#2004-10 October 2004

IS EARLY RETIREMENT ENDING?

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The AARP Public Policy Institute, formed in 1985, is part of Policy and Strategy at AARP. One of the missions of the Institute is to foster research and analysis on public policy issues of importance to older Americans. This paper represents part of that effort.

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FOREWORD

After decades of decline, the labor force participation rate for the older population in the United States began inching upward in the mid-1980s. As of 2003, nearly 36 percent of persons aged 55 and older were working or looking for work, up from just over 30 percent in 1985 but still well below the 43 percent of 1950. Moreover, while the trend toward ever *earlier* retirement may have come to an end, early retirement remains the norm. Only a minority of workers remain in the labor force after the normal retirement age, although that figure is also rising.

Still, older worker surveys and public opinion polls find that very high percentages of workers, e.g., 70 to 80 percent, expect to work at least part time in retirement. While many workers say they will have to work, even more plan to keep working for the pleasure or purpose work gives them. Do findings such as these herald the end of early retirement? Will high proportions of workers remain in the labor force beyond the normal retirement age? Or is it more likely that workers will remain in the labor force somewhat longer than they have in recent decades but for the most part continue to retire early? What might foster labor force attachment later in life?

In *Is Early Retirement Ending?*, Sophie M. Korczyk of Analytical Services reviews recent trends in the labor force participation of, and Social Security benefit receipt by, older persons in the United States and reports on the results of an extensive review of economic studies of factors affecting work and retirement decisions. She then examines a number of policy options designed to encourage prolonged worklives and delayed receipt of Social Security benefits.

Korczyk concludes that reports of the end of early retirement may indeed be "premature." Furthermore, judging from the literature she reviewed, there may be no easy ways to get people to work longer. She observes that changes in Social Security's early retirement age and improvements in Social Security's delayed retirement credit seem likely to have a greater impact on encouraging delayed retirement than benefit cuts. However, given the diversity of situations that people face, Social Security changes alone might not influence very many retirement decisions. As Korczyk notes, health status, health care coverage, and labor market conditions exert a more powerful influence on work and retirement decisions well before the age of eligibility for Social Security. If the labor force participation rate at upper ages is to increase substantially, a multifaceted approach to prolonging the worklife is likely to be necessary.

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ACKNOWLEDGMENTS

The author wishes to thank Hilary Waldron of the U.S. Social Security Administration for helpful insights into her work on early retirees. She would also like to thank the several anonymous individuals who reviewed an earlier draft for their thoughtful comments. All errors are solely the author's responsibility.

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EXECUTIVE SUMMARY

Background

People are now living longer, and living healthier lives for most of that added time. Although increased longevity and improved health represent major social accomplishments, the combination of early retirement and longer life places strains on the Social Security and employer pension systems.

Some argue that people who expect to live longer should work longer as well. Longer careers could be good for workers, who would benefit from the added mental and social stimulation as well as the opportunity to accumulate more retirement assets. Society, in turn, would benefit from being able to retain experienced workers longer and from fiscal relief to the Social Security system.

Purpose and Methodology of the Report

This report reviews recent trends in labor force participation and Social Security pension receipt among older workers. It then examines selected descriptive statistics, economic research studies, and literature reviews on how the structure of Social Security benefits, older workers' health status, access to health care coverage, and labor market conditions affect older workers' work and pension receipt decisions. This examination provides a context for developing policy options to encourage older workers to work longer and delay claiming pension benefits.

Empirical Results

Reports of the "end of early retirement" may be premature. After about 15 years of almost no change, the median age at labor force exit began to decline again in the late 1990s. On the other hand, the average age at which workers claim Social Security retirement benefits has been virtually unchanged since 1985, at about 63¹/₂ years.

The Social Security program is both an important tool and a target of retirement policy. Yet recent research on the likely retirement effects of program design changes is not encouraging.

Many people are likely to work longer if the early retirement age (ERA) is raised, but their benefits at retirement would increase as well. As a result, raising the ERA might have no net effect on the Social Security trust funds. In contrast, cuts in early retirement benefits—holding the benefit eligibility age constant—seem less effective in encouraging longer workforce participation, and could also have undesirable distributional effects, particularly on workers in poor health.

Increasing the normal retirement age (NRA) is less likely to affect labor force participation and pension receipt decisions, in part because so many workers claim Social Security benefits upon reaching the ERA, and have done so for many years. Increasing the delayed retirement credit

(DRC) for workers who delay applying for benefits past NRA would have more impact on labor force participation and pension receipt delays than changes in the NRA, but even this effect is still not large. Liberalizing the Social Security earnings test appears to have little effect on the labor force participation decisions of older workers, but may increase the proportion of beneficiaries who claim benefits at ERA.

The desirability of various options depends on whether the primary goal is getting people to work longer, or reducing Social Security program liabilities. Some analysts believe changing the ERA would not affect the financial status of the Social Security trust funds even if it affected labor supply; on the other hand, changing the NRA would affect the trust funds favorably but is unlikely to affect the labor supply in any substantial way.

Health status may moderate the effect of changes in Social Security benefits on retirement decisions. Health status affects the retirement decision through several channels. Poor health accelerates the timing of retirement, as do adverse changes in health. Although logic might suggest that people in physically demanding jobs retire sooner due to the toll such jobs take on their health, the research on that issue is not conclusive. Some research suggests, instead, that people take jobs that are well matched to their physical capacities, and thus people in physically demanding jobs may not retire sooner than those in less demanding jobs. Low subjective survival probabilities accelerate retirement, presumably because people who do not expect to live a long time want to spend at least some of their remaining life retired. Early Social Security retirees tend to die sooner than those who wait to NRA to claim benefits, probably reflecting the fact that people in poorer health claim Social Security benefits as soon as they can.

The availability of health care coverage plays a role in workers' decisions about the receipt of both Social Security retirement and disability benefits. Having coverage only through one's own employment discourages claiming of both types of benefits, but having an alternative source of coverage such as through a spouse or in an employer-sponsored retiree health plan encourages it.

The evidence on labor market conditions facing older workers is mixed. Descriptive statistics suggest that most who want jobs stay employed, but that those who lose their jobs in the last decade before NRA face difficult circumstances. Econometric evidence suggests that those who lose jobs at this time of life are more likely to retire than those who have not experienced a job loss. Among those who continue to work after claiming a pension, circumstances vary as well. Many older workers continue to work because they have to, while for others, work takes on the characteristics of a leisure activity chosen in preference to unstructured time.

Conclusions

The report concludes that a great deal is known about the determinants of retirement: some people retire because they can, others because they need to do so. Although eligibility for Social Security benefits underlies most workers' retirement decisions, other factors can be far more powerful and operate long before the ages when most people become eligible for Social Security benefits. The research on the determinants of retirement reviewed in this report also suggests that older workers face very diverse circumstances. Therefore, Social Security changes alone

might not change very many decisions, and multiple strategies might be required to promote increased labor force participation in later life. In particular, although the report does not consider the effects of employer pensions on retirement decisions, it identifies research suggesting that private pensions are important.

The literature reviewed in this report suggests two broad groups of strategies:

- Changing how workers see their choices between work and retirement and
- Changing the options they face in choosing between work and retirement.

Changing Choices. People might choose to work longer if they got more or better information about their economic prospects in retirement, or if they had a better understanding of the structure of Social Security benefits.

Learning to Take the Long View. Borrowing a concept from the health care coverage industry, "consumer-directed" retirement promises to be the norm for baby boom retirees. But just as there were no models for the civil rights movement, the youth movement, and the women's movement of the last generation, so also is there currently no model for a retirement where the (prospective) retiree makes all the decisions, bears much of the costs through salary reduction or other pre-tax contributions, and faces substantial risks.

There is evidence that older workers have not caught on that providing for their retirement is largely up to them. Older workers without savings, without enough savings, or who have dissipated the retirement savings they once had, may be ready to hear the message that working longer is an option.

Educating Workers about Social Security. If it is desired to keep more people in the labor force longer and discourage them from claiming early Social Security retirement benefits, simply educating them about the structure of those benefits could also work. There is some evidence of a relationship between education and early claiming, with better-educated workers claiming benefits somewhat later. It may be that more education about claiming and better education about the value of delaying benefits could reduce early retirement rates.

Changing Options. People might want to work longer if work became more attractive and if they felt more comfortable with the skills required. Changing health care coverage arrangements would also change both the employee's reward for working and the cost to employers of expanding employment of older workers.

Making Work More Attractive. If work were more attractive, both the choices people make and the budget constraints they face could change. Work could become more attractive with more flexible hours, perhaps flexible location arrangements such as telecommuting, and better pay and benefits for part-time workers. In particular, many people of all ages might like flexible hours to accommodate physical limitations, family responsibilities, or leisure pursuits.

Labor Market Interventions. Knowing *how* workers trade wages for flexibility does not necessarily tell us whether this is how they *want* to trade these dimensions against each other. Unlike younger workers, many older workers who do not like the tradeoff can leave the labor force and live on a pension or savings. A poorly paying job may be better than gardening, watching television, or playing bridge, but a well-paying job with some flexibility in hours and other characteristics may be even better. Changing the wage-flexibility tradeoff facing older workers (and some younger workers such as women with children) could draw more into work. Expanding existing programs that assist older workers with job searches, especially for lower-skilled workers, could also help.

Health Care Coverage. Most people under age 65 who have health care coverage obtain it through their own employer or that of a spouse. There is substantial evidence that the prospect of losing coverage discourages workers who are not yet eligible for Medicare from leaving the labor force. More options for affordable coverage outside the workplace would therefore probably accelerate labor force exit among people who would otherwise be able to continue working. At the same time, however, divorcing health care coverage from employment could allow both employers and employees to make labor market decisions solely on the grounds of productivity. Employers would not face higher health care costs as their workforces aged. Employees, in turn, would be able to make employment-related decisions based on the quality of the job and its compensation, rather than on the availability and quality of health care coverage.

INTRODUCTION

In 2008, the leading edge of the baby boom will reach age 62, the earliest age at which Social Security¹ retirement benefits are available. If the behavior of prior generations is any guide, most will probably claim their Social Security benefits before they reach age 65. More than two-thirds of retirement benefits paid to men in March 2003 and almost three-quarters of those paid to women were early retirement benefits (U.S. Social Security Administration 2003).

