



**Managerial Attitudes Toward
Older Workers:
A Review of the Evidence**

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A crosscutting team of Urban Institute experts in Social Security, Medicare, Medicaid, tax and budget policy, and microsimulation modeling ponder the aging of American society.

The aging of America raises many questions about what's in store for future and current retirees and whether society can sustain current systems that support the retired population. Who will prosper? Who won't? Many good things are happening too, like longer life and better health. Although much of the baby boom generation will be better off than those retiring today, many face uncertain prospects. Especially vulnerable are divorced women, single mothers, never-married men, high school dropouts, and Hispanics. Even Social Security—which tends to equalize the distribution of retirement income by paying low-income people more than they put in and wealthier contributors less—may not make them financially secure.

Uncertainty about whether workers today are saving enough for retirement further complicates the outlook. New trends in employment, employer-sponsored pensions, and health insurance influence retirement decisions and financial security at older ages. And, the sheer number of reform proposals, such as personal retirement accounts to augment traditional Social Security or changes in the Medicare eligibility age, makes solid analyses imperative.

Urban Institute researchers assess how current retirement policies, demographic trends, and private sector practices influence older Americans' security and decisionmaking. Numerous studies and reports provide objective, nonpartisan guidance for policymakers.

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Abstract

The economic burden of an aging population depends partly on older adults' employment rates, which in turn depend partly on employers' willingness to hire and retain them. This report reviews the literature on managerial attitudes toward older workers. Although the available evidence is incomplete and sometimes inconsistent, many firms appear to have serious reservations about older workers. Employment prospects may be especially bleak for rank-and-file workers and those with limited skills. Managerial attitudes toward older workers may improve in the future, however, as the population and workforce age.

Introduction

The economic burden of an aging population depends partly on older adults' employment rates. If workers continue to retire at the relatively young ages that have become the norm over the past generation, then the aging of the baby boomers will reduce the ratio of working taxpayers to older retirees. However, the economy could produce more goods and services if older people worked longer, boosting living standards for both workers and nonworkers and generating additional tax revenue to fund all kinds of government services.

Older people's employment depends in turn on employers' willingness to hire and retain them. Firms may be reluctant to employ older workers if managers believe they are less energetic and flexible than younger workers or lack up-to-date skills. Managers may view older workers as particularly expensive, either because they demand higher salaries than younger workers or they incur more health care costs. Some employers also may be reluctant to train older workers because they believe they will retire soon, making it difficult for employers to recoup their training costs. The lack of training opportunities may exclude older workers from the best work assignments, hurt their promotion chances, and depress job satisfaction and earnings growth. On the other hand, some employers may prefer older workers to their younger counterparts because they value their experience, maturity, and strong work ethic. It is not immediately obvious, then, how managerial attitudes affect employment prospects for older Americans.

This paper reviews the literature on employers' willingness to hire and retain older workers, an increasingly important topic as the population ages. After a discussion of the benefits of delayed retirement, the current retirement landscape, and some theoretical issues in the

demand for older workers, the paper examines findings from a number of recent surveys of employer attitudes toward older workers, both in the U.S. and other countries. It then compares these attitudes to evidence on actual employer practices, to better assess employment prospects for older workers. The final sections consider the apparent willingness of employers to train older workers and present conclusions.

Benefits of Delayed Retirement

Population aging poses a serious threat to the nation's economic security. The growing size of the older population will increase the number of older Americans who qualify for publicly financed retirement and health benefits in coming years, relative to the number of younger adults who typically work and pay taxes. Between 2000 and 2020, the number of working adults for every nonworking adult age 65 or older will fall from 4.5 to 3.3, if current employment patterns continue (Johnson and Steuerle 2004). The shrinking labor pool threatens American economic growth, living standards, Social Security and Medicare financing, and funding for all other government programs. If current employment patterns persist, workers will have to pay higher taxes to support more retirees, employers will face labor shortages (particularly in selected industries), retirement benefits will likely be cut, and per capita economic output will fall.

But demographic change tells only part of the story. Future outcomes depend largely on individual employment decisions by workers and employers. Labor force participation rates for older women have been rising over the past half century as paid employment increased for women of all ages, and participation rates for older men have been inching upward over the past decade. Nonetheless, relatively few older adults work for pay, and older men are less likely to

work today than they were 50 years ago, when health problems were more prevalent and jobs were generally more physically demanding. In 2006, for example, only 20 percent of men age 65 or older participated in the labor force, down from 47 percent in 1948 (Bureau of Labor Statistics 2007a).

If people work longer, the economy can produce more goods and services, boosting living standards for both workers and nonworkers and generating additional tax revenue to fund all kinds of government services. For example, in 2020 if men age 55 or older worked at the same rate as they did in 1950 instead of the rate that prevailed in 2000, the ratio of working adults to nonworking older adults would rise from 3.3 to 4.1 (Johnson and Steuerle 2004). This boost in older men's employment would eliminate about two-thirds of the expected drop in the old-age dependency ratio between 2000 and 2020. If every worker delayed retirement by five years, relative to retirement plans based on current work patterns, the additional revenue generated by income and payroll taxes would more than cover the Social Security trust fund deficit for the foreseeable future (Butrica, Smith, and Steuerle 2007).

