the materials.

# IS WORKING LONGER A GOOD PRESCRIPTION FOR ALL?

BY GEOFFREY T. SANZENBACHER AND STEVEN A. SASS\*

---

## Introduction

Working longer is one of the most effective ways to improve prospects for a secure retirement. It increases monthly Social Security benefits, allows more time for saving in 401(k)s, and shortens the period of retirement that assets need to cover. Working longer is also widely seen as a reasonable response, because people are living longer and healthier lives. The question is whether this prescription is realistic for individuals across the socioeconomic spectrum. This *brief* addresses this question by synthesizing the findings of a series of five recent studies conducted by the Center, using educational attainment as the measure of socioeconomic status (SES).<sup>1</sup>

The *brief* proceeds as follows. The first section addresses whether it is reasonable to expect lower-SES individuals to work longer by examining recent patterns in life expectancy gains. The findings suggest that working somewhat longer is reasonable, so the rest of the *brief* focuses on the feasibility of this option for the lower-SES group. The second section explores whether lower-SES individuals currently plan to work long enough to achieve retirement security. The third section analyzes whether job switching can help workers extend their careers, while the fourth section explores the breadth of job options available to those

who do switch. The fifth section examines whether reducing the health insurance costs of older workers can improve their labor force prospects. The final section concludes that less-educated workers could clearly benefit from extending their worklives but they face narrower options than their better-educated counterparts. Therefore, society may need to find remedies, other than working longer alone, that allow lower-SES households to secure an adequate retirement income.

## Is It Fair to Expect Lower-SES Workers to Work Longer?

One of the reasons working longer is such a common prescription for improving retirement outcomes is that people are living longer. Given this trend, it seems reasonable for them to work a bit longer, ultimately maintaining the same share of life spent in retirement as previous generations. But a robust literature suggests people are not living longer equally – lower-SES individuals have seen the smallest gains.<sup>2</sup> Thus, whether working longer is a universal solution is not obvious. The first study in our series reports

---

\* Geoffrey T. Sanzenbacher is associate director for research at the Center for Retirement Research at Boston College (CRR). Steven A. Sass is a research economist at the CRR. All of the research projects summarized in this *brief* were supported by a generous grant from the Alfred P. Sloan Foundation.

the extent to which longevity gains differ by education and then assesses how long people could be expected to work if they were to spend the same fraction of their adult lives working as past cohorts.<sup>3</sup>

Assessing changes in longevity by education is complicated by dramatic changes in educational attainment over the last few decades. While 40 percent of Americans born in 1925 did not finish high school, this share dropped to only 20 percent for those born in 1945. Workers without a high school diploma who turned 65 in 1990 had thus been in the mainstream of economic life, while those turning 65 in 2010 were more of a disadvantaged economic minority. As a result, looking at life expectancy simply by education would overstate any rise in inequality because the group being examined changed over the time period.

To address this problem, the study constructs SES quartiles by educational attainment using data from the *National Longitudinal Mortality Study* (NLMS).<sup>4</sup> It then uses NLMS mortality data to construct longevity estimates for the cohorts that turned 65 in 1979 and in 2011. The results in Table 1 show that life expectancy at age 65 increased by 4.0 years for men in the lowest education quartile compared to 6.1 years for those in the highest quartile, a gap of 2.1 years. The gap between the highest and lowest quartiles for women was 1.8 years.

TABLE 1. LIFE EXPECTANCIES CONDITIONAL ON SURVIVING TO AGE 65, BY GENDER AND EDUCATION

	1979 cohort	2011 cohort	Increase (1979-2011)
<i>Men</i>			
Lowest quartile	77.5	81.5	4.0
Second quartile	77.7	82.8	5.1
Third quartile	77.8	83.3	5.5
Highest quartile	78.9	85.0	6.1
<i>Women</i>			
Lowest quartile	82.3	83.7	1.4
Second quartile	82.6	85.3	2.7
Third quartile	82.9	85.2	2.3
Highest quartile	83.4	86.6	3.2

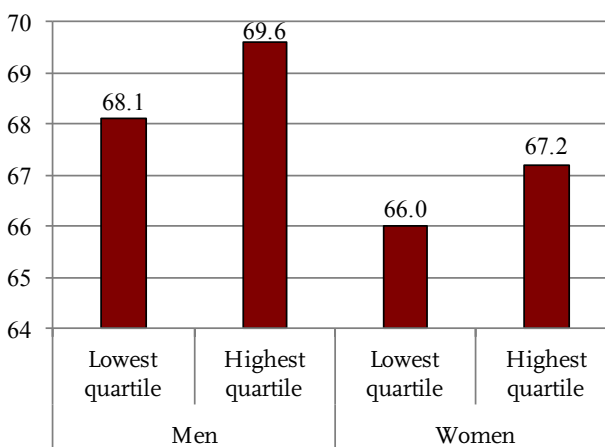
Note: These data are period life expectancies.