People are now living longer, and living healthier lives for most of that added time.² Accordingly, the aging of the U.S. population places strains on the Social Security system. The Old-Age and Survivors Insurance (OASI) Trust Fund is currently projected to be exhausted by 2044, and the combined OASI and Disability Insurance (DI) funds are expected to be exhausted by 2042 (U.S. Social Security Administration 2004). The Congressional Budget Office (2004) is more optimistic, projecting that the trust funds would not become exhausted until 2052, but even this more distant date would occur within the life span of most of today's younger and mid-career workers.

Some argue that people who expect to live longer should work longer, delay claiming their Social Security pensions, or both. Longer work could benefit workers, who could accumulate more savings; benefit society, which could avoid the premature retirement of qualified workers; and ease the strain on the Social Security system.

The Social Security Amendments of 1983 contained several provisions aimed at encouraging workers to wait longer to claim benefits, including (1) phased increases in the normal retirement age (NRA) for receiving full, unreduced Social Security retirement benefits; (2) a phased increase in the delayed retirement credit (DRC) that increases benefits for workers who delay applying for retirement benefits past NRA to 8 percent per year for those reaching age 62 after 2004; and (3) a phased reduction in the retirement benefits available at age 62. (These changes are discussed further later in this report.)

Some observers believe even more incentives and penalties will be necessary to encourage longer work. Some have proposed accelerating the scheduled increase in the NRA and raising the early retirement age (ERA). Other possible program changes include reducing early retirement benefits and further increasing the credit for those who delay claiming benefits beyond the NRA (President's Commission 2001).

Purpose and Methodology of the Report

This report reviews recent trends in labor force participation and Social Security pension receipt among older workers; examines several threads of the literature on the major factors believed to influence older workers' work decisions; and provides a context for evaluating policy options for encouraging older workers to work longer and delay claiming pension benefits.

¹ When the term "Social Security" is capitalized in this report, it will refer to the U.S. Old-Age, Survivors and Disability (OASDI) program. When it is not capitalized, it will refer to social insurance programs around the world.

² See research reviewed in Korczyk (2002).

Purpose. The report focuses largely on how four factors affect retirement decisions:

- The structure of Social Security benefits;
- Older workers' health status and survival expectations;
- The availability of health care coverage, either through one's own employer or through that of a spouse; and
- Labor market conditions.

Methodology. The report pulls together four separate—and, to a great degree, nonoverlapping—branches of the economic literature on retirement.

The first branch of this literature attempts to identify the role of Social Security benefits in the retirement decision and the potential impact of benefit structure changes on the decision. These studies typically include controls for such influences as health status and health care coverage, but do not model these variables in detail.

The second branch of the retirement literature considered here examines the relationships between various measures of health status and older workers' retirement plans and decisions. These studies typically include controls for various financial influences on retirement, but do not model the potential effects of changes in Social Security retirement benefits or other benefits.

A third branch of the retirement literature considers the effect of health care coverage availability on the retirement decision, including coverage as an employee or spouse of an employee, employer-provided retiree coverage, continuation coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA), and Medicare coverage. These studies typically include controls for health status but, again, do not model the effects of changes in Social Security retirement benefits.

A final topic concerns labor market conditions facing older workers. This topic is examined using both current data and the results of research studies.

Some topics covered in this report—prominently the impacts of health status and employerprovided health care coverage on the retirement decision—have been the subjects of extensive literature reviews (for example, Currie and Madrian 1999 and Gruber and Madrian 2002). Where such literature reviews are available, the conclusions of those reviews are generally cited, and not always the articles considered in those reviews.

The report focuses largely, though not exclusively, on the results of recent research studies and reviews. Recent studies reflect the Social Security system and other important retirement influences the way they are today, not the way they were several decades ago. Recent studies

also benefit from better and more complete data on the Social Security and other incentives facing prospective retirees (Coile and Gruber 2000a).

Topics Not Covered in This Report. In connection with the topics that are the focus of this report, the report also discusses some research results on the determinants of disability retirement and on the effects of employer pensions on retirement. However, the latter topics are not given as prominent attention as the bulleted topics listed above. This limitation was imposed to focus the discussion on those factors likely to affect the largest number of retirees. Since eligibility for disability retirement requires a substantial physical impairment, disability retirement is not an option for most prospective retirees. Similarly, more than half of all private-sector employees are not covered by employer pensions, so these prospective retirees will not factor employer pensions into their retirement decisions.³

The report also does not cover phased retirement, which can be an important interim state between full workforce participation and full retirement. AARP's Public Policy Institute will publish a future report on this topic.

³ An additional reason for limiting the discussion of employer pensions in the present report is that defined benefit and defined contribution plans appear to affect retirement decisions differently (see, for example, Friedberg and Webb 2003).

TRENDS IN LABOR FORCE PARTICIPATION AND PENSION RECEIPT

This section establishes key definitions that will be used in this report and examines the data on labor force participation and pension receipt.

What Is Retirement?

There are many ways to define or measure retirement, including whether one is working, how much one works, and whether one collects a pension. To some it is an age, or perhaps a state of mind:

- A flight attendant—who was also a part-time substitute teacher during her flying career—retires from flying to teach full time.
- An air force officer completes 20 years of military service, claims a military pension, and begins a new full-time career in the insurance industry.
- A federal civil servant accepts a federal retirement pension and takes a full-time position with an international development organization.
- An executive accepts a corporate pension and takes a part-time teaching job in his field of interest.

For some purposes, all of these persons are clearly "retired." Yet in federal labor force statistics, all would appear as employees based on their current employment income (Purcell 2000, 2003). Consequently, various definitions of retirement can overlap. Federal statistics also do not distinguish among "bridge jobs," where a worker may change from a full-time job to a temporary or part-time job before retiring fully; or "phased retirement," where a worker may remain in the career job but be on a part-time schedule, also in transition to retirement; and ordinary part-time employment.⁴

To some, retirement is defined by age—as long as one is of a certain age, one is, at least potentially, "retired" (Hill 2002). But for some older persons, reaching "retirement age" does not always mean reaching pension age. These persons may continue to work because they do not yet qualify for a pension, or because their pension is not large enough to provide for their needs, or because they like their jobs (see further discussion later in this report). The definition of retirement can also depend on how it is measured—whether from self reports, time spent at work, or the nature of one's job (Panis et al. 2002).

To avoid confusion among these concepts and overlapping states, the present report will generally define retirement as ceasing work, claiming a pension, or both, depending on the context. Some discussion will also be devoted to pensions based on disability, but the major focus of the present report is on the responsiveness of retirement decisions to policy changes.

 $^{^4}$ But see research studies on these job patterns reviewed in Purcell (2000, 2003) and Hill (2002).

Who Is Working?

Although ever-earlier retirement seems to be part of the American dream, the American experience is not quite as clear. Quinn (1999) announced some years ago that the era of "earlier and earlier retirement" had been over since the mid-1980s.⁵ He found that rather than continue to decline as it had since the 1960s, labor force participation rates among older workers had flattened out and even risen, beginning in the 1980s, to as much as 18 percentage points above the expected trend line for men ages 60 to 69 in 1998. He found further that most of the trend away from early retirement was noncyclical—not a function of the unemployment rate, in other words. He attributed the trend to such factors as changing attitudes toward work, better health, less arduous jobs, and the shift away from defined benefit plans, which often encourage early retirement, and toward defined contribution plans, which are age-neutral.

Cross-sectional increases in labor force participation among older workers have continued. Between 1994 and 2003, employment increased among all groups ages 55 to 69 (Table 1). Although the largest increase—7.9 percentage points—occurred among women ages 55 to 61, substantial increases also occurred among men and women eligible for both early and normal Social Security retirement benefits.

Older workers are thus more likely to be employed than were previous cohorts of the past few decades. Among older workers of all ages, furthermore, the percentage working full time increased between 1994 and 2003 (Purcell 2000, 2003). However, older workers still tend to withdraw as they age, much as recent generations did.

Who Is Retired?

That people retire seems obvious, but when? Visitors to the International Spy Museum in Washington, D.C. are warned, "Nothing is what it seems." Unfortunately, even the answer to this seemingly simple question seems to be subject to the same warning.

Since this report defines retirement as either ceasing work or claiming a pension, there can be at least two retirement ages with important public policy consequences: the age at which one withdraws from the labor force, and that at which one claims a Social Security or other retirement pension.

Labor Force Exit. Since one can claim a pension and continue to work, the age at which one exits the labor force—stops working—would seem to be the "purest" measure of retirement as it is commonly understood. The median age of labor force exit has been examined by Gendell (2001) using 50 years of *Current Population Survey* (CPS) data on workers ages 50 and older. The median age in year of exit for reasons other than death declined by about 3.5 years among men and nearly 5 years among women between the early 1950s through the early 1970s (Table 2).⁶ The median ages were roughly stable between 1975 and 1990, but began to decline slightly

⁵ Munnell, Cahill, and Jivan (2003) observe a similar pattern in male retirement ages.

⁶ The method used to calculate the medians presented in Table 2 is explained in Gendell and Seigel (1992).

again in the 1990s. This pattern would seem to contradict the labor force participation trends heralded by Quinn.

Claiming Social Security Benefits. Labor force participation data thus suggest that more older workers are working, while data on labor force exit suggest older workers are retiring sooner than in earlier years. Social Security benefit award data will not necessarily resolve the impasse. The percentage of workers claiming benefits at age 62 and at ages 62 to 64 fluctuates from year to year and displayed a slight downward trend between 1985 and 2001 (Figure 1).

From 1985 to 2001, the average age at which men claimed Social Security retirement benefits, calculated in 5-year averages, was stationary at 63.7 years (Table 3, first column). The average age for women, in contrast, trended upward slightly over this period, reaching 63.7 years in 2001 (Table 3, second column).⁷

But the combined average Social Security retirement and disability award age is roughly a full year lower for both men and women than the average age for retirement benefits alone (Table 3, third and fourth columns). Like the median labor force exit age, the average "combined disability and retirement" age also trended downward during the 1990s after an extended period of stability (Gendell 2001). The combined average age trend displayed in Table 3 includes disability benefit recipients as young as age 50, however, so it is not surprising that their inclusion lowers the average age at benefit award.

Trends in pension receipt thus differ according to the type of Social Security benefit considered. Most workers are not disabled when they reach retirement age. At the same time, both disability and old-age pensions provide ways for older workers to leave the labor force. We conclude that retirement and disability benefits and beneficiaries are different enough that they should not be combined in assessing retirement trends.

Reconciling Participation, Exit, and Pension Award Data

Gendell (2001) has reconciled higher labor force participation rates among older workers with earlier, or even unchanged, average retirement ages by analyzing the changing age distribution of the labor force and changing patterns of labor force withdrawal by age.