In addition to improving the economic outlook, working longer can also enhance individual well-being. Those who delay retirement can raise their own retirement incomes by avoiding early retirement reductions to their Social Security and defined benefit (DB) pension benefits, accumulating more Social Security and pension credits and other savings, and reducing the number of retirement years that they must fund. By working until age 67 instead of retiring at age 62, for example, a typical worker could gain about \$10,000 in annual income at age 75, net of federal income taxes and health insurance premiums (Butrica et al. 2004). Delaying retirement

may also promote physical and emotional health by keeping older adults active and engaged and imbuing their lives with meaning (Calvo 2006).

The Changing Retirement Landscape

The crucial question, then, is whether the upcoming demographic challenges will lead to higher employment rates and later retirements for older adults. A number of factors suggest that employment rates for older Americans will rise in coming years. Improved health and declines in physical job demands leave older people better able to work today than in the past (National Center for Health Statistics 2006; Johnson, Mermin, and Resseger 2007; Steuerle, Spiro, and Johnson 1999).¹ Recent Social Security changes increase work incentives at older ages. The normal retirement age for full Social Security benefits increased from 65 to 66 and will reach 67 for those born after 1959. Delayed retirement credits have been raised to better compensate retirees who take up benefits after the normal retirement age. And Congress repealed the earnings test past the normal retirement age, which reduces Social Security benefits for employed recipients who earn more than a limited amount.

Changes in employer-provided pension and retiree health benefits are also likely to encourage boomers to remain at work. Traditional DB pensions, which provide workers with lifetime retirement annuities usually based on years of service and earnings near the end of the career, tend to discourage work at older ages (Stock and Wise 1990). They often provide substantial subsidies for early retirement and penalize workers who remain on the job past the

¹ However, there is some evidence that the trend toward better health in late midlife has ended and perhaps reversed. For example, the share of surveyed adults ages 51 to 56 reporting health problems increased between 1992 and 2004 (Soldo et al. 2006), and disability rates at ages 40 to 49 increased between 1984 and 2000 (Lakdawalla, Bhattacharya, and Goldman 2004).

plan's normal retirement age, partly because workers who delay retirement by a month forfeit a month of benefits.

Over the past 30 years, however, employers have been shifting from DB pensions to defined contribution (DC) plans, which do not encourage early retirement (Pension and Welfare Benefits Administration 1998). Employers typically make specified contributions into individual DC accounts which workers access at retirement, generally as lump sum payments. Because contributions continue as long as plan participants remain employed and workers with a given account balance can receive the same lifetime benefit regardless of when they chose to begin collecting, DC plans do not generally penalize work at older ages. As a result, people in DC plans tend to work about two years longer than DB participants (Friedberg and Webb 2005), and the shift to DC plans should increase older Americans' labor supply.

Many employers that continue to offer DB plans have switched from traditional plan designs to hybrid formats, such as cash balance plans, that include many features common in DC plans and do not penalize work at older ages. Employers offering cash balance plans regularly set aside a given percentage of salary for each employee and credit interest on these contributions. Interest credit rates are usually tied to a specific benchmark, such as the U.S. Treasury bill rate. Benefits are expressed as account balances, as in DC plans, even though cash balance plans are classified under the law as DB plans. Because cash balance plans tie retirement benefits to career earnings and account balances continue to grow as long as the plan participant remains employed, participants do not lose benefits if they work beyond the plan's retirement age. Moreover, many employers with cash balance plans eliminated the early retirement subsidies that their traditional plans provided (Brown et al. 2000). In 2005 one-quarter of DB-covered

workers in the private sector participated in plans with cash balance or other hybrid designs (Bureau of Labor Statistics 2007c). This share is likely to increase following the 2006 enactment of the Pension Protection Act, which affirmed that cash hybrid plans do not inherently discriminate against older workers, removing an important obstacle to plan conversions.

The erosion in employer-provided retiree health benefits is also likely to limit early retirement. Retiree health insurance, which pays health expenses for early retirees who have not reached the Medicare eligibility age of 65, discourages work by reducing retirement costs that arise from the loss of employer health benefits. Workers offered retiree health benefits by their employers retire earlier than workers who lose their health benefits (Johnson, Davidoff, and Perese 2003; Rogowski and Karoly 2000). However, rising health care costs and the introduction of an accounting rule in 1993 requiring employers to recognize on their balance sheets the full liability of future retiree health costs have led many employers to terminate their retiree health plans. In 2005, only 33 percent of employers with more than 200 employees offered retiree health benefits, down from 68 percent in 1988 (Kaiser Family Foundation and Health Research Educational Trust 2005).

Perhaps in response to these various trends, older adults are now working longer than they did about 20 years ago. Between 1985 and 2005, the share of men in the labor force increased from 46 to 53 percent at ages 62 to 64 and from 24 to 34 percent at ages 65 to 69 (Federal Interagency Forum on Aging Related Statistics 2006). Over the same period, female labor force participation rates rose from 29 to 40 percent at ages 62 to 64 and from 14 to 24 percent at ages 65 to 69.

