

# CAN THE BOTTOM THIRD WORK LONGER?

BY ALICIA H. MUNNELL, GEOFFREY SANZENBACHER, AND STEVEN A. SASS\*

---

## Introduction

Even before the sharp financial downturn, working longer had emerged as perhaps the most attractive response to the contraction of the nation's retirement income system.<sup>1</sup> Since the downturn, working longer increasingly seems to be the only way most workers approaching retirement can secure a reasonably comfortable old age. The rise in employment rates at older ages has thus received a great deal of positive attention. What has not received much attention is its unevenness. At older ages, high-skill workers have much higher employment rates than workers with lower skills. Understanding the causes and consequences of this pattern could have important implications for policymakers concerned with strengthening retirement security.

This *brief* addresses the question of whether men in the bottom third of the educational distribution – a proxy for earnings levels – can be expected to work longer. The first section describes the employment patterns of men and the change in employment patterns since the early 1960s. The second section examines the primary factors that might explain the decline in employment among older low-skill workers – changes in availability of alternative sources

of income (Social Security disability and retirement benefits and the advent of the Supplemental Security Income program), changes in the composition of labor demand, and changes in health. The concluding section assesses the implications for retirement income policy.

## Employment Patterns by Education

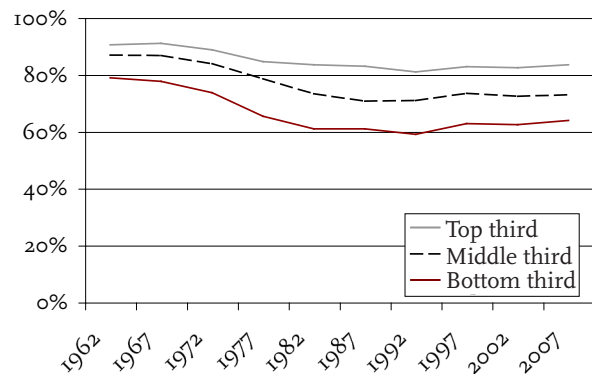
Men with lower skill levels, and thus lower earnings, have left employment at younger ages than their more highly skilled counterparts throughout the industrial era. To capture this pattern, one needs to look at the employment rates of the top, middle, and bottom third of the educational distribution. While earnings levels would provide a more direct measure of a worker's economic circumstances, the *Current Population Survey* data used in this analysis do not indicate whether someone not working should be considered a high or low earner, nor whether a worker's earnings in a given year are typical. So educational attainment serves as a proxy for earnings.<sup>2</sup>

---

\* Alicia H. Munnell is the Peter F. Drucker Professor of Management Sciences in Boston College's Carroll School of Management and Director of the Center for Retirement Research at Boston College (CRR). Geoffrey Sanzenbacher is a graduate research assistant at the CRR. Steven A. Sass is Associate Director for Research at the CRR. The authors would like to thank Dan Muldoon for research assistance and David Autor for valuable comments.

Figure 1 shows employment rates for men 50-64 by educational attainment for the period 1962-2007. Between the early 1960s and the mid-2000s, the employment rate fell 7 percentage points in the top tercile, 14 percentage points in the middle tercile, and 15 percentage points in the bottom tercile. Figure 1 also shows that the employment decline and widening disparity in employment rates were essentially complete by the early 1980s.

FIGURE 1. EMPLOYMENT RATES BY EDUCATION-BASED TERCILES, MEN AGED 50-64, 1962-2007

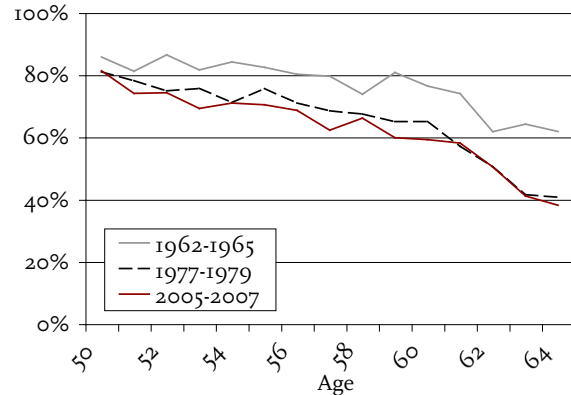


Source: Authors' calculations based on U.S. Bureau of Labor Statistics, *Current Population Survey* (CPS), 1962-2007.

Figure 2 shows employment rates for men in the bottom third by age in the early 1960s, at the end of the 1970s, and in the mid-2000s. Three factors are striking about the employment decline in the bottom tercile. First, employment rates are down substantially for men in their fifties. For example, in the early 1960s, 80 percent of men age 57 were employed; by the mid-2000s the share of men working had dropped to 62 percent. Second, an even larger gap emerges after age 62. For example, 64 percent of men age 63 were employed in the early 1960s, but this share dropped to 41 percent by the mid-2000s. Finally, most of the reduction in employment rates had occurred by the late 1970s.