The over-45 workforce got markedly younger between 1980 and 1995, with over 9 percentage points more men in the 45-to-54-year-old category in 1995 than in 1980, and nearly 10 percentage points more women (Table 4 and Figures 2 and 3). Data for 2002 show only a slight re-aging of the workforce toward its 1980 age distribution.

With the age distribution of the labor force changing so substantially, the average age at withdrawal would have declined even if all age groups had left the workforce at the same net rates in 1995 to 2000 as they did in 1980 to 1995. But in fact withdrawal rates fell less among

⁷ The data presented in Table 3 include an unusually high average retirement age for women in 1997. This figure may represent an above-average number of conversions of non-disabled widows to retired worker benefits in that year (Purcell 2003).

workers ages 45 to 59 than among workers 60 and older (Gendell 2001). This difference in withdrawal rates, combined with the large reversal in the age distribution of the older workforce, led to the decline in the average age at exit from the workforce *despite* the increase in labor force participation at older ages.

Importantly for retirement policy, in 2000 to 2005, the net withdrawal rates of those 45 to 64 is projected to fall more than those of workers ages 65 and older (Gendell 2001). If this forecast proves accurate, the median age at exit from the labor force would rise. Since ages at labor force exit and Social Security benefit award tend to follow generally similar patterns, the age at which workers accept Social Security benefits would rise as well. With older workers working longer and delaying Social Security benefit receipt, the system's finances would be likely to improve.

SOCIAL SECURITY PROGRAM PROVISONS AND RETIREMENT

One of the major reasons many observers give for wanting older workers to work longer is the likely positive financial impact on the Social Security program. Whether the Social Security system's finances improve if workers work longer depends on whether working past the early retirement age to the normal retirement age or beyond the NRA is under discussion, and on whether jobs are available for older workers (see further discussion of the effect of labor market conditions later in this report).

But there is some disagreement among researchers about how older workers would respond to changes in Social Security early and normal retirement provisions, as well as the secondary changes in disability retirements that might be generated. This disagreement emerges even among researchers using the same database, the *Health and Retirement Study* (HRS).⁸

The present report does not attempt an exhaustive survey of the literature on the retirement effects of the Social Security program because numerous such surveys exist.⁹ Rather, it takes a detailed look at a selection of recent studies with two goals in mind: to show how the answer to the policy question depends on how the question is phrased, and to point out where some of the greatest sources of uncertainty arise about policy impacts.

In evaluating likely behavioral responses to such policy changes, researchers have asked three basic questions:

- Why do people retire when they do?
- How would retirement and disability benefit receipt patterns change if benefits changed?
- How would the Social Security trust funds be affected?

We consider separately explorations of the likely effect of changes in the incentives for early and normal retirement.

Changing Early Retirement Benefits

Researchers have examined eliminating early retirement benefits entirely, moving the age for early retirement benefits forward, increasing the early retirement penalty (ERP), and increasing the penalty for accepting benefits at age 62.

⁸ The University of Michigan Health and Retirement Study (HRS) surveys more than 22,000 Americans over the age of 50 every two years. The study paints an emerging portrait of older Americans' physical and mental health, insurance coverage, financial status, family support systems, labor market status, and retirement planning.

⁹ For extensive citations of literature reviews and surveys see Gustman and Steinmeier (2002); Coile and Gruber (2000a); Panis et al. (2002); and Anderson, Gustman, and Steinmeier (1999).

Why do people retire when they do? The reason for the spike in retirements at age 62 has been one of the enduring puzzles in retirement research (see, for example, studies cited in Panis et al. 2002). It is clear, of course, that the Social Security system is responsible for these spikes— without access to early retirement benefits, only those workers with employer pension benefits payable at that age or with sufficient savings to support themselves (and with health care coverage, which is addressed later in this report) would be able to leave the workforce before the NRA.

The problem that has perplexed researchers is exactly *how* Social Security causes the early retirements, since the benefit reduction currently imposed at early retirement is roughly actuarially fair. One explanation that has been advanced for the prevalence of early retirement is that early retirees have high rates of time preference: they weight the loss of this year's retirement benefits more heavily than they do the larger annual benefits they would receive by waiting until the normal retirement age and so they find the actuarial adjustment for delaying retirement inadequate (Gustman and Steinmeier 2002).

But analysis by Coile and Gruber (2000b) suggests that although the early retirement benefit reduction may be actuarially fair for the typical worker, it may not be actuarially fair for everyone. Using the HRS, they found that there is substantial heterogeneity in Social Security incentives for work between the ages of 62 and 64, with about half of the HRS sample experiencing a net tax on work at age 62. Age, earnings, and average indexed monthly earnings (AIME), a key computation in determining Social Security benefits, were important in explaining variation in these incentives across individuals. Their work does not show, however, whether it is exactly those persons who face disincentives to continued work who are responding by retiring early.

Another way to figure out why people claim early retirement benefits is to examine the circumstances of actual retirees using household-level data. Studies using successive waves of the HRS and other databases such as the Census Bureau's *Survey of Income and Program Participation* (SIPP) have consistently found that most people who claim Social Security early retirement benefits do so because they want to and not because they need to. That is, they either have other sources of income (such as pensions) that will support them until they qualify for normal retirement benefits, or they have jobs at which they can work until the NRA.

Some claim early retirement benefits because they need to—they have little chance of supporting themselves by working and limited or no other sources of income. But these numbers appear to be small. Using the first two waves of the HRS, Burkhauser, Couch, and Phillips (1996) found that fewer than 1 in 10 male early Social Security beneficiaries were *both* in poor health—which could have reduced their ability to keep working—*and* in a household with no income from pensions. Estimates using the SIPP confirm this result (U.S. Congress, Congressional Budget Office 1999).¹⁰ Yet many people with self-reported¹¹ disabilities continue to work well into their later years, while most who retire early have no disabilities.

¹⁰ Uccello (1998) reports similar results.

¹¹ None of the studies available for this report contained objective information on individuals' disability status.

How Would Retirement Patterns Change If the Structure of Benefits Changed? Observing the circumstances of early retirees does not necessarily tell us how their behavior would change if the incentives they face were to change. Five recent studies examine the likely results of selected policy changes. These studies are not all directly comparable due to design differences, but all tend to point in the same general direction: changing early retirement benefits is less likely to affect retirement patterns than changing the ERA.

Reducing Early Retirement Benefits. Mitchell and Phillips (2000) use a life-cycle model of retirement behavior to simulate the effects of cutting early Social Security benefits on the probability that HRS respondents would select normal retirement, early retirement, and disability retirement pathways into retirement (Table 5). This study is of interest because it includes respondents receiving disability benefits; many other studies of benefit claiming explicitly exclude disability beneficiaries.

Mitchell and Phillips estimated the effect of reducing early retirement benefits by 15 percent. They found a 2.5 percent decline in the probability of early retirement, a 1.8 percent increase in the probability of normal retirement, and a roughly 0.6 percent increase in the probability of disability retirement. In other words, most beneficiaries would accept lower benefits rather than retire later. The largest percentage decrease in expected retirement wealth would fall on those workers with the lowest retirement wealth—generally the poorest, who are more likely to be black, have less education, and be in poorer health. In similar results to those of Mitchell and Phillips, Panis et al. (2002) found that increasing the early retirement penalty to 1 percent per month—an approximate decrease in age 62 retirement benefits of 16 percent—would have little or no impact on labor force participation.

Gustman and Steinmeier (2003) explored the effects of Reform Model 3¹² as proposed by the President's Commission to Strengthen Social Security (President's Commission 2001). One component of Model 3 would lower age 62 benefits to 63 percent of full benefits, while raising the DRC to 10 percent per year of delay. A parallel change for spouse benefits would lower age 62 benefits to 58 percent from 65 percent under current law.

Gustman and Steinmeier projected that these increased actuarial rewards to continued work contained in Model 3 would reduce age 62 retirements in 2075 by 3.2 percentage points. Since they projected an increase in retirement at age 62 of 8.7 percentage points without any policy interventions, these changes alone would reduce that trend by more than one-third.¹³

Eliminating Early Retirement Benefits. Mitchell and Phillips (2000) considered the potential effects of eliminating early retirement benefits entirely. If early retirement benefits were no longer available, they found that more than twice as many HRS respondents would be likely to work until the NRA as to file for disability retirement.

¹² Model 3 is the only model that contains proposals designed explicitly to raise the age at which people are eligible for benefits.

¹³ Other elements of Model 3, including the addition of voluntary personal accounts to the Social Security system, could accelerate the trend toward earlier retirement.

Delaying Early Retirement Benefits. Three recent studies have projected the likely effects on retirement ages of delaying the age of eligibility for early retirement benefits by one, two, and three years. All three studies find that delaying the availability of early retirement would affect the retirement decisions of a substantial number of those who currently retire early.

Panis et al. (2002) find that moving the ERA from age 62 to age 63 can shift more than half of the age 62 retirements to age 63. Gustman and Steinmeier (2002) use the HRS to estimate a structural model of retirement and wealth aimed at explaining the peaks in retirement at ages 62 and 65. They project that raising the ERA from 62 to 64 would shift about three-fifths of age 62 labor force departures to age 64.

Gruber and Wise (2004) summarize the results of a multinational study examining social security program incentives to retire and the proportion of older workers no longer in the labor force. The study finds that, across all 12 countries included, delaying the age of first eligibility for benefits by three years would reduce the proportion of men ages 56 to 65 who are out of the workforce by an average of 23 to 36 percent.

In the U.S. article in this compilation, Coile and Gruber (2004) use the HRS to explore the effects of delaying the ERA and the NRA by 3 years each, to ages 65 and 68, respectively. They find that these changes would raise the chances that a person age 65 would still be in the workforce by about half—to 0.68 from the baseline probability (that is, the probability with no policy changes) of 0.46.

Modifying or Eliminating the Earnings Test. The Social Security earnings test reduces benefits to Social Security recipients whose earnings exceed a certain threshold. For calendar year 2004, persons under the NRA for the entire year may earn \$11,640 before their Social Security benefits are reduced. Above this income level, Social Security benefits are reduced by \$1 for every \$2 of excess earnings. The test has been eliminated for beneficiaries above the NRA, but still applies to those ages 62 to the NRA.