Several surveys also suggest that boomers intend to work into old age. For example, 68 percent of older workers in one recent poll said they intended to work in retirement (AARP 2003). The mean self-reported probability of working full-time past age 65 among workers ages 51 to 56 participating in the Health and Retirement Study increased from 27 percent in 1992 to 33 percent in 2004 (Mermin, Johnson, and Murphy 2007). Another AARP poll found that 38 percent of older workers want to phase gradually into retirement instead of leaving the labor force all together (AARP 2005a). A recent MetLife survey found that boomers are increasingly concerned about their ability to afford an early retirement (MetLife Mature Market Institute 2005).

The Demand for Older Workers

Although the supply of older workers may increase in coming years, employment rates at older ages also depend on the demand for older workers. It is not clear how willing employers are to hire and retain older adults. Employment decisions hinge on perceptions of older workers' productivity and the costs of employing them. On one hand, older workers are less likely to miss work than younger employees (Martocchio 1989), and older adults' long experience in the labor force may make them especially productive. On the other hand, older workers' education and skills may be outdated, and employers may view them as being less flexible than younger workers and less willing to experiment with new ways of working. Concern that increased age impairs the ability to complete physically demanding tasks may fuel employer reluctance to hire older people for strenuous work. These attitudes will likely evolve in coming years as the workforce ages, especially if labor and skill shortages develop in certain occupations.

Managers may also view older workers as more expensive than their younger counterparts. It is well known that wages tend to increase with age, up to about the mid-50s (Mincer 1974). For example, median usual weekly earnings in 2004 for full-time wage and salary workers increased from \$406 at ages 20 to 24, to \$604 at ages 25 to 34, to \$743 at ages 45 to 54 (table 1). However, wages grow relatively slowly after the mid-30s or early-40s. Median wages in 2004 for full-time workers was only about 4 percent higher at ages 45 to 54 than at ages 35 to 44, and they were lower at ages 55 to 64 than at ages 45 to 54. Employers likely tolerate older workers' relatively high salaries when age-related productivity gains cause wages to rise as workers grow older. However, managers may view older workers as too costly at firms in which wage growth is driven by seniority pay scales and are only loosely tied to productivity differentials, such as in unionized settings and the public sector.²

Fringe benefit costs also tend to rise with age. The cost of traditional DB pension plans rises rapidly as workers approach the plan's retirement age and can soon begin collecting benefits. Although these plans are becoming less common, they continue to cover all federal government employees, about 90 percent of state and local government workers (Bureau of Labor Statistics 2000), and about 15 percent of private-sector workers (Bureau of Labor Statistics 2007c, 2007d). Because older workers tend to use more health services than younger

² Wages also increase with age when employers and employees enter into implicit long-term contracts designed to encourage employees to work hard. These implicit contracts pay workers relatively little in the early stages of their careers—less than the value of the goods and services they produce—but then pay much more later in the career (Lazear 1979; Lazear and Moore 1984). Worker effort is often difficult to monitor and assess in the short-run, especially when employees work in teams or extrinsic factors (such as market forces) affect their output. These implicit contracts provide employees with strong incentives to work hard, because employees who shirk their responsibilities run the risk of being fired and forfeiting future compensation premia. These contracts are not legally binding, but employers who violate them by dismissing older workers without cause could damage their reputations and find themselves unable to offer credible implicit contracts to future generations. Although long-term employment arrangements may be less prevalent today than they used to be, they are still relatively common (Neumark 2000).

Table 1. Earnings and Health Insurance Claims by Age, 2004 (\$)

Age	Median Usual Weekly Earnings, Full-Time Wage and Salary Workers			Annual Private Health Insurance Claims, Insured Workers	
	All	Men	Women	Median	Mean
20 to 24	406	417	391	220	983
25 to 34	604	639	561	278	1,500
35 to 44	713	804	608	396	1,560
45 to 54	743	857	625	715	2,388
55 to 64	725	843	615	1,177	2,904

Source: Bureau of Labor Statistics (2007b) and author's computations from the Medical Expenditure Panel Survey.

workers, the cost to employers of providing health benefits generally increases with age. Median annual health insurance claims in 2004 for privately insured workers were nearly twice as high at ages 45 to 54 than at ages 35 to 44 and about three times as high at ages 55 to 64 (table 1). In dollar terms, however, the differences were fairly small. Median annual health insurance claims were \$781 higher for workers ages 54 to 64 than those ages 35 to 44, and mean annual claims were \$1,344 higher. The health insurance cost differential between workers ages 35 to 44 and those ages 55 to 64 equaled about 2 percent of annual earnings, measured in medians.

Employers may be more reluctant to hire older job applicants than retain their older, experienced staff. Employers incur at least some recruiting, hiring, and training costs when taking on new employees, and they may have less time to recoup these costs for older hires near retirement age than younger hires.³ Employers do not face any of these costs, of course, by retaining existing employees. Older adults are likely to be especially costly to hire for firms with

³ Towers Perrin estimates that professional workers typically spend about 12 weeks on the job before they become fully proficient, and are about 40 percent less productive during that period (AARP 2005b).

traditional DB pension plans, because older workers accumulate benefits in traditional plans much more rapidly than younger workers (Penner, Perun, and Steuerle 2002).