Source: Authors' calculations using restricted NLMS data provided by the U.S. Census Bureau (1979-2011).

To set a reasonable target for how long people could work, the analysis calculates the retirement age that would allow them to maintain the same number of work years relative to retirement years as earlier cohorts. Using this rule, the study estimates retirement ages for the cohort turning 65 in 2011, using the cohort turning 65 in 1979 as the benchmark.<sup>5</sup>

The results show that higher-SES individuals can indeed work longer than their lower-SES counterparts while still maintaining the same fraction of their life retired (see Figure 1). But the good news is that even lower-SES workers can remain in the labor force long enough to significantly improve their standard of living in retirement. For example, a man in the lowest quartile can now work to age 68.1 while still maintaining the same work-to-retirement ratio as the previous cohort. So it is fair to expect lower-SES workers to work longer, although not as long as higher-SES workers. The next question is whether it is realistic.

FIGURE 1. RETIREMENT AGES IN 2011 TO MAINTAIN 1979 RETIREMENT-TO-WORK RATIO, BY GENDER AND EDUCATION



Source: Sanzenbacher et al. (2015).

## Will People Retire Too Soon?

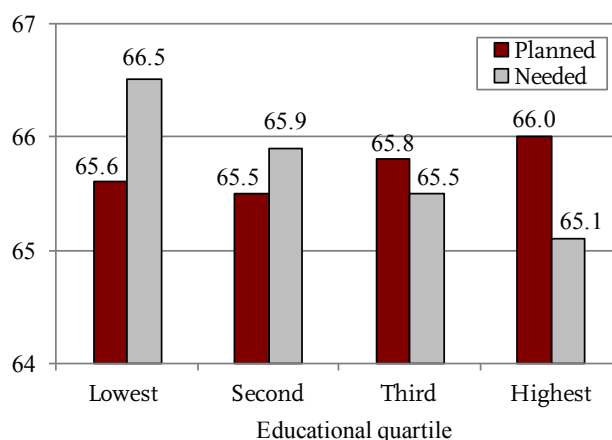
Even though lower-SES workers are living longer, it could be tough to get them to work longer if they are not prepared to do so. Thus, the second study in the series examines the age to which workers *plan* to work and compares it to the age *needed* to maintain their standard of living, again presenting the results by educational quartile. The data are from the *Health*

and Retirement Study (HRS) and cover households ages 58-59 between 2000 and 2010.<sup>6</sup>

For each household, the study identifies a target retirement income based on replacement rates that vary by marital status and household income.<sup>7</sup> It then calculates the age at which each household could secure that retirement income from all sources: Social Security, traditional employer pensions, financial assets (including 401(k)/IRA balances) converted into an annuity, and the proceeds of a reverse mortgage.<sup>8</sup> This target retirement age can then be compared to the planned age to see if expectations are realistic.

As shown in Figure 2, the top two quartiles plan to work long enough to achieve this goal, whereas the bottom two quartiles have plans that will leave them short. These findings suggest that premature retirement is a problem for lower-SES households. Per-

FIGURE 2. “PLANNED” AND “NEEDED” RETIREMENT AGES, BY EDUCATION



Note: The needed retirement age is the average age at which households have enough to maintain their living standard.  
Source: Munnell, Webb, and Chen (2016).

haps one development that could convince workers to delay their retirement plans would be switching to a job better suited to working longer.

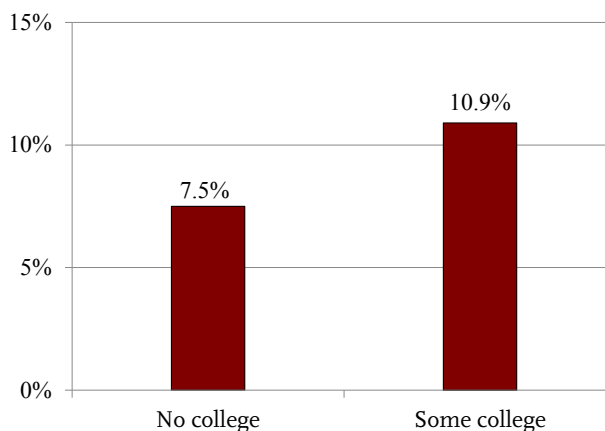
## Can Job-Changing Help?