Many people do not understand, however, that benefits are refigured after attainment of NRA to reflect pre-NRA benefits lost in whole or in part to the earnings test (Gruber and Orszag 2001). The adjustment works as follows:¹⁴

When a person elects to receive retirement benefits prior to NRA, those benefits are reduced based on the number of months that benefits are paid prior to attainment of NRA. For example, for people attaining age 62 in 2000, full retirement age was 65 and 2 months. A person retiring at age 62 in July 2000 had a reduction factor of 38 months. The amount of the reduction is 5/9 percent for each of the first 36 months and 5/12 percent for each additional month. The reduction is computed by multiplying 36 by 5/9 percent (20 percent) and 2 by 5/12 percent (0.83 percent). The total reduction of 20.83 percent will apply to all benefits, even those after full retirement age.

¹⁴ The following explanation was graciously provided by the Social Security Administration help line.

The Social Security Administration refigures the reduction factor in the month full retirement age is attained. At that time, any month for which a benefit was not paid because of the annual earnings test is eliminated from the reduction factor. The new higher benefit is payable for the month of attainment of full retirement age and all subsequent months. In the above example, if the person did not receive benefits for a period of 10 months because of the annual earnings test, the Social Security Administration will recalculate the reduction factor in the month of attainment of age 65 and 2 months. The new reduction factor will be 28 instead of 38. The reduction will be 28 x 5/9 percent for a total reduction of 15.5 percent. The higher benefit will be payable beginning with that month. Credit is similarly given after attainment of NRA for months in which the beneficiary lost only part of benefits otherwise payable due to the earnings test.

Due to misinformation about its operation, the test is often viewed as a pure tax on work (Gruber and Orszag 2001). As a tax on work, the test could reduce labor supply, thereby reducing the elderly's living standards. On the other hand, loosening the test could encourage older workers to claim benefits at the ERA rather than waiting until the NRA, since earned income would result in a smaller reduction in benefits.

The substantial literature on this topic concludes that the earnings test has little effect on labor supply (Gruber and Orszag 2001). However, much of the past work had several limitations: it did not assess the effect of the test on the decision to work (as opposed to the decision of how much to work); it considered only men; and it ignored the effect of the test on the decision of when to receive benefits.

To overcome these limitations, Gruber and Orszag (2001) formulated a model that used the variation in the earnings test during a 25-year period to measure the impact of the test on employment, weeks of work, earnings, and benefit receipt. Using data from the 1974-1999 Current Population Survey March Supplements, they confirmed the results of the older literature that the test does not have a large effect on the labor supply of men,¹⁵ although there is some response on the part of women.

They also found the first confirmation for the United States that removing the earnings test may increase the proportion of retirees claiming benefits at age 62. They determined that a \$1,000 rise in the earnings test threshold would increase the share of elderly men receiving Social Security benefits by less than 1 percentage point, while complete removal of the test would increase that share by 5.2 percentage points to 13.5 percent. They found a comparable increase in early recipiency among women from an increase in the threshold, but discovered an increase in benefit recipiency of 6.8 to 7.4 percentage points from a complete removal of the test. Based on their results, they urged caution about removing the test.

The Role of Disability Benefits. Disability benefits have played a role in the debate over early retirement policies. To the extent that disability benefits are available to would-be early retirees

¹⁵ This result is also indirectly confirmed by the results reported in Haider and Loughran (2001) discussed later in this report.

who are in poor health, these benefits can offset possible adverse distributional consequences of restrictions in the availability of early retirement benefits.

Estimates of the likely impact of changes in early retirement benefits on disability take-up rates vary widely. Gustman and Steinmeier (2002) do not explicitly model the disability benefit takeup decision, but calculate based on beneficiary data that raising the ERA to age 64 would increase the number of disability retirement claimants by no more than 0.16 percent at age 62 and 0.81 percent at age 63. Panis et al. (2002) also do not explicitly model the disability benefit take-up decision, but argue that many more—from 1 in 10 to 1 in 5—of those forced to wait for retirement benefits could claim disability benefits.

Leonesio, Vaughan, and Wixon (2000) found results broadly consistent with the expectations in Gustman and Steinmeier. The authors determined that the disability program would not serve as a safety net for many of the most severely disabled early retirees. Using SIPP data combined with Social Security records to create a restricted-access data file, they explicitly simulated the Social Security Administration's medical definition of disability. They found that relatively few of the early retirees who were simulated to be disabled based on the Social Security Administration's criteria also met the insurance criteria for the Disability Insurance program. As a result, they concluded that any increase in DI enrollment following a rise in the ERA would probably be modest.¹⁶

How Would the Social Security Trust Funds Be Affected? Panis et al. argue that because the early retirement penalty is roughly actuarially fair, delaying the ERA has a limited effect on lifetime Old-Age and Survivors Insurance payments to beneficiaries. They argue that an increase in disability enrollments would cause a delay in the ERA to have an adverse impact on trust fund liabilities. Increasing the early retirement penalty, on the other hand, permanently lowers OASI liabilities.¹⁷

Changing Normal Retirement Benefits

This section explores the somewhat smaller body of research on changing the NRA and the DRC.

Why Do People Retire When They Do? Age 65 brings eligibility for Medicare, and health care coverage has a separate and powerful effect on retirement timing (see health care coverage discussion later in this report). Also, unlike the early retirement penalty, the DRC has not been actuarially fair to those who continue to work after the NRA, although the currently scheduled increases will make it actuarially fair for workers reaching age 62 after 2004 (Burtless and Quinn 2002). Finally, noneconomic factors should not be neglected. Gruber and Wise (2004) are among the authors who point out that benefit eligibility ages—both early and normal—may

¹⁶ The DI administrative process is also important in assessing the substitutability of early retirement and disability benefits. More than a quarter of all applicants who are ultimately awarded benefits only receive them upon appeal (Gruber and Kubik 2002). ¹⁷ Mitchell and Phillips (2000) do not address the question of trust fund impacts.

establish social norms for retirement. To the extent that this is the case, just changing the retirement ages that are labeled as "early" and "normal" could influence behavior.

How Would Retirement Patterns Change If Benefits Changed? Options for changing normal retirement benefits include increasing the NRA and raising the DRC.

Increasing the NRA. There are many ways the NRA could be raised (Panis et al. 2002). Coile and Gruber (2002a) explore raising it immediately to age 67 rather than having it rise gradually as scheduled in current law. For any given retirement age, raising the NRA is a benefit cut and thereby encourages work. Coile and Gruber find, however, that the effect of such a change on labor supply would be modest—an increase of about 2 percentage points in labor force participation by age 65. It is even smaller—half that—if they allow for the effect of employer pensions on retirement decisions. The availability of an employer pension offsets the effect of an increase in the NRA on retirement decisions, making people freer to retire even if Social Security benefits are not available.

Panis et al. (2002) approach a hypothetical NRA increase somewhat differently. Also using the HRS, they change the NRA immediately to ages 66, 67, 68, 69, and 70, and assume that the early retirement penalty is applied between age 62 and these ages. They likewise find small labor supply effects from changing the NRA.

Increasing the DRC. Coile and Gruber (2000a) explore the effect on retirement of increasing the DRC to 8 percent, as provided in the 1983 Social Security Amendments for persons born in 1943 or later. Without considering employer pensions, they project that labor force participation would increase 4 percentage points at age 65, or twice as much as the estimated effect of an increase in the NRA.

Changing the DRC has a larger effect than changing the NRA because changing the NRA has offsetting wealth and accrual effects. Wealth effects are those affecting the entire future stream of retirement incentives, while accrual effects determine the change in retirement wealth over the next year alone (Coile and Gruber 2000a). In contrast, changing the DRC has only positive work incentives until age 65. As in their simulations of the effect of a change in the NRA, a change in the DRC has a somewhat smaller effect on labor force participation if employer pensions are considered—people with employer pensions do not pay as much attention to Social Security provisions as those without pensions.

How Would the Social Security Trust Funds Be Affected? Social Security changes—such as an increase in the NRA—that cut benefits also cut trust fund liabilities. Panis et al. (2002) estimate that OASI liabilities would decrease by approximately 5 percent for every year that the NRA is increased. They find that trust fund liabilities would decline because an increase in the NRA is a benefit reduction and because workers will not act to mitigate this benefit reduction by working longer; in other words, they are projected to retire at roughly the same age as they would if the NRA were not changed. As a result, they do not earn additional benefits during the added time they must wait for NRA benefits.

In summary, recent research suggests that the decision to claim early Social Security retirement benefits is more likely to be affected by changes in the ERA—because the benefits are no longer available—than by changes in the level of early retirement benefits. In contrast, the decision to defer benefits until the NRA is more likely to be affected by changes in the level of benefits—such as a more generous DRC—than by changes in the NRA.

HEALTH AND RETIREMENT

The evidence on the role of Social Security in retirement decisions suggests that health affects the decision to accept Social Security benefits. But some people retire long before they can receive Social Security. This section considers the branch of retirement literature that examines the separate role of health in the retirement decision.

Researchers have explored this issue in four general ways: by relating health status to retirement decisions; by examining the effect of health and changes in health on retirement expectations; by relating subjective survival probabilities to retirement decisions; and by examining the relationship between retirement timing and mortality.

Health Status Among Workers and Retirees

We look first at descriptive statistics relating health status and labor force participation, then turn to evidence compiled in several extensive reviews of the research literature.

The basic descriptive statistics relating health status to labor force participation seem clear health and work status are closely related. Older adults who work are healthier—at all ages than those who are out of the labor force. Among those who were ages 51 to 59 in 1992-1993, for example, 60 percent of workers said their health was excellent to very good, compared with just over half as many retirees (Table 6). Among those ages 60 and older in 1992-1993, nearly half of those working, but just over one-quarter of those not working, said their health was excellent to very good. The conclusion based on descriptive data would seem to be that older workers are healthier than retirees of the same age.

But the research literature relating health status to labor force participation and retirement decisions has not been quite as decisive. Poor health has long been offered by survey respondents as an explanation for early departure from the labor force, even as the overall health status of the population has improved (see, for example, Vroman 1983). One problem with evaluating the relative importance of health in the decision to retire has been doubt about the likely accuracy of self-reported measures of health (see studies cited in McGarry 2002). Some respondents who have withdrawn from the labor force for other reasons may simply see poor health as a socially acceptable reason for not working. This phenomenon has been called "justification bias."

But studies using other measures of health also have problems. In an extensive review of studies relating health and labor market behavior, Currie and Madrian (1999) argue that even though the relationship between health and labor force participation has been intensively studied, little consensus has been reached on the magnitude of the effect. They believe one reason for the lack of consensus is that the definition of health status has varied widely among studies. Differences in definitions across studies can influence the relative effects of health status and other factors, notably financial considerations, on retirement decisions.