Employers may also be less likely to hire older workers because they are sometimes more difficult to terminate than younger employees. Workers age 40 and older are covered by the Age Discrimination in Employment Act (ADEA), which makes it illegal for firms to discriminate unfairly against older workers in employment decisions, including hiring, firing, work assignments, and promotions. The courts can force employers who illegally fire older workers to pay monetary damages. As a result, employers may be reluctant to hire older workers, out of fear that they could face legal action if they tried to terminate those that did meet expectations. The ADEA, designed to protect older workers, may have the perverse effect of limiting opportunities for older job applicants.

With theory alone it is difficult to assess managers' willingness to employ older adults. Employers may appreciate older workers' experience and maturity, but managers may be reluctant to employ older people because of their relatively high compensation and limited number of remaining work years. The special legal protections that older workers receive may also deter employers from hiring them. To better evaluate older adults' employment prospects, we now examine surveys of employer attitudes and actual employer practices toward older adults.

Survey-Based Evidence of Employer Attitudes

A number of recent employer surveys have attempted to measure managerial attitudes toward older workers. Most employer surveys indicate that managers generally value older workers'

knowledge, experience, and work ethic. For example, a 2006 survey of 578 private-sector firms with 50 or more employees by the Center on Aging and Work at Boston College found that a majority of employers (between 50 and 54 percent) said it was “very true” that their late-career employees were “loyal to the company,” had “a strong work ethic,” were “reliable,” and had “low turnover rates” (Pitt-Catsouphes et al. 2007). By comparison, fewer than one-quarter of employers said that each of these attributes applied to early-career employees. Additionally, about 47 percent of employers said it was very true that late-career employees had “high levels of skills relative to what is needed for their jobs,” compared with 38 percent of mid-career employees and 21 percent of early-career employees. Of course, late-career employees have many years of experience in their positions, so it is not clear from these survey results how employers view older workers with more limited experience.

Other employer surveys indicate that many managers believe that older workers benefit the firm. In a 2006 internet-based survey of 487 organizations by Buck Consultants, Corporate Voices for Working Families, and WorldatWork, 88 percent of respondents said that mature workers’ knowledge provided very significant business advantages, and 74 percent said their reliability and dedication were very significant advantages (Buck Consultants 2007). Although it is not clear from the survey, these results suggest that respondents may have been referring more to professional and managerial workers than rank and file workers. In another 2006 survey of 400 private-sector employers by the Center for Retirement Research at Boston College, more than four of five managers said that older workers’ “knowledge of procedures and other aspects of the job” and their “ability to interact with customers substantially enhanced their productivity (Munnell, Sass, and Soto 2006). An earlier 1998 employer survey conducted by AARP (2000) found that human resources executives most frequently cited “loyalty and dedication to the

company,” “commitment to doing quality work,” “someone you can count in a crisis,” and “solid performance record” as attributes that describe workers ages 50 and older.

However, these surveys also indicate that employers often question older workers’ creativity and willingness to learn new things. Only about 29 percent of employers in the Center on Aging and Work survey described their late-career employees as creative, compared with 34 percent of mid-career employees and 35 percent of early-career employees. Only 1 in 10 employers in the Buck Consultant survey described older workers as innovative or as risk takers. (However, it is not clear whether older workers fare much worse than their younger counterparts on this dimension, because the survey did not ask employers to rate younger workers.) In the Center for Retirement Research survey, more than one in five employers cited older workers’ limited ability to learn new tasks quickly as an important factor in reducing their productivity. About one-third noted older workers’ limited physical health and stamina, and nearly one-fifth expressed concerns about how long older workers would remain on the job. However, only 15 percent of employers in the Buck Consultants survey said that any reluctance by mature workers to learn new procedures or adapt to new technology posed significant business risks in employing them. Employers in this survey expressed more concern about the risks of integrating multiple generations of workers and of accommodating older workers’ part-time and flexible schedules.

Overall, most employers appear to consider older workers to be at least as productive as younger workers. The Center for Retirement Research survey found that 56 percent of employers reported that older professionals and managers were more productive than their younger counterparts (Munnell, Sass, and Soto 2006). Only 6 percent of employers reported that older

white-collar workers were less productive than younger ones, while 39 percent said that they were equally productive. Views toward older rank-and-file workers were not quite as positive: 41 percent said they were more productive than their younger counterparts and 19 percent said they were less productive. Familiarity with older workers appeared to make favorable impressions on many employers. The share of employers who reported that older workers were more productive than younger ones increased with the share of their workforce age 55 and older. Survey respondents who were age 55 or older themselves were also more likely to describe older workers as especially productive.