When thinking about the possibility of men in the bottom third of the educational distribution working longer, a reasonable starting point is the level of employment in the early 1960s. This benchmark does not mean that employment levels in the early 1960s were necessarily optimal, but rather that they indicate a possible peak level. Thus, the question becomes whether the employment rate of men in the bottom

FIGURE 2. EMPLOYMENT RATES, LOWEST EDUCATION TERCILE BY AGE, 1962-1965, 1977-1979 & 2005-2007



Note: Educational attainment data not available for 1963.  
Source: Authors' calculations based on 1962-2007 CPS.

third can increase by 20 percentage points – from 60 percent to 80 percent for those in their fifties and from 40 percent to 60 percent for those in their early sixties. To answer that question requires understanding what factors led to the decline in employment rates in the first place.

## What Might Explain The Sharp Employment Decline Among Low-Skill Workers?

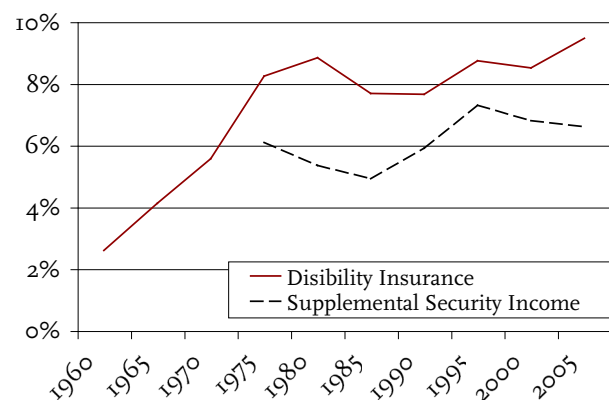
The three main reasons why older workers leave employment are the availability of resources to support themselves without working, lack of employer demand for their labor, and poor health.

### “Non-Employment” Sources of Income

The most likely explanation for the decline in employment rates for men in the bottom third is an increase in resources available without work. The easiest pattern to explain is the drop in employment rates after age 62. Beginning in 1961, Congress allowed men to retire on reduced Social Security old-age benefits at age 62, rather than having to wait to age 65. Congress then significantly raised benefits claimed at any age, especially in 1972. Thus, higher benefits available at age 62 are a good explanation for the drop in employment rates for men in their early sixties.

The more difficult phenomenon to explain is the surprising decline in employment rates for men in their fifties. Here one possible explanation is the expansion in Social Security disability benefits and the introduction of the Supplemental Security Income (SSI) program. The Social Security Disability Insurance (SSDI) program, introduced in 1956, paid increasingly generous benefits to those who qualified, and eligibility for benefit receipt was liberalized. As a result, the share of men age 50-64 collecting benefits grew rapidly in the 1960s and 1970s (see Figure 3).<sup>3</sup> Recipients of Social Security disability benefits were disproportionately low-wage workers. In some ways, SSDI has served as a long-term unemployment insurance program for these disadvantaged workers.

FIGURE 3. PERCENT OF MEN AGED 50-64 ON DISABILITY INSURANCE OR SUPPLEMENTAL SECURITY INCOME, 1960-2005

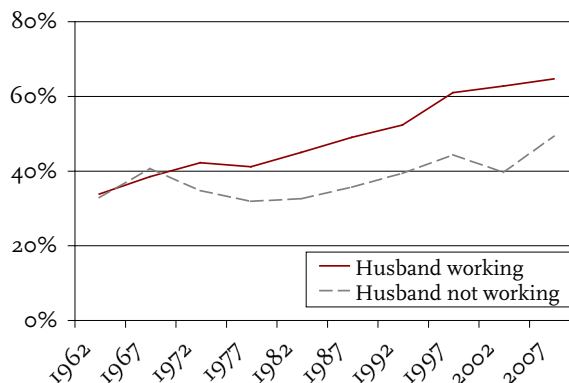


Sources: Authors' calculations based on U.S. Social Security Administration (2008); and U.S. Bureau of Labor Statistics (2008).

The SSI program, which was introduced in 1974, is designed to provide benefits to the aged, blind and disabled who have little or no income. Virtually all SSI benefits paid to older men went to those in the bottom third. The income from these two programs allowed an increasing proportion of the men in the bottom third to support themselves without working.