Taking the long view, Costa points out that retirement rates by age have increased even as the health of the elderly has improved (Costa 1998, 1999). She attributes much of the long-term increase in retirement rates to increased incomes of the elderly, the development of retirement as a social norm, and various economic trends such as lower-cost transportation and communication that make retirement more attractive. The intuitive expectation that healthier people would work longer and historical trends in the relationship between health status and labor force participation thus lead us in different directions.

Health, Changes in Health, and Retirement Expectations

One effort to eliminate justification bias from the assessment of the role of health in retirement focuses on the individual's subjective probability of working full time at age 62, as queried in successive waves of the HRS (McGarry 2002). Since this question is asked only of employed respondents, the problem of justification bias is eliminated, and since it is asked repeatedly in successive waves, both health status and changes in health status can be related to expectations about future work.

Respondents' subjective reports of health are powerful predictors of the subjective probability of working at a particular age. Those in fair or poor health are 18 percent less likely than those who are in excellent health to report that they expect to still be working at age 62 (McGarry 2002).

Furthermore, health is more important in determining labor force attachment than financial variables such as earnings and wealth (the latter being measured at the point of retirement). A 10 percent growth in earnings increases the expected probability of working at age 62 by 0.21 percentage points (a 10 percent increase in wealth decreases the probability by the same amount). In contrast, a respondent whose self-reported health status is "good" is 5 percentage points less likely to retire than one whose health status is "fair or poor."

A final important point that emerges from this study is that *changes* in health (Is health better or worse than in a previous period? Is there a change in activity limitations or chronic conditions?) are also strongly related to changes in plans to retire. McGarry's (2002) regression equations showed that workers whose health worsened between waves 1 and 2 of the HRS lowered their expectation of still working at age 62 by 4 percentage points. Many workers' retirement plans may thus be significantly affected—if not overwhelmed—by unexpected declines in health.

The relationship between changes in health status and retirement plans also has policy implications. More research might be needed on whether people are too optimistic about their future health status and potential for working in their later years. If so, then education programs about the need to save and protect themselves against unpleasant health surprises could help more people to be better prepared for retirement (McGarry 2002).

Physical Demands of the Job and the Decision to Retire

Some observers argue that Social Security early retirement benefits must be preserved for those in physically demanding jobs, who may not be able to work as long as others. Conversely, the

argument is frequently made that with generally easier working conditions—for example, better occupational health and safety regulations, fewer jobs in dangerous industries such as mining—people should be able to work longer before claiming retirement benefits.

Different researchers exploring this issue have come to different conclusions. Some research, using the HRS, has found that there is no relationship between measures of the physical difficulty of a job and the respondent's labor force attachment, the latter again measured by the subjective probability of continued employment at age 62 (see, for example, Hurd, Smith, and Zissimopoulos 2002). The lack of such a relationship could mean that an individual will select a job that accords with his or her abilities, so difficulty or ease of performing the job will thus not determine retirement dates *independently* of health and health status (McGarry 2002). On the other hand, earlier studies using other data found that the physical difficulty of a job does influence the timing of retirement (see studies reviewed in Haider and Loughran 2001).

Taking the long view, Costa (1999) assesses the importance of sectoral shifts in determining retirement patterns. She points out that the earlier shift from agriculture to manufacturing did not change retirement trends, and takes that as an indication that the ongoing shift from manufacturing to (physically easier) service jobs is also unlikely to do so. Her work suggests that the empirical relationship between the physical demands of a job and the timing of retirement may be difficult to disentangle for the simple reason that *everyone* seems to want to retire early, regardless of what they do for a living.

Subjective Survival Probabilities

Health problems can lead not only to premature departure from the workforce, but also to expectations of premature death. The HRS asks respondents about their subjective survival probabilities to ages 75 and 85. Researchers have studied the determinants of these probabilities and examined their implications for retirement decisions.

The first point that has been examined is whether subjective survival probabilities make sense. It appears that they do (see summary of studies in Hurd, Smith, and Zissimopoulos 2002). Respondents' assessments of their survival probabilities reflect objective risk factors—smokers give themselves lower survival probabilities, for example, while people with high socioeconomic status (correctly) give themselves higher probabilities. The subjective assessments also predict actual mortality between successive HRS interview waves.

Subjective survival probabilities influence retirement decisions, although primarily among respondents ages 62 and older (Hurd, Smith, and Zissimopoulos 2002). Before age 62 subjective survival probabilities, even if low, have no systematic effect on retirement decisions. Starting at age 62, however, people who have no expectation of living to age 85 leave the labor force earlier than those with moderate or high expectations of survival to that age. For example, about 18.6 percent of workers who give themselves an unchanging probability of survival to age 85 of 50 percent would still be in the labor force at age 67, compared with 7.8 percent of those who think they have no chance of surviving to that age. Hurd, Smith, and Zissimopoulos (2002) do not speculate on why subjective survival probabilities affect retirement differently before and after

age 62, but one reason could be that prior to age 62 many older workers have no way to support themselves other than by remaining employed.

Retirement and Mortality

One controversial variable that has been studied in connection with early retirement is mortality. On the one hand, the relationship between early retirement and mortality would seem to follow logically from the relationship between retirement, subjective health assessments, and survival probabilities—if one feels one's health is poor and one is unlikely to live long in retirement, early retirement would seem to be a reasonable choice.

On the other hand, as McGarry (2002) points out, an individual who died after retirement might well have been able to work longer at the time he or she was contemplating retirement. Death could have resulted from a sudden illness or an accident, for example, neither of which might have been foreseen at retirement. At the same time, conditions that impede one's ability to work—she cites arthritis—might not materially reduce life expectancy.

Although identifying the role of mortality in retirement decisions thus poses analytical challenges, it can be important for policy and distributional reasons. One proposal for improving the Social Security program's finances is to increase the benefit eligibility ages in step with increases in average longevity (see, for example, Phillips 1999). Such a proposal would keep the average number of retirement years that Social Security must finance per person relatively constant.

Waldron (2001, 2002) is the most recent researcher to document that early retirees die earlier than those who wait until NRA to claim benefits.¹⁸ She explored the determinants of mortality using a version of the 1973 Exact Match in which data from the 1973 *Current Population Survey* were matched to Social Security Administrative records. The data also included longitudinal earnings from 1951 to 1996, beneficiary and claim data to mid-1998, and death data.

Waldron found that men retiring exactly at age 62 were 38 percent more likely to die during the observation period (1973 to 1997) than those retiring at age 65 or older. Those who retired exactly at age 62 also had a higher mortality risk than even other groups who retired after 62 but before age 65, suggesting that there may be a particularly unhealthy or shorter-lived group who claim benefits at the earliest opportunity. In a second report (Waldron 2002), she confirmed the relationship between early retirement and mortality using three independent data sets, and again found that those claiming benefits right at age 62 had a higher mortality risk than other groups claiming benefits before age 65.

If early retirees die sooner than later claimants, several consequences would seem to follow from delaying the early retirement age and/or linking it to average longevity improvements.¹⁹ First,

¹⁸ See also the brief review of past studies in Waldron (2001).

¹⁹ It should be emphasized that *reducing* early retirement benefits (as already scheduled in the 1983 Social Security Amendments, for example) and *delaying* early retirement benefits are conceptually and empirically different policy

some people would die having received few or no Social Security retirement benefits, although their eligible survivors, if any, would receive benefits. Second, those receiving few or no benefits could differ systematically from those who receive a full retirement's worth of benefits.²⁰ In that case, linking the availability of retirement benefits to average longevity would preserve the lifetime Social Security benefits of longer-lived groups at the expense of those likely to die sooner than average. The distributional consequences of linking retirement ages to average longevity improvements would thus depend critically on the correlates of early mortality. People in poor health or those with certain demographic characteristics might not want to give up their chance at retirement for the sake of the system's financial stability.

In summary, health status, changes in health status, and subjective survival probabilities affect older workers' labor force participation decisions in diverse ways. Although older workers are generally healthier than retirees of the same age, research has not conclusively documented a link between health status and labor force participation. It is also not clear that people in physically demanding jobs want to retire earlier than those in physically easier jobs. However, there is evidence that health status, changes in health status, and older workers' expectations about their long-term survival probabilities affect their retirement plans, and that these plans are formed well before they might have a clear idea of their likely Social Security benefits at ERA or at NRA. These health measures thus appear to affect retirement plans independently of any incentives contained in Social Security benefit structures.

actions, even though both actions can reduce lifetime benefits. One difference is that reduced benefits remain available at an unchanged age, while delayed benefits do not.

²⁰ Waldron (2001) found that those who were unmarried at the start of the observation period, had less education, or were African American were more likely to die during the observation period than those who were married, had more education, or were of other races. This risk is added to the death risk associated with early retirement. In a private communication, Waldron indicated that interactions of race, marital status, and education with retirement ages were not statistically significant, but that she felt the sample size in this report was not large enough to adequately test for such interactions.

SOURCES OF HEALTH CARE COVERAGE AND RETIREMENT

More than 70 percent of U.S. workers ages 18 to 64 depend on employers for their health care coverage (Fronstin 2002). Many depend on employer plans for their families' coverage as well. Of those with health care coverage through an employment-based plan in 2001, 52 percent were covered in their own names and 48 percent were covered as dependents of covered workers (author's calculation based on Fronstin 2002).

Health tends to decline and health care needs tend to increase with age, yet Medicare benefits are not available until age 65, and Medicare does not cover dependents unless they are eligible in their own right. Accordingly, many researchers have explored the role of health care coverage, for both active workers and retirees, in the early retirement decision. Three recent reviews examined a total of 18 studies dealing with health care coverage and retirement (Currie and Madrian 1999, Fronstin 2000, Gruber and Madrian 2002). All three reviews concluded that the balance of the evidence indicates that health care coverage has a crucial impact on retirement decisions.

The effect of coverage on the decision to leave the workforce depends on the type of coverage involved. We consider here the effect of retiree coverage, continuation coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA), and Medicare coverage. We also consider the effect of employee coverage on disability applications.

Retiree Coverage

For most people, employer-provided health care coverage tends to be the best type of health care coverage available. This coverage is cheaper than individual coverage, reflecting both the pooling of risks and economies of scale in administration. Employer-provided coverage also tends to be more comprehensive than individual coverage, both in terms of the services covered and in the extent of coverage for pre-existing conditions.