Many American employers express concerns about the cost of employing older workers, however. In the Center for Retirement Research survey, 39 percent of employers said that older white-collar workers were more costly than their younger counterparts, and 43 percent said that older rank-and-file workers were more costly (Munnell, Sass, and Soto 2006), probably because older workers tend to be more experienced. Only 19 percent said that older professionals and managers were less costly than younger ones, and only 18 percent said that older rank-and-file were less costly. Large employers and those with DB pension plans were especially likely to view older workers as relatively expensive to employ. Employers expressed special concern about older workers' health care costs. For example, 36 percent of human resources executives in a 1991 study said that high health care costs influenced their decision about hiring and retaining older workers (Barth, McNaught, and Rizzi 1993). In the more recent Buck Consultants (2007) survey 39 percent cited health care expenses as highly significant factors in the cost of employing older workers. (Interestingly, however, 36 percent said health care costs were not significant.) Overall 62 percent of employers said the cost of transferring older workers' knowledge and skills to younger workers was highly significant.

Most employers appear to believe that the relatively high productivity of older workers offsets their relatively high costs. Two-thirds of employers surveyed by the Center for Retirement Research said an employee or prospect age 55 or older was neither more or less attractive than a younger person capable of the same job (Munnell, Sass, and Soto 2006). This assessment held for both white-collar workers and rank-and-file workers. However, the survey results did indicate that older white-collar workers have better prospects for continuing their careers than rank-and-file workers. While 23 percent of employers reported that white-collar older workers were more attractive than younger ones, only 15 percent favored older rank-and-file workers over younger ones.

Although relatively few employers admit having negative views toward older workers, that does not necessarily imply that most employers are eager to hire older workers. In fact, one-quarter of employers in the Center on Aging and Work survey said that their organizations were reluctant to hire older workers (Pitt-Catsouphes et al. 2007).

Employer Attitudes in Other Countries

Employers in other countries appear to share many of the views toward older workers that American employers hold. For example, a 2000 survey found that employers in New Zealand generally considered older workers to be more reliable and productive than younger workers and better able to work with people (McGregor and Gray 2002). However, the survey also indicated that employers believed older workers were less flexible and harder to train than younger workers and generally failed to keep up with the latest technology. Various surveys found that Canadian managers generally held favorable views of older workers, although many expressed concerns about their ability to do heavy physical work or develop new technical skills (Marshall

2001). Depending on region, industry, and firm size, between 25 and 43 percent of employers said they would not hire workers above certain ages, which varied between 55 and 61. A 2002 survey found that most employers in the Netherlands view older workers as more productive and reliable than younger workers, but less adaptable and more resistant to innovation and technical change (Henkens 2005). High health care costs do not damage employment prospects for older workers outside the United States, since in most other countries the government, not the employer, covers most medical expenses.

A 2005 survey found that many employers in the United Kingdom reported favoring younger workers in hiring decisions, perhaps because age discrimination in employment was not illegal in the U.K. until October 2006. About half of surveyed employers had a maximum recruitment age and considered potential length of service in hiring decisions (Metcalf and Meadows 2006). More than one in five said some of their jobs were better suited for workers of certain ages. These employers generally favored prime-age workers over those older than 50 or younger than 25.

Limitations of Attitudinal Surveys

Some important limitations with employer survey data make it difficult to know how to interpret these findings. Most of these surveys collected information from only a few hundred employers, so it is not clear how well they represent all firms. Response rates tend to be quite low, with typically only about one-third of surveyed employers completing the questionnaire. Employers with relatively strong age-related policies are probably more likely than other employers to participate in the survey, potentially biasing the findings. The small number of employers sampled generally make it impossible to examine how attitudes vary across industries. Few

survey-based studies tested whether observed differences in employer attitudes toward older and younger workers were statistically significant or could instead have likely resulted from sampling variation.

How much credence to give survey responses is also unclear. Respondents may tend to understate the role of age in employment decisions (especially since age discrimination is illegal in the United States), or they might portray their policies in the best possible light, biasing the results. The respondent's position within the organization also affects survey results and how they should be interpreted. In some cases, the respondent may report the firm's policy, which may differ from actual practice. In other cases, respondents may report their personal views, which may differ from the prevailing practice within the organization. For example, as noted earlier, older survey respondents rated older workers more highly than younger respondents (Munnell, Sass, and Soto 2006). Finally, the surveys may fail to capture variation in attitudes and policies within establishments, particularly variation across occupations.

Employer Practices Toward Older Workers

Given the difficulties of measuring and interpreting employer attitudes, a better approach might be to gauge actual employer practice. On the surface, there appears to be little direct evidence that older workers fare worse in the labor market than younger workers. As noted earlier, older workers receive higher earnings than younger workers. They also exhibit lower unemployment rates. In the first quarter of 2007, the unemployment rate was 3.4 percent at ages 55 to 64 and 3.7 percent at ages 25 to 54 (Bureau of Labor Statistics 2007a). Additionally, job loss rates are lower for workers ages 55 to 64 than for younger workers (Farber 2005), although the protective effect

of age disappears when the analysis accounts for job tenure (Munnell, Sass, Sato, and Zhivan 2006), suggesting that newly hired older workers face roughly the same job displacement risk as newly hired younger workers. However, Siegel, Muller, and Honig (2000) found that older workers were more likely than younger workers to lose their jobs during the early 1990s recession, reversing the age pattern that prevailed during the 1982–83 recession. And older unemployed adults experience longer unemployment spells than their younger counterparts. In 2006, 28 percent of unemployed adults ages 55 to 64 were unemployed for at least 27 weeks, compared with just 26 percent of those ages 25 to 34 and 20 percent of those ages 35 to 44 (Bureau of Labor Statistics 2007e).