Voluntary job-changing is a way for workers to move to a job they prefer, which may allow them to work longer. The risk is that workers open themselves up to more frequent job loss, as they sacrifice protective seniority, a risk that could be higher for less-educated

workers. The third study in the series sought to find out which effect dominates by estimating the impact of a voluntary job change by workers ages 51-56 on the likelihood of staying in the labor force to age 65.<sup>9</sup>

To identify a worker's SES, this study estimated the effect separately for those with and without some college education, dividing the sample roughly in half. The study used regression analysis to control for factors identified in the literature as affecting retirement timing such as defined benefit pension coverage, health shocks, and the worker's planned retirement age. The results indicate that a voluntary job change is associated with a large and statistically significant increase in the likelihood of remaining in the labor force to age 65 for both higher- and lower-SES workers – a 10.9-percentage-point increase for higher-SES workers and a 7.5-percentage-point increase for lower-SES workers (see Figure 3). This effect is quite large, given that only 44 percent of all workers in the sample remained in the labor force to age 65.

FIGURE 3. ESTIMATED EFFECT OF VOLUNTARY JOB-CHANGE ON BEING IN THE LABOR FORCE AT AGE 65, BY EDUCATION



Note: Solid bars indicate statistical significance at least at the 10-percent level.

Source: Sanzenbacher, Sass, and Gillis (2016).

## But Will the Jobs Be There?

While it seems clear that switching jobs helps both more and less-educated workers extend their careers, not all workers in their 50s may be able to do so easily. A key constraint is the narrowing of job options as workers age past their prime working years. The

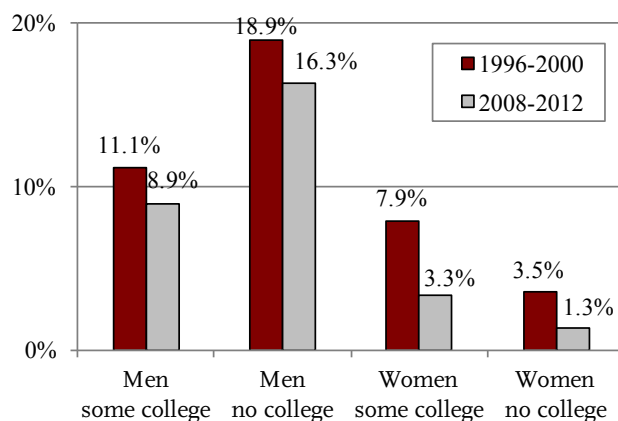
fourth study in the series assesses how options narrow by gender and SES – again defined by those with and without some college – and how that has changed since the late 1990s.<sup>10</sup>

The study uses an occupational hiring ratio to compare the share of older workers (ages 50-64) hired in a particular occupation to the share of prime-age workers (ages 30-49) hired in that same occupation. An occupation with a ratio of 2, for example, indicates that its share of older hires is at least twice as large as its share of prime-age hires. This analysis considers any occupation with a ratio of two or greater to be an “old-person” job.

The results show that job opportunities do narrow for workers seeking jobs after age 50. The pattern is relatively mild for those in their early 50s, with less than 5 percent of older job-seekers hired into “old-person” jobs. But it becomes more pronounced for those at older ages, rising to more than 20 percent of those in their early 60s.

The good news is that the share of people being hired into old-person jobs has been declining over time (see Figure 4). Even the most disadvantaged group – men with no college – has seen an improvement in the range of job options since the late 1990s, though their opportunities remain substantially narrower than the other groups.

FIGURE 4. SHARE OF OLDER JOB-SEEKERS HIRED IN “OLD-PERSON” JOBS, BY GENDER AND EDUCATION, 1996-2012



Source: Rutledge, Sass, and Ramos-Mercado (2016).

Summing up, workers in their 50s – both higher- and lower-SES – who move to a new job are far more likely to remain in the labor force to age 65. And job options for older workers have generally expanded since the late 1990s. Still, lower-SES men do have more narrow options than others, so the remaining question is what can policymakers do to help lower-SES workers extend their careers?