Accordingly, older workers contemplating retirement face an "interesting" dilemma (Gruber and Madrian 2002). Declining health can make retirement more attractive. However, declining health can also make good health care coverage, and thus continued work, more important.

Older workers appear to favor working more years with employer-provided insurance over spending more years in retirement without coverage. This conclusion comes from both descriptive statistics and econometric studies comparing the retirement behavior of people covered only as employees with the behavior of who are covered as employees and expect to be covered as retirees.

Johnson, Davidoff, and Perese (2003) have tracked the retirement behavior of HRS respondents ages 55 to 61 according to their health care coverage status. Employees who are promised retiree health care coverage by their employers are more likely to retire than those who are covered only while they are working. Among HRS respondents working full time at wage and

salary jobs in wave 1, 10.7 percent of men and 12.6 percent of women with employee but not retiree coverage were retired by wave 2 (conducted two years later). In contrast, nearly 1 in 5 with both employee coverage and an offer of retiree coverage—19.9 percent of men and 19.4 percent of women—retired over the same interval.

Econometric studies arrive at similar results. People with retiree health care coverage are 30 to 80 percent more likely to cease working than those without such coverage, and are 6 to 24 months younger at retirement (see literature reviewed in Currie and Madrian 1999 and Gruber and Madrian 2002).

Some studies do not support the hypothesis that health care coverage influences retirement decisions, but some of these studies, in turn, have problems with data and other issues that can limit their predictive value (Gruber and Madrian 2002). For example, Blau and Gilleskie (2003) find a limited effect of health care coverage on retirement decisions. However, the sample of HRS respondents used in this study has a lower rate of health care coverage than the HRS as a whole. Consequently, the results of this study could understate the effect of health care coverage on retirement decisions are not likely to be influenced by employer health care coverage since they do not have it.²¹

Workers appear to compare their likely pre- and post-retirement health coverage costs before making the decision to retire. The reduction in the cost of retirement that results from the availability of both retiree and employee health coverage increases retirement rates for men by 25 percent and for women by 28 percent over the retirement rates that would be expected with employee coverage alone (Johnson, Davidoff, and Perese 2003).

It is important to note, however, that the proportion of employers offering such coverage declined throughout the 1990s (Fronstin 2000). Since workers in large businesses are more likely to have access to such coverage, and the proportion of the workforce employed in large firms may be increasing, the declining number of employers offering such coverage has not yet translated into a material decline in the number of employees covered (Fronstin 2000). However, if the number of employees offered retiree health care coverage declines substantially, many older workers who are covered as employees and not as retirees may choose to remain in the workforce rather than lose coverage at a particularly vulnerable point in their lives.

COBRA Coverage

COBRA requires employers with 20 or more employees to offer certain employees who are leaving their jobs the right to continue health care coverage for themselves and their dependents at their own expense, though at group rates. Parallel rules apply to employees of federal, state, and local governments. COBRA coverage is generally the only way for those without employer coverage to remain covered at group rates, which are much lower than individual rates. Many states have similar regulations that apply to even smaller firms or require longer periods of coverage. COBRA coverage for retirees is available for 18 months after the participant is no longer eligible for coverage as an employee.

²¹ Gruber and Madrian (2002) further develop this argument in a critique of earlier work by Blau and Gilleskie.

The availability of COBRA and similar state programs increases retirement probability by an estimated 30 percent (Gruber and Madrian 1995, 1996). While this effect is at the lower end of the estimated effects of retiree health care coverage, Gruber and Madrian (2002) note that it is quite substantial given that this coverage is costly and available for only 18 months.

Medicare Coverage

Although age 65 is the Holy Grail for those who want to be assured of health care coverage in retirement, the empirical connection between Medicare eligibility and retirement decisions is not as clear as one would think. Men with employer-provided health care coverage but not retiree coverage do have a greater tendency to stay in the workforce up to age 65 than those who can expect retiree coverage (see studies reviewed in Gruber and Madrian 2002).

However, there is evidence that they stay in the workforce past age 65 as well. Various studies have suggested several reasons for this pattern. One reason could be that Medicare coverage is not as generous as that in the typical employer plan for active employees. Another could be that, unlike employer plans, Medicare does not cover spouses unless they themselves are of Medicare age. Accepting Medicare benefits could thus not only increase the employee's own health care costs compared with those under an employer plan but could also cause the loss of coverage for a spouse if the spouse were not also eligible for Medicare. Data limitations of previous studies could also limit their power in explaining the separate effect of Medicare coverage on retirement decisions (Gruber and Madrian 2002).

Employee Coverage and the Disability Retirement Decision

Since disability benefits constitute one path into retirement, it is useful to consider also how health care coverage affects the decision to apply for Social Security disability insurance (SSDI). Health care coverage would be especially important to those most likely to apply for SSDI, as they would be among those in their age group in the poorest health. At the same time, however, the SSDI application process could lead to coverage gaps among this most vulnerable population (Gruber and Kubik 2002). For example, an applicant has to be out of work for at least 5 months before filing an application; there is substantial uncertainty about acceptance;²² and even those awarded benefits are not eligible for Medicare coverage considerations in the disability application process can be complex and substantially different from those involved in the retirement decision.

The structure of the DI application process suggests two possible effects on coverage. First, applicants could go without health care coverage while they wait first for the DI award and then for Medicare eligibility. Second, the waiting period, along with the uncertainty about the outcome of the process, could deter employees with coverage from applying unless they have alternative sources of insurance such as through a spouse's employment or a government plan such as Medicaid. Using the HRS, Gruber and Kubik (2002) find that health care coverage rates

²² About 49 percent of applicants are awarded benefits (Mitchell and Phillips 2000).

actually rise among DI applicants—lost employer coverage due to the 5-month waiting period for application is more than offset by increased coverage from other sources. Persons with an alternative source of coverage are more likely to apply for DI benefits than those who depend only on their own employer coverage; —people with other coverage to fall back on are 26 percent to 74 percent more likely to apply than those without alternatives.

In summary, access to retiree health insurance, and even COBRA coverage, encourages earlier retirement, although the effect of Medicare coverage is less clear. Having alternative sources of coverage also encourages workers to apply for Social Security disability benefits. The availability of health care coverage affects retirement even before the age of eligibility for early Social Security retirement benefits.

LABOR MARKETS AND RETIREMENT

An earlier section of this report reviewed the evidence on whether older workers are staying in the workforce longer. This section examines the evidence on what happens to older workers who remain in the labor force.

In considering changes in Social Security policy toward older workers, it is important to clarify exactly what one wants to accomplish. Is it to get workers to defer pension receipt or to keep them working longer? Burtless and Quinn (2002) suggest that policymakers may well be concerned with both goals. Age 62 or so might be too early for healthy people to retire who can expect to live another 20 years or more. At this age, employees may still have a great deal to benefit and contribute by working longer. In particular, policymakers may want to discourage older workers with scarce skills from leaving the labor force prematurely.

Leaving work early and claiming an employer and/or Social Security pension can also be a bad financial decision for someone with a long expected life span. An early retiree will lose labor income, receive a reduced Social Security benefit due to the early retirement penalty,²³ and may lose additional employer pension contributions as well. Finally, an employee who works longer—and hence accumulates more assets and a better pension—may be better able to weather any future Social Security or Medicare cutbacks (Burtless and Quinn 2002).

But whether older workers can work longer depends at least in part on the reception they get in the labor market. We begin this section with a description of employment and unemployment patterns among older workers, then review research on older workers experiencing selected types of workforce transitions.

Labor Market Conditions Facing Older Workers

Labor force participation rates drop markedly in the last decade before NRA. In 2002, 91 percent of men ages 25 to 54 were in the labor force,²⁴ compared with 69 percent of those ages 55 to 64 (U.S. Department of Labor 2002). Among women, 76 percent of those ages 25 to 54 were in the labor force in the same year, but only 55 percent of those ages 55 to 64.

Unemployment rates, in contrast, vary less by age. In 2002, 4.8 percent of men ages 25 to 54 and 4.3 percent of those ages 55 to 64 were unemployed (U.S. Department of Labor 2002). Unemployment rates decline more sharply with age among women, with 4.8 percent of those ages 25 to 54 unemployed in 2002, compared with 3.5 percent of those ages 55 to 64. One reason unemployment rate is lower for older persons is they are more likely to drop out of the labor force when they lose their jobs; this is discussed further below.

²³ It should be noted that just because the early retirement penalty is actuarially fair does not necessarily mean that the reduced benefit will provide a given retiree with sufficient income.

²⁴ The labor force includes those working and those who are unemployed, i.e., those not working but available to work and actively looking for work (U.S. Department of Labor 2002).

Older workers are no more likely than younger workers to drop out of the workforce due to discouragement over their job prospects. More than 93 percent of all those who were not in the labor force in 2002 reported that they did not want a job (U.S. Department of Labor 2002). Of those who both wanted a job and were available to work, 30 percent of those ages 25 to 54 and 27 percent of those ages 55 and older said they were not looking due to discouragement over their job prospects.

But unemployment duration increases substantially with age. In 2002, just over a third of all those unemployed had been unemployed less than 5 weeks, and fewer than 1 in 5 reported 27 or more weeks of joblessness (Table 7). About one-quarter of the unemployed ages 55 to 64 reported being out of work less than 5 weeks, however, while a similar proportion had been unemployed 27 weeks or more. Unemployment among persons ages 65 and older presents a more mixed picture. This age group was about as likely as all those unemployed to have been out of work for less than 5 weeks, but was as likely as those ages 55 to 64 to have experienced a particularly long spell of unemployment.

Although the oldest workers are likely to be unemployed the longest, the average length of unemployment rises throughout the work career. At ages 16 to 19 the average duration is about 10 to 11 weeks, rising to more than 22 weeks at age 65 or older (Figure 4). Unemployment duration differs to some degree by gender. The average spell of unemployment in 2002 was shorter for women than for men younger than age 25 and older than 44, but slightly higher between ages 25 and 44.

The employment picture for older workers is thus mixed. Market conditions do not seem to be forcing older workers out of the labor force. At the same time, however, older workers who lose their jobs have a much harder time returning to employment than workers at younger ages.

Job Loss and Labor Force Exit

Econometric studies confirm the pattern suggested by the descriptive statistics discussed in the previous section. An extended literature search suggests that job loss changes the relative attractiveness of work and retirement (see discussion in Chan and Stevens 2002).