It is difficult to know what to make of these comparisons, however, because they do not control for productivity differences between younger and older workers. Labor market discrimination occurs when factors unrelated to productivity affect the employment relationship. Most economic analyses measure gender and race discrimination by differences in employment probabilities and earnings between men and women and across different racial groups that persist after controlling for observable factors that are likely to affect productivity. This approach does not work when assessing age discrimination, however, because aging per se may affect worker productivity, either positively or negatively. Thus the assumption that older workers are equally productive after controlling for variables such as education, experience, and job tenure—the key assumption in most studies of race and sex discrimination—is not very convincing. A better approach would be to relate individual productivity measures to earnings and examine how these relationships vary by age, but individual productivity is difficult to measure.

Although national employment and earnings statistics indicate that older workers fare at least as well as their younger counterparts, many workers seem to believe that employers favor younger workers and that age discrimination is pervasive. About 16,500 age-related discrimination claims were filed with the Equal Employment Opportunity Commission in 2006, accounting for about 22 percent of all complaints (U.S. Equal Employment Opportunity Commission 2007). By comparison, about 36 percent of all claims were based on race and 31 percent were based on sex. In a 2005 survey of 800 adults working or looking for work, 36 percent said that employers treated older workers less fairly than younger workers and 71 percent said that older workers were more likely to be laid off (Reynolds, Ridley, and Van Horn 2005). Overall, 60 percent of workers ages 45 to 74 responding to a 2002 survey said they felt older workers were the first to go when employers cut back their workforces (AARP 2002). Two-thirds of the same group of respondents said they believed workers face age discrimination in the workplace, based on what they had experienced or seen.

However, fewer workers said they experienced age discrimination themselves. For example, only 7 percent of employed men ages 45 to 73 reported work-related age discrimination between 1966 and 1980 (Johnson and Neumark 1997). Only 13 percent of adult workers in a 2005 survey reported being treated unfairly by their employers because of their age (Reynolds, Ridley, and Van Horn 2005).

About 18 percent of workers ages 51 to 61 participating in the 2004 Health and Retirement Study (HRS) agreed with the statement that their employers give preference to younger workers over older workers when making promotion decisions (table 2).⁴ Men were

⁴ The HRS is a nationally representative survey of older Americans conducted by the University of Michigan with primary funding from the National Institute on Aging. Visit <http://hrsonline.isr.umich.edu> for additional information.

Table 2. Percentage of Older Workers Reporting that Their Employers Favor Younger Workers in Promotion Decisions, by Demographic Characteristics, 2004

	All	Men	Women
Ages 51 to 61			
All	17.6	20.4	15.1 [§]
Education			
Did not complete high school	21.3	28.7	13.7 [§]
High school graduate	17.6	20.5	15.3
Some college	16.5	18.8*	14.7
Four or more years of college	17.3	18.8*	15.6
Race			
Non-Hispanic white or Asian	16.5	19.3	13.9 [§]
African American	21.9*	26.0	19.4*
Hispanic	23.7*	26.8	20.9
Ages 51 and older			
All	16.4	18.5	14.6 [§]
Age			
51 to 55	17.1	20.1	14.4 [§]
56 to 61	18.2	20.7	16.0 [§]
62 to 64	15.4	15.4	15.4
65 to 69	13.3*	11.6*	14.7
70 and older	8.3*	8.5*	8.0*

Source: Author's tabulations from the 2004 Health and Retirement Study (HRS).

* percentage differs significantly ($p < .05$) from the percentage in the first row of the education, race, or age group

[§] percentage differs significantly ($p < .05$) from the corresponding percentage for men

more likely than women to agree with these sentiments, and African Americans and Hispanics were more likely than non-Hispanic whites. Men who did not complete high school were about 10 percentage points more likely than male college graduates to report that their employers favor younger workers, but these feelings did not vary much by education among women. Those who remained employed after qualifying for Social Security retirement benefits were much less likely than workers ages 51 to 61 to report that their employers discriminate against older workers, probably because those who remain employed late in life have better work experiences than those who retire early. Only 13 percent of workers ages 65 to 69 and 8 percent of workers ages

70 and older reported that their employers favor younger workers. It would be informative to examine nonworkers' beliefs about age discrimination, since they may have had worse employment experiences than workers, but the HRS did not ask nonworkers about employer preferences for younger people.