One further source of income for men in the bottom third of the income distribution could be the earnings of their spouses. As shown in Figure 4, however, the employment of the wives of non-working men increased much less than the employment of wives whose husbands worked. Thus, spousal income is probably not an important explanation for the decline in employment of men in the bottom third.

FIGURE 4. PERCENT OF WIVES WORKING, LOWEST EDUCATION TERCILE OF MEN 50-64 BY EMPLOYMENT STATUS OF HUSBAND, 1962-2007

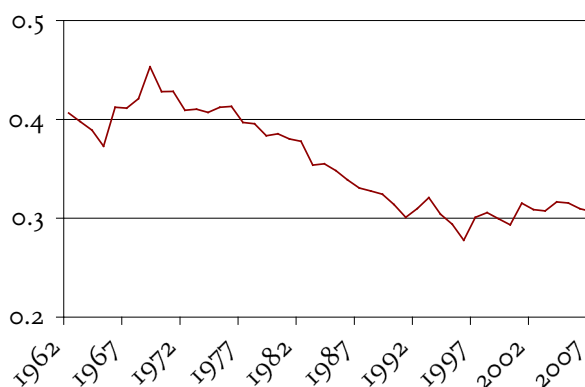


Source: Authors' calculations based on 1962-2007 CPS.

### Employer Demand

At the same time that more income became available, employer demand shifted away from less educated workers to more educated workers. This pattern is evident in Figure 5, which gives the ratio of weekly earnings of full-time male workers age 50-70 at the 20th and 80th percentiles from 1962 to 2007.<sup>4</sup> The wages of the low paid fell sharply relative to those of the higher paid, suggesting a relative decline in the demand for older low-wage workers. Among older workers, a decline in employer demand can be expected to result in a decline in employment as well as in wages.<sup>5</sup>

FIGURE 5. RATIO OF WAGES AT 20TH PERCENTILE TO 80TH PERCENTILE FOR FULL-TIME MALE WORKERS AGE 50-70, 1962-2007



Source: Authors' calculations based on 1962-2007 CPS.

## Health Status

A decline in health is the least likely explanation for the sharp decline in the employment rates of low-skill workers. As shown in Table 1, disability-free life expectancy has increased for those in the lower tercile, just as for those in the upper two thirds. So a deterioration in health is not the reason for the decline in employment among men in the lower third of the educational ladder.<sup>6</sup> Men at age 50 in 2000 could expect more years of life free of disability than they could have expected in 1970.

TABLE 1. DISABILITY-FREE LIFE EXPECTANCY FOR MALES AGE 50, BY TERCILE, 1970-2000

Tercile	1970	1980	1990	2000
Lower	12.7	12.1	13.7	15.0
Middle	15.3	16.2	17.7	17.9
Upper	17.6	19.4	20.2	22.5

Source: Authors' calculations based on Munnell, Soto, and Golub-Sass (2008).

While the trend is positive, it is also important to consider the levels of expected disability-free life. The table says that in 2000 a 50-year-old man in the bottom third of the educational distribution could expect 15 years of disability-free life.<sup>7</sup> Those 15 years would bring him to age 65. The question is whether individuals with such an outlook would want to spend every moment of their healthy life working or whether they would prefer to spend some healthy time in retirement. Moreover, continued improvement in healthy life expectancy seems unlikely since much of the improvement was driven by movement up the educational ladder, and educational attainment has leveled off. And the growing incidence of obesity is beginning to swamp the gains made against cardiovascular and other diseases. Thus, while the trends suggest improvement, the levels suggest a real limit on the worklives for those in the bottom third.

## Conclusion

While employment levels of older male workers have begun to edge upward in recent years, the pattern remains very uneven, with much lower employment levels for low-skill workers. In 1960, the employment rate of low-skill older men was 15-20 percentage points higher than today. The question is whether it is possible to return to employment levels experienced in the early sixties and, to some extent, whether it is desirable.

The answer is complicated. First, it appears that as long as these relatively disadvantaged men have some alternative income available – Social Security Disability Insurance, Supplemental Security Income, or Social Security retirement income beginning at age 62, they will exit the labor force and opt for these benefits. Therefore, the *need* for this group of workers to stay employed longer has diminished somewhat. Second, even if older low-skilled workers decided to work, it is not clear that employers are anxious to hire them. The wages of low-wage workers have remained virtually stagnant over the last forty years, while the wages of those with more education have increased. Finally, low-wage workers at age 50 have only 15 years of healthy life expectancy. So, even if they needed to work and were able to find employment, it may not make sense for them to spend every year of that period employed.

The bottom line is that working longer may not be realistic or desirable for all members of society, and this possibility merits careful consideration when it comes to reforming the U.S. retirement income system. At a minimum, it seems important to maintain alternative sources of income for older workers in ill health or with poor labor market prospects. Whether programs such as SSDI should continue to serve this role by essentially providing long-term unemployment insurance or whether an alternative approach would be better is an open question.