Analysis using the first three waves of the HRS confirms this result for recent cohorts of older workers. A major advantage of the HRS is that it allows for the comparison of displaced workers with similar workers who have not experienced displacement. Two years after an involuntary job loss at age 55, 60 percent and 55 percent of men and women respectively were employed, compared with more than 80 percent of men and women who were working at age 55 and did not experience displacement (Chan and Stevens 2002). Even four years after the job loss, displaced workers were 20 percentage points less likely to be employed than those who were not displaced. These longer-term effects reflect both lower rates of re-employment and higher rates of exit from subsequent jobs.²⁵

²⁵ Controlling for pension eligibility did not affect the estimated effects of job loss on labor force attachment or the probabilities of re-employment. However, this study used pension eligibility as a control for some of the potential differences in the types of jobs held by workers who had and had not experienced displacement rather than as a

"Working Retirees"—Back Again?

Surveys have found that increasing numbers of older workers expect or hope to work after claiming pension benefits (see, for example, AARP 2003). CPS data spanning two decades bear out these results. Herz (1995) found that both full- and part-time work among male pension recipients ages 55 to 64 increased by almost 8 percentage points—from 26.8 percent to 34.6 percent—between 1984 and 1993 (Table 8, first three rows).²⁶

After the increase reported by Herz, the employment rate among male pensioners stayed relatively stable between 1993 and 2003 (Table 8, last two rows). Unfortunately, CPS data do not provide information on why pensioners work, or even whether they left the workforce and returned or just never left. The working pensioner appears to be a durable phenomenon, however, and serves to show that no one definition of "retirement" is likely to serve the needs of either policymakers or retirees.

Why Older Workers Work

One of the arguments for increasing work activity among older people is that they need the stimulation; another is that they need the money. So it would be useful to know how important each of these factors is likely to be to potential older workers.

Research using three data sets (the March CPS supplements, the HRS, and the Asset and Health Dynamics Among the Oldest Old (AHEAD))²⁷ suggests that the older labor supply may be more "play" than "work" (Haider and Loughran 2001). Labor force participation among older workers is highest among those with more education, more wealth, and better health. The relative importance of education and health also increases with age, suggesting that the older working population becomes increasingly concentrated among the educated and healthy. Older workers also tend to work less, get paid lower wages, and be self-employed or work in flexible arrangements. In particular, older workers' wages are not only lower than those of comparable younger workers, but also lower than they themselves earned earlier in their careers. Older workers "…purchase flexibility at the expense of lower wages," making "work…closer to leisure for the majority of elderly workers" (Haider and Loughran 2001, p. 20).

However, while this research tells us a great deal about those who do work, the authors point out that the data are silent on the labor market options facing those who no longer work at older ages

measure of the retirement incentives embedded in pension plans. Chan and Stevens (2002) point out that recent work on pension incentives and retirement suggests that it is the expected accrual of pension benefits between the current period and the projected retirement date that should affect retirement behavior, not pension eligibility or the accrued level of benefits.

²⁶ Women are not included in this discussion because published data for women for 1984, 1989, and 1993 are not available.

²⁷ The Asset and Health Dynamics Among the Oldest Old, also known as Aging and Health in America, is an HRS companion study. It centers on data to address a broad range of scientific questions focused on the interplay of resources and late life health transitions. The initial sample consisted of 7,447 respondents aged 70+, including 2,548 aged 80 and over, plus 775 younger spouses. There are follow-ups every two years.

(Haider and Loughran 2001). The circumstances of the latter—and much larger—group may be more important if policies are to be devised to increase employment among older population.

Williamson and McNamara (2001) fill in some of these gaps using wave 4 of the HRS. Their analysis confirms that healthier and better-educated workers are more likely to work past age 60. They find that people with little income from sources other than work are less likely to leave the workforce at older ages, presumably because they cannot afford to retire.²⁸ They also find that low education discourages labor force participation more for women than for men, and low income from sources other than work is less effective in encouraging blacks than whites to work. They interpret these results to mean that women with low education and blacks either find or perceive a lack of access to employment opportunities. They conclude that more older workers might work if offered job training or job search programs, as well as flexibility in hours or the physical demands of jobs to accommodate the mild functional disabilities that many people encounter with advancing age.

Friedberg (2001) offers indirect support for Williamson and McNamara's suggestion that job skills are related to the timing of retirement. She explores patterns of on-the-job computer use among workers of different ages. Her study is of interest because it focuses on a specific and measurable job skill rather than on more amorphous and difficult-to-define concepts such as "staying current" or "retraining."

Using new CPS and HRS data on computer use by individuals, Friedberg finds that computer use affects retirement independently of such variables as pension plan type, eligibility age, and whether the worker has retiree health insurance. She finds that persons who did not use computers in their jobs were 25 percent more likely than users to leave work between 1992 and 1996. She concludes that policy changes designed to encourage delayed retirement could have a limited effect if older workers face technological barriers. On the other hand, the prospect of a longer worklife could make new skills more attractive for workers to acquire and for employers to provide.

²⁸ Unlike Haider and Loughran (2001), however, they find wealth has little impact on the employment decisions of older workers.

CONCLUSIONS AND POLICY OPTIONS

A review of the research on labor force exit and pension receipt patterns suggests that reports of the "end of early retirement" may be premature. After about 15 years of almost no change, the median age at labor force exit began to decline again in the late 1990s. On the other hand, the average age at which workers claim Social Security benefits has been virtually unchanged since 1985, at about 63.5 years. Due in part to demographic patterns, the median age at labor force exit is expected to rise between 2000 and 2005.

The Social Security program is both an important tool and a target of retirement policy: a tool because it affects almost all workers, and a target because it is a large federal spending program that is projected to be unable to meet its commitments over the longer term. The various strains of research literature on the determinants of retirement reviewed in this report suggest strongly that Social Security provisions are a fundamental factor in the retirement decision. Yet recent research on the likely retirement effects of program design changes is not encouraging.

The desirability of various policy options would seem to depend on whether the goal is getting people to stay in the workforce longer, or reducing Social Security program liabilities. People are likely to work longer if the early retirement age is raised, but the Social Security trust funds are unlikely to be affected because workers would earn additional benefits during the longer period of employment. Cuts in early retirement benefits seem less effective in encouraging longer workforce participation, and could also have undesirable distributional effects, particularly on older workers in poor health, but the cuts would reduce trust fund liabilities. Changing the normal retirement age would be fiscally positive for the program because it would constitute a benefit cut, but it is unlikely to affect the labor supply in any substantial way, in part because many workers retire long before the NRA.

Increasing the delayed retirement credit would seem to have the right political and economic features. As a benefit improvement it might not require a long lead time to implement; at least for those without employer pensions, it would make a difference in retirement decisions; and, to the extent that it is taken up by those without other pension income, the DRC would seem to have positive distributional consequences. But the DRC will become actuarially fair when the changes scheduled in the 1983 Social Security Amendments are fully phased in2027, so increasing it further past the point when it is actuarially fair could mean that work would be subsidized.

Health status affects the retirement decision through several channels. Poor health probably accelerates the timing of retirement, as do adverse changes in health. Although logic might suggest that people in physically demanding jobs retire sooner, the research is not conclusive, suggesting instead that people may choose jobs that match their perceived health and stamina. Low subjective survival probabilities are based on logical self-assessments of health, and they accelerate retirement, presumably because people who do not expect to live a long time want to spend at least some of their remaining life retired. Finally, early Social Security retirees die sooner than those who wait to NRA to claim benefits, probably reflecting the fact that people in

poor health claim Social Security benefits as soon as they can. Health factors can affect retirement plans and labor force participation decisions before the age of eligibility for Social Security benefits. Health-motivated retirements would thus be difficult to influence by means of changes in the structure of the Social Security retirement program.

Health care coverage plays a major role in the decision to retire. In particular, employees with an offer of retiree health care coverage may retire up to two years sooner than those with coverage only as employees. Health care coverage plays much the same role in the decision to apply for Social Security disability benefits; having health coverage only through one's own employment discourages application/claiming, but having an alternative source of coverage encourages it.

The evidence on labor market conditions facing older workers is mixed. Most who want jobs stay employed, but those who lose their jobs in the last decade before NRA face difficult circumstances, and are more likely to retire than those who have not experienced a job loss. Among those who continue to work after claiming a pension, circumstances vary as well. Many older workers continue to work because they have to, while for others, work takes on the characteristics of a leisure activity.

Policy Options

Is working longer something people should do because it is good for them, much like exercising more and eating fewer saturated fats? Or is early retirement a consumer good, much like the latest SUV or big-screen TV, that people should be allowed to buy as long as they can afford it?

Both viewpoints have some validity, but neither is complete.

As the U.S. population ages, longevity increases, and the Social Security system becomes more fragile, society may need to keep workers in the labor force longer. The research on the determinants of retirement suggests that older workers face diverse circumstances. Therefore, multiple strategies might be required to promote increased labor force participation in later life.

The literature reviewed in this report suggests two broad groups of strategies:

- Changing how workers see their choices between work and retirement; and
- Changing the options people face in choosing between work and retirement.

Changing Choices. People might want to work longer if they got more or better information about their economic prospects in retirement, or if they had a better understanding of the structure of Social Security benefits.

Learning to Take the Long View. Surveys have shown that many people are not aware that the age for unreduced Social Security benefits will rise to 67 in 2022 (see, for example, U.S. Social

Security Advisory Board 1997). This provision of the 1983 Social Security Amendments is being gradually phased in for those born between 1938 and 1960.

Borrowing a concept from the health insurance industry, "consumer-directed retirement" promises to be the norm for baby-boom retirees. But just as there were no models for the civil rights movement, the youth movement, and the women's movement of the 1960s, so also is there currently no model for a retirement where the (prospective) retiree makes all the decisions, bears much of the costs through salary reduction or other pre-tax contributions, and faces substantial risks.

There is evidence that many older workers have not caught on that providing for their retirement is largely up to them. For example, a recent Hewitt Associates survey found that, despite multiple tax penalties, one-third of recipients ages 50 to 59 cashed out their pension distributions rather than roll them over into individual retirement accounts or qualified plans (Hewitt Associates 2003). Older workers without savings, without enough savings, or who have dissipated previously accumulated retirement savings, may be ready to hear the message that working longer is an option.

Social Security. If it is desirable to keep more people in the labor force longer and discourage them from claiming early Social Security retirement benefits, simply educating them about the structure of those benefits could also work. Hurd, Smith, and Zissimopoulos (2002) found some relationship between education and early claiming, with better-educated workers claiming benefits somewhat later. They interpreted this pattern to mean that more education about claiming and better education about the value of delaying benefits could reduce early retirement rates.