It is not clear how much credence to give these discrimination claims. They are inherently subjective and difficult to document. Some survey respondents may report age discrimination when it does not exist to justify poor labor market outcomes. Nonetheless, respondents in the National Longitudinal Survey of Mature Men who reported age discrimination between 1966 and 1980 were more likely to separate subsequently from their employer and less likely to be employed later than those who did not report discrimination (Johnson and Neumark 1997).⁵ In addition, those who reported discrimination and separated from their employers suffered wage losses of about 10 percent, suggesting that self-reports of age discrimination might reflect unfair treatment.

Quasi-experimental studies provide additional evidence that some older workers face discrimination. An early study investigated how employers might treat older workers by examining how a sample of Harvard Business Review subscribers said they would react to hypothetical management situations (Rosen and Jerdee 1977). The researchers mailed questionnaires to study participants asking how they would handle different scenarios if they were managers, such as dealing with an underperforming employee, allocating training opportunities, and making promotion decisions. Rosen and Jerdee compared responses for

⁵ The analysis focused on individuals who switched from reporting no age discrimination to reporting discrimination, to attempt to net out the effects of unobserved individual differences in the propensity to report discrimination that might be correlated with labor market behavior. It also controlled for general job satisfaction to account for other negative job characteristics that might cause workers to report discrimination.

scenarios that involved younger workers (age 32) and those that involved older workers (age 61). The results suggest that managers generally perceive older workers as less flexible and more resistant to change than younger workers and that they are reluctant to promote older workers to jobs requiring flexibility, creativity, and high motivation. Additionally, the research indicated that managers are less inclined to support career development and training for older workers. A follow-up study completed in 1995 using similar methods also revealed managerial bias against older workers, particularly older women (Rosen and Jerdee 1995).

Although these results suggest that managers continue to hold negative stereotypes about older workers, there are a number of important limitations with the studies. The response rates were quite low, with only 15 percent of those contacted completing the questionnaire in 1995. Because respondents may hold different views toward older workers than nonrespondents, it is unclear how well the study participants represent the views of the underlying population of managers. Additionally, *Harvard Business Review* subscribers may differ from typical managers. Finally, managers may respond differently to hypothetical scenarios than real-world situations.

Other experimental evidence focused on the actual hiring process. Lahey (2005) sent resumes to nearly 4,000 firms in the Boston and St. Petersburg, Florida areas and compared responses for younger and older workers. The resumes, which were faxed in pairs in response to employment ads for entry-level jobs, were identical except for the age of the job applicant, which varied from 35 to 62. Lahey found that resumes from younger women (age 35 or 45) generated significantly more positive responses than those from older women (age 50, 55, or 62). Prospective employers in Massachusetts contacted 9.2 percent of the younger women with a positive-sounding response (but not necessarily an interview offer), compared with only 7.7

percent of the older women. They offered interviews to 5.3 percent of the younger women but only 3.8 percent of the older women. Results were similar for Florida. These findings are not necessarily evidence of age discrimination, but they do suggest that employers prefer younger women over older women in hiring decisions, at least for less-skilled entry-level jobs.

A final piece of evidence about labor market challenges at older ages comes from a study of the effects of fringe benefits on decisions to hire mature workers (Scott, Berger, and Garen 1995). Using data from a 1991 nationwide survey of employers and 1979, 1983, 1988, and 1993 data from the Employee Benefits Supplement of the Current Population Survey, the researchers found that higher health insurance costs, in the presence of prohibitions against age discrimination and discrimination in the provision of fringe benefits, reduced employment prospects for older workers. In all five datasets over a 14-year period, the probability that a new hire was age 55 to 64 was significantly lower in firms with health care plans than in those without, and was also significantly lower in firms with relatively costly plans than in those with less costly plans. However, neither the cost nor presence of retirement plans significantly affected hiring probabilities.

Employers' Willingness to Train Older Workers

Training is a critical activity for an effective and efficient workforce. To remain productive workers must continuously maintain and update their skills, especially when technology is changing rapidly. Training can provide employers with access to the best work assignments, improve their promotion chances, and promote job satisfaction and earnings growth. However, Training activities are costly. Expenses include both the opportunity cost of training—employees

who are being trained have less time to produce goods and services than those who are in training—and the direct cost of trainers' time and related equipment. Recent estimates suggest that U.S. employers spent between \$46 and \$54 billion on training in 2003 (Mikelson and Nightingale 2004). The government spent between \$3.7 billion and \$6.0 billion on training in 2002, primarily at the federal level.

Training investments can be classified into two broad types. General training is investment in skills that are easily transferable to other employment situations, and specific training is investment in skills that can be used only at the current employer. Economists have noted that employees generally pay for the costs of general training themselves, through wages that are lower than the wages they could demand if they received no general training (Becker 1975). Because employers cannot generally prevent workers from quitting, newly trained employees can move to new employers and command higher wages that reflect their enhanced skills. The former employer that provided training would lose any training investment it made. To prevent workers from extorting employers in this way, the theory goes, workers pay general training costs themselves through lower wages. Employers and employees generally share the cost of firm-specific training, because neither party can appropriate the productivity gains from training for themselves by terminating the employment relationship. Firm-specific training is forfeited when the employment relationship ends. The empirical evidence indicates that employers pay most training costs themselves (Neal 1995; Parent 1999; Parsons 1972; Topel 1991), suggesting that training is generally firm specific, or at least that the combination of different skills that a particular employer promotes is unique (Lazear 2003).