## Endnotes

1 To offset the rise in Social Security's Full Retirement Age and the projected increases in Medicare premiums, by 2030 a worker will need to work two to four years longer than a worker retiring at age 62 in 2000 (Munnell et al. 2006). This estimate excludes any impact of the current financial crisis, which has substantially reduced 401(k) balances.

2 Where one educational group straddled a tercile break – with high school graduates straddling the bottom and middle terciles in the mid-2000s the most significant case – both portions of that group – the portions in each tercile – were assumed to have the same employment rate. If lower-wage high school graduates had lower employment rates, as is likely the case, the employment gap in the mid-2000s would be greater than that estimated using this method and shown in Figures 1 and 2.

3 Employer pensions, which are not an important source of retirement income for the bottom tercile, also became far more prevalent and generous from the mid-1960s to the mid-1980s (U.S. Social Security Administration 2006). For discussions of the disability program and its labor market effects, see U.S. Social Security Administration (1986) and Autor and Duggan (2003).

4 See Gottschalk (1997). This ratio can also be taken as an indicator of the earnings gap between the highest and lowest earnings terciles.

5 von Wachter (2007) shows that local labor demand conditions affect the continued employment of older workers. Autor and Duggan (2003) attribute the rise in the number of low-wage older workers retiring on Social Security Disability Insurance benefits to this shift in the composition of labor demand combined with a broadening of the definition of disability to include economic criteria.

6 The education-based terciles in this table are calculated similarly to the terciles in Figures 1 and 2. However, these calculations did not have detailed information on the health status by educational attainment of men without a high school diploma. As this group straddled the bottom and middle terciles in 1970, the men without a high school diploma in each tercile were assumed to have the same incidence of good or better health. If men with less education have poorer

health, as is likely the case, the health gap in 1970, and thus the decline in the health gap between 1970 and 2000, would be greater than shown in Table 1.

7 Some researchers are more sanguine about improvements in disabilities. For example, Manton and Gu (2001) find that disability rates among those over 65 fell by 25 percent between 1982 and 1999.

## References

- Autor, David H. and Mark G. Duggan. 2003. "The Rise in the Disability and the Decline in Unemployment." *Quarterly Journal of Economics* 118(1): 157-205.
- Gottschalk, Peter. 1997. "Inequality, Income Growth, and Mobility: The Basic Facts." *Journal of Economic Perspectives* 11(2): 21-40.
- Manton, Kenneth G. and XiLiang Gu. 2001. "Changes in the Prevalence of Chronic Disability in the United States Black and Non-Black Population Above Age 65, from 1982 to 1999." *Proceedings of the National Academy of Sciences* 98(11): 6354-59.
- Munnell, Alicia H., Marric Buessing, Mauricio Soto, and Steven Sass. 2006. "Will We Have to Work Forever?" *Work Opportunities for Older Americans Issue in Brief* 4. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Munnell, Alicia H., Mauricio Soto, and Alex Golub-Sass. 2008. "Will People Be Healthy Enough To Work Longer?" Working Paper 2008-11. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- U.S. Bureau of Labor Statistics. *Current Population Survey*, 1962-2007. Washington, DC.
- U.S. Bureau of Labor Statistics. 2008. *Labor Force Statistics from the Current Population Survey*. Washington, DC.
- U.S. Social Security Administration. 1986. *A History of the Social Security Disability Programs*. Washington, DC: U.S. Government Printing Office.
- U.S. Social Security Administration. 2006. *Income of the Aged Chartbook, 2004*. Washington, DC: U.S. Government Printing Office.
- U.S. Social Security Administration. 2008. *Annual Statistical Supplement, 2007*. Washington, DC: U.S. Government Printing Office.
- von Wachter, Till. 2007. "The Effect of Economic Conditions on the Employment of Workers Nearing Retirement Age." Working Paper 2007-25. Chestnut Hill, MA: Center for Retirement Research at Boston College.

CENTER FOR  
RETIREMENT  
RESEARCH  
AT BOSTON COLLEGE

---

### About the Center

The Center for Retirement Research at Boston College was established in 1998 through a grant from the Social Security Administration. The Center's mission is to produce first-class research 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, 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  
Massachusetts Institute of Technology  
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://www.bc.edu/crr>

---

© 2008, 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 research reported herein was performed pursuant to a grant from The Atlantic Philanthropies. The opinions and conclusions expressed are solely those of the authors and do not represent the opinions or policy of The Atlantic Philanthropies or the Center for Retirement Research at Boston College.