## Can Lower Health Insurance Premiums Extend Careers?

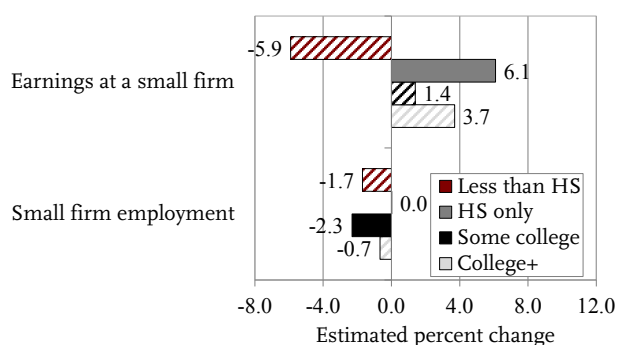
One way to potentially expand options for older workers is to reduce the cost of hiring them, for example by lowering the cost of health insurance. After all, the actuarial cost of insuring older workers is about five times the cost of younger workers.<sup>11</sup> Responding to this discrepancy, states introduced initiatives beginning in the 1990s that imposed a “rate band” limiting how much premiums could vary by age. Some even required “community rating,” where age has *no* effect on the premium. These initiatives targeted the insurance market serving small employers.

The final study in the series estimates the effect of these state initiatives on the employment and earnings of older workers, using data from the *Current Population Survey* for 1989-2013.<sup>12</sup> Controls included demographic characteristics, the state unemployment rate in the given year, state and year fixed effects, and the strength of the state restrictions on a scale from 0 to 1 using the inverse of the rate band (no restriction = 0, a 3-1 rate band = .33, and community rating = 1). Because the state initiatives targeted the small group market, the study focuses on their effect on older workers in firms with fewer than 100 employees. It is worth noting that this study used the more traditional measures of educational attainment – including “less than high school” – because during the time period covered here, no dramatic changes occurred in the composition of these groups.

The results presented in Figure 5 (on the next page) are the estimated effect of community rating – the strongest reduction in the cost of insuring older workers. They indicate that community rating had a limited effect on employment at older ages, with the

only significant result being to *reduce* the employment of older workers with some college, the opposite of the expected effect. The effect on earnings was also limited, although here the only significant effect was to increase the wages of workers with a high school education but no college. These results suggest that indirectly reducing the cost of hiring older workers – by restricting their health insurance premiums – does not substantially improve the labor market outcomes of any SES group, with the possible exception of increasing wages for high-school graduates.<sup>13</sup>

FIGURE 5. ESTIMATED EFFECT OF ADOPTING COMMUNITY RATING ON EMPLOYMENT AND EARNINGS FOR WORKERS AGES 50-61, BY EDUCATION



Note: Solid bars are statistically significant at least at the 10-percent level.

Source: Rutledge and Crawford (2016).

## Conclusion

This series of studies indicates that while it is fair to expect lower-SES workers to work longer given rising life expectancies, it is also more challenging for them to do so compared to higher-SES workers. Lower-SES workers have relatively low planned retirement ages even though they need to work longer than other groups to attain retirement security. And while moving from one job to another appears to allow them to extend their careers, the effect is somewhat smaller than for higher-SES individuals. Finally, while job options for older workers seem to have broadened since the late-1990s, allowing easier job movement and thus longer careers, less-educated men still face narrower options than their better-educated counterparts.

These findings do not invalidate the working longer prescription. Instead, they simply suggest that policymakers need to think about whether it works equally for everyone. This research suggests that lower-SES workers do face challenges, but that expanding job opportunities to allow easier movement to jobs that can be done longer could help. Unfortunately, the research also suggests that one type of policy intervention – reducing the cost of providing health insurance – may not help open up those jobs. To the extent that lower-SES workers continue to have more difficulty extending their careers than higher-SES workers, policymakers may want to consider other alternatives to help shore up their retirement income security.

## Endnotes

1 Educational attainment is a good measure of SES to use for these studies because it is determined early in life and affects, but is unaffected by, our research focus: late-career labor market behavior and retirement preparedness.

2 For example, see Waldron (2007).

3 Sanzenbacher et al. (2015).

4 The process for constructing this ranking is described in detail in Sanzenbacher et al. (2015).

5 To simplify the calculation, it assumes that all workers enter the labor force at age 22 and that workers in the 1979 cohort retired at age 65.