Employers appear somewhat reluctant to train older workers, perhaps because firms, not employees, bear most training costs. Older employees have fewer remaining work years before retirement than younger employees, and employers may fear that they will not be able to recoup their training costs before older workers retire and leave the firm. On the other hand, older workers tend to have lower turnover rates than their younger counterparts (Farber 1999). The evidence suggests that older workers are less likely to obtain employer-sponsored training than younger workers. A 1995 survey indicates that 51 percent of workers ages 55 and older in large and medium-sized establishments received formal employer-sponsored training during the previous 12 months, compared with 79 percent of those ages 25 to 34, 75 percent of those ages 35 to 44, and 65 percent of those ages 45 to 54 (Frazis et al. 1998). Older workers also receive less intensive training. According to the same survey, workers ages 55 and older averaged 17 hours of informal on-the-job training between May and October, 2005, compared with 30 hours for those ages 35 to 44 and 39 hours for those ages 44 to 54.⁶

Conclusions

Although the available evidence on employment prospects at older ages is incomplete and sometimes inconsistent, a careful review reveals that many firms have serious reservations about hiring and retaining older workers. Many employers report lingering concerns about what they perceive as older workers' limited creativity and lack of willingness to learn new things, while at the same time telling surveyors that they value older workers' experience, knowledge, maturity, and work ethic. Many firms also express concern about the cost of employing older people, even

⁶ However, older workers may receive less training because they tend to have more experience than younger workers and thus may need less training.

though actual cost differentials by age are relatively small. Most workers believe that age discrimination in the workplace is widespread, and nearly one in five workers in their 50s reports that their own employer favors younger employees over older employees. Older workers also receive less on-the-job training than their younger counterparts. Additionally, quasi-experimental studies suggest that managers typically perceive older workers as less flexible and more resistant to change than younger workers and that they are reluctant to promote older workers to positions that require creative, highly motivated individuals.

Employment prospects at older ages may be especially bleak for rank-and-file workers and those with limited skills. Well-educated managers and professionals are more likely than less-skilled workers to accumulate the specialized knowledge that employers say they value in older workers. More employers report in surveys that older managers and professionals outperform their younger counterparts than report that older blue-collar workers perform better. Among working men in their 50s, those who did not complete high school are about 10 percentage points more likely than college graduates to report that their employers favor younger workers.

Older people appear to encounter particular difficulty when seeking employment. Recent evidence suggests that employers hiring entry-level workers prefer younger job applicants to older applicants. Employers' reluctance to hire older workers creates special problems for older people who lose their jobs, especially if they do not yet qualify for Social Security. About one in five workers ages 51 to 55 in 1992 were laid off from their jobs before they reached age 62 (Johnson, Mermin, and Murphy 2007). Older workers displaced from their jobs are generally unemployed for long periods and suffer substantial wage losses when they become reemployed

(Chan and Stevens 2001; Couch 1998; Johnson and Kawachi 2007). Employers that are reluctant to hire older job applicants may be willing to keep incumbent older employees on the payroll. Many incumbent workers enjoy several advantages over job applicants. Incumbents have already proven themselves to their employers and thus are less risky than new hires, many have acquired specialized skills and knowledge that their employers value, and they do not require as much additional training as new hires.

Managerial attitudes toward older workers may improve in coming years as the population and workforce age, especially if labor and skill shortages develop in certain industries or occupations. Perceptions of older workers tend to be more favorable in workplaces with relatively high concentrations of older workers, which will become more common as the workforce ages. Similarly, older managers will likely become more prevalent in the future, and they generally have higher regard for older workers than younger managers. Also, as younger workers become relatively more scarce in the next few decades, employers may be forced to turn more often to older workers, likely inducing new attitudes and policies. Managerial attitudes have probably not changed much yet at many employers, because most firms have not yet addressed the challenges created by the coming aging of the population (Young 2007).

Ongoing changes in the nature of work may also make older workers more attractive to employers in the future. Although some managers question older people's physical strength and stamina, the physical demands of work have declined steadily over time. For example, between 1971 and 2006 the share of jobs involving physically demanding work declined from about 57 percent to 46 percent (Johnson, Mermin, and Resseger 2007). As these trends continue, managers may be more likely to hire and employ older people.

In the meantime, policymakers can take steps now to soften employer attitudes toward older workers. In Arizona, for example, the governor's Advisory Council on Aging has launched a public education campaign on the value of older workers (Arizona Governor's Advisory Council on Aging 2006). Similarly, the Arkansas Department of Workforce Services has teamed with AARP to improve awareness and appreciation of older workers by developing relationships with the public workforce system, chambers of commerce, national and local training providers, trade associations, labor unions, community organizations, policymakers, and business leaders (Arkansas Department of Workforce Services 2007). These types of efforts, which are being duplicated around the country (NGA Center on Best Practices 2007), can increase employment opportunities for older people and accommodate the work preferences of the growing number of boomers who say they want to delay retirement.

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