Changing Options. People might want to work longer if work became more attractive and if they felt more comfortable with the skills required. Changing health care coverage arrangements would also change both the employee's reward for working and the cost to employers of expanding employment of older workers.

Making Work More Attractive. If work were more attractive, both the choices people made and the budget constraints they faced could change. Work could become more attractive with more flexible hours, perhaps flexible location arrangements such as telecommuting, and better pay and benefits for part-time workers. In particular, many people of all ages might like flexible hours to accommodate physical limitations, family responsibilities, or leisure pursuits.

Labor Market Interventions. Knowing *how* workers trade wages for flexibility does not necessarily tell us whether this is how they *want* to trade these dimensions against each other, since (unlike younger workers) many who do not like the tradeoff can leave the workforce and live on a pension or savings. A poorly paying job may be better than gardening, watching television, or playing bridge, but a well-paying job with some flexibility in hours and other characteristics may be even better. Changing the wage-flexibility tradeoff facing older workers (and some younger workers, such as women with children, as well) could draw more older

people into work. Expanding existing programs that assist older workers with job searches, especially for lower-skilled workers, could also help.

Health Care Coverage. Most people under age 65 who have health care coverage obtain it through their own employer or that of a spouse. There is substantial evidence that the prospect of losing coverage discourages workers who are not yet eligible for Medicare from leaving the workforce. More options for affordable health insurance outside the workplace would therefore probably accelerate labor force exit among people who would otherwise continue working. At the same time, however, divorcing health care coverage from employment could allow both employers and employees to make labor market decisions solely on the grounds of productivity. Employers would not face higher health care costs as their workforces aged, and employees would be able to make employment-related decisions based on the quality of the job and its compensation, rather than the availability and quality of health care coverage (Johnson, Davidoff, and Perese 2003).

Summary

If longevity continues to increase and the health status of the older population continues to improve, policies to discourage early retirement are likely to attract growing interest. The U.S. population is aging, and many observers suggest younger workers should not be heavily taxed to support healthy retirees who could also be working.

Stabilizing the Social Security system's finances is a major—although not the only—reason for wanting older workers to work longer, so changes in Social Security benefits to make early retirement less attractive would seem to be an obvious choice for accomplishing this goal. The availability of early benefits clearly constitutes a safety net for some people unable to work past 62. But many others appear to take the money because it is there, not because they need it. Particularly as the benefit cuts and NRA changes enacted in the 1983 Social Security Amendments are phasing in, this could be a good time for a public education campaign on the structure of Social Security benefits.

The literature reviewed in this report is not unanimous on the likely effects of changes in the structure of Social Security benefits, but the balance of the evidence seems to favor changes in the ERA and improvements in the DRC over benefit cuts if the goal is to encourage delayed retirement. And changes in the structure of Social Security benefits would not affect the decisions of those forced to leave the workforce long before eligibility due to health problems or job loss.

A review of key topics in the economic literature on the determinants of retirement does not suggest easy ways to get people to work longer. The circumstances of older workers and of retirees are very diverse. Some older people want to—and do—work well into older age; others do not. Those who stay in the labor force in their later years tend to be healthier and better educated than those who leave.

Job opportunities also influence the decision. Those who are involuntarily displaced from their jobs leave the labor force far sooner than those able to find flexible job arrangements. When older workers do become unemployed, they stay unemployed much longer than younger workers. Most older workers who are out of the labor force say they do not want to work, but at least some are out of the workforce because they feel there are no opportunities for them. So if society wants people to work in their later years, ways may have to be found to expand the available options.

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TABLES AND FIGURES

Table 1Employment Patterns Among Older Workers, 1994 and 2003
(numbers in thousands)

	Men		Women			
		Employed		Employed		loyed
Age and Year	Population	Total	Percent	Population	Total	Percent
55 to 61						
1994	7,047	4,828	68.5	7,676	4,089	53.3
2003	9,870	7,050	71.4	10,677	6,529	61.2
	· · · · · ·					
62 to 64						
1994	2,869	1,172	40.9	3,129	975	31.2
2003	3,279	1,539	46.9	3,522	1,307	36.8
65 to 69						
1994	4,225	1,056	25.0	5,365	891	16.6
2003	4,318	1,385	32.1	5,121	1,152	22.5
70 and older						
1994	8,493	953	11.2	12,678	682	5.4
2003	10,210	1,209	11.8	14,585	896	5.1

Sources: Author's calculations based on Purcell (2000, 2003).

Median Age in Tear of Exit from Labor Force, by Sex, 1750-55 to 1775-2000				
Interval	Men	Women		
1950-55	66.9	67.6		
1955-60	65.7	66.1		
1960-65	65.1	64.6		
1965-70	64.2	64.2		
1970-75	63.4	62.9		
1975-80	63.0	63.2		
1980-85	62.8	62.7		
1985-90	62.6	62.8		
1990-95	62.4	62.3		
1995-2000 ¹	62.0	61.4		

Table 2Median Age in Year of Exit from Labor Force, by Sex , 1950-55 to 1995-2000

Source: Gendell (2001).

¹ This range includes only data for the period 1995-1999.

Figure 1 Retirement Benefit Claimants in Selected Age Groups, by Sex, 1985-2001 (in percentages)



Source: Author's calculations based on U.S. Social Security Administration (2002).

	Retirement I	Benefits Only	Retirement and Disability¹ Benefit		
Interval	Men	Women	Men	Women	
1985-90	63.7	63.4	62.8	62.8	
1990-95	63.7	63.5	62.7	62.6	
1995-2000	63.7	64.0 ²	62.6 ³	62.5 ^{2,3}	
2001	63.7	63.7	3	3	

Table 3 Average Age at Initial Award of Social Socurity Ronafite 1085 through 2001

Sources: For "Retirement Benefits Only," author's calculations based on U.S. Social Security Administration (2002); for "Retirement and Disability Benefits," Gendell (2001).

¹ Disability beneficiaries include only those ages 50 to 65 in year of award. ² The mean retirement age for women in 1997 was 65.4. The second data column in the table includes that age in the average; the fourth does not.

 3 Data for 2000 and 2001 were not included in the original study.

2002 1995 Sex and Age 1980 2002 Men 45-54 52.8 62.2 61.3 55-64 38.7 31.3 30.0 65-74 7.4 8.6 7.8 Women 45-54 54.8 64.7 62.8 55-64 37.1 28.4 30.7 65-74 8.0 6.9 6.4

 Table 4

 Changes in the Age Distribution of the Labor Force Aged 45 to 74 Years, 1980, 1995, and

Sources: Gendell (2001) and author's calculations based on U.S. Social Security Administration (2002).

Figure 2 Age Distribution of Older Working Men, 1980, 1995, and 2002 (in percentages)



Sources: Gendell (2001) and author's calculations based on U.S. Social Security Administration (2002).

Figure 3 Age Distribution of Older Working Women, 1980, 1995, and 2002 (in percentages)



Sources: Gendell (2001) and author's calculations based on U.S. Social Security Administration (2002).

			Impact on		
	HRS Waves	Policy	Retirement or Labor Force	OASI Trust	
Study	Used	Options	Participation	Fund	
Mitchell	1992-1998	Early	Small decline in probability	Not examined	
and	(4)	retirement	of ER, small increases in		
Phillips		(ER) benefits	probability of normal and		
(2000)		reduced 15%	disability retirement		
		No ER	Probability of normal	Not examined	
			retirement increases twice as		
			much as probability of		
			disability retirement		
Gustman	1992-2000	Early	Shifts about 3/5 of age 62	Positive even if	
and	(5)	retirement age	retirements to age 64	disability	
Steinmeier		(ERA) to 64		retirements are	
(2002)				considered	
Panis et al.	1992-2002	ERA to 63	More than half of age 62	None to adverse	
(2002)	(6)		retirements would be delayed	if disability	
			but retirement benefits would	retirements are	
			be higher	considered	
		Increase Early	Little or no impact	Substantial	
		Retirement		positive impact	
		Penalty (ERP)			
Gustman	1992-2000	Increase ERP	Reduce trend toward earlier	Not calculated	
and	(5)	and Delayed	retirement by more than $1/3$		
Steinmeier		Retirement	-		
(2003)		Credit			
Coile and	1992-1998	ERA to 65	Probability of labor force	Not examined	
Gruber	(4)	Normal	participation at 65 rises by up		
(2004)		retirement age	to 50% depending on model		
		(NRA) to 68	specification		

 Table 5

 Summary of Selected Studies on the Effects of Social Security Changes

Source: Author's compilation based on studies cited in first column.

Age and Work	15		
Status	Fair to Poor	Good	Excellent to Very Good
51 to 59			
Retired	46	22	32
Working	12	28	60
60 and older			
Not working	39	35	26
Working	16	36	48

 Table 6

 Health Status of Retirees and Workers by Age and Work Status, 1992-1993

 (in percentages)

Source: National Academy on an Aging Society (2000).

(in percentages)					
Group	Total	< 5 weeks	5 to 14 weeks	15 to 26 weeks	27+ weeks
Total	100.0	34.5	30.8	16.3	18.3
55 to 64 years	100.0	25.8	29.0	19.4	26.0
65 years+	100.0	33.7	25.2	14.1	27.0
Men					
All ages	100.0	33.9	30.8	16.4	18.9
55 to 64 years	100.0	24.7	28.4	19.0	27.9
65 years+	100.0	34.5	25.3	14.9	25.3
Women				_	
All ages	100.0	35.3	30.8	16.3	17.6
55 to 64 years	100.0	27.4	29.7	19.8	23.2
65 years+	100.0	32.9	25.0	13.2	28.9

 Table 7

 Length of Unemployment by Sex and Age, 2002

 (in percentages)

Source: U.S. Department of Labor (2002).

Figure 4 Average Length of Unemployment by Sex and Age, 2002



Source: Author's tabulation based on U.S. Department of Labor (2002).

		Worked in March of year indicated		
Year	Received a pension in the previous year	Number	Percent	
1984	2,889	775	26.8	
1989	3,065	948	30.9	
1993	3,150	1,090	34.6	
1998	2,152	778	36.2	
2003	2,372	827	34.9	

 Table 8

 Employment Among Male Pension Recipients Ages 55 to 64, Selected Years (numbers in thousands)

Source: Author's calculations based on Herz (1995) and Purcell (2003).