6 Munnell, Webb, and Chen (2016). The age and educational attainment of the household are those of the household head.

7 The replacement rate targets come from Georgia State University's RETIRE Project. See Palmer (2008).

8 The calculations assume that the household maintains its current earnings, saving rate, and asset allocation to retirement. For further details, see Munnell, Webb, and Chen (2016).

9 Sanzenbacher, Sass, and Gillis (2016).

10 Rutledge, Sass, and Ramos-Mercado (2016).

11 Yamamoto (2013).

12 Rutledge and Crawford (2016).

13 This result may not be too surprising in light of new research by Saez, Schoefer, and Seim (2017) that similarly finds the lack of an effect on wages for a policy that reduced the cost of younger workers in Sweden. The hypothesized reason for the lack of a wage effect is the issue of equity – firms feel they cannot raise wages only for younger workers.

## References

- Munnell, Alicia H., Anthony Webb, and Anqi Chen. 2016. "To What Extent Does Socioeconomic Status Lead People to Retire Too Soon?" Working Paper 2015-19. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Palmer, Bruce A. 2008. "2008 GSU/Aon RETIRE Project Report." Research Report Series 08-1. Atlanta, GA: Georgia State University, J. Mack Robinson College of Business.
- Rutledge, Matthew S. and Caroline V. Crawford. 2016. "Would Reducing the Price of Employing an Older Worker Improve Labor Market Outcomes by Socioeconomic Status? Evidence from Health Insurance Premium Restrictions." Working Paper 2016-17. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Rutledge, Matthew S., Steven A. Sass, and Jorge D. Ramos-Mercado. 2016. "How Does Occupational Access for Older Workers Differ by Education?" Working Paper 2015-20. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Saez, Emmanuel, Benjamin Schoefer, and David Seim. 2017. "Payroll Taxes, Firm Behavior, and Rent Sharing: Evidence from a Young Workers' Tax Cut in Sweden." NBER Working Paper 23976. Cambridge, MA: National Bureau of Economic Research.
- Sanzenbacher, Geoffrey T., Anthony Webb, Candace M. Cosgrove, and Natalia S. Orlova. 2015. "Calculating Neutral Increases in Retirement Age by Socioeconomic Status." Working Paper 2015-21. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Sanzenbacher, Geoffrey T., Steven A. Sass, and Christopher M. Gillis. 2016. "The Effect of Job Mobility on Retirement Timing by Education." Working Paper 2016-17. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Waldron, Hilary. 2007. "Trends in Mortality Differentials and Life Expectancy for Male Social Security-Covered Workers, by Socioeconomic Status." *Social Security Bulletin* 67(3): 1-28.
- U.S. Census Bureau. 1979-2011. *National Longitudinal Mortality Study*. Washington, DC.
- Yamamoto, Dale H. 2013. "Health Care Costs – From Birth to Death." Independent Report 2013-1. Schaumburg, IL: Society of Actuaries, Health Care Cost Institute



CENTER *for*  
RETIREMENT  
RESEARCH  
*at* BOSTON COLLEGE

---

### About the Center

The mission of the Center for Retirement Research at Boston College is to produce first-class research and educational tools and forge a strong link between the academic community and decision-makers in the public and private sectors around an issue of critical importance to the nation's future. To achieve this mission, the Center sponsors a wide variety of research projects, transmits new findings to a broad audience, trains new scholars, and broadens access to valuable data sources. Since its inception in 1998, the Center has established a reputation as an authoritative source of information on all major aspects of the retirement income debate.

### Affiliated Institutions

The Brookings Institution  
Syracuse University  
Urban Institute

### Contact Information

Center for Retirement Research  
Boston College  
Hovey House  
140 Commonwealth Avenue  
Chestnut Hill, MA 02467-3808  
Phone: (617) 552-1762  
Fax: (617) 552-0191  
E-mail: [crr@bc.edu](mailto:crr@bc.edu)  
Website: <http://crr.bc.edu>

---

© 2017, by Trustees of Boston College, Center for Retirement Research. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that the authors are identified and full credit, including copyright notice, is given to Trustees of Boston College, Center for Retirement Research.

The CRR gratefully acknowledges the Alfred P. Sloan Foundation for its support of this research. The findings and conclusions expressed are solely those of the authors and do not represent the opinions or policy of the Alfred P. Sloan Foundation, Boston College, or the Center for Retirement Research.