

#9810
October 1998

**FACTORS INFLUENCING RETIREMENT:
Their Implications for Raising Retirement Age**

by
Cori E. Uccello
Urban Institute

Sara E. Rix, Ph.D
Project Manager

The Public Policy Institute, formed in 1985, is part of the Research Group of the American Association of Retired Persons. One of the missions of the Institute is to foster research and analysis on public policy issues of interest to older Americans. This paper represents part of that effort.

The views expressed herein are for information, debate and discussion, and do not necessarily represent formal policies of the Association. Nor should they be attributed to the Urban Institute, its trustees, or its funders.

© 1998, American Association of Retired Persons.
Reprinting with permission only.
AARP, 601 E Street, N.W., Washington, DC 20049

Foreword

Increasing the age of eligibility for full Social Security benefits--the so-called “normal retirement age” (NRA)--above the level specified in current law appears in a number of reform proposals designed to restore long-term solvency to the Social Security system. Some proposals would then index the NRA to increases in life expectancy.

Pointing out that life expectancy today is well above what it was when the Social Security program was established over 60 years ago, proponents of raising the normal retirement age argue that some of those added years should be “paid for” in the form of a longer worklife. However, it is unclear how workers will respond to, or be affected by, the increase to go into effect beginning in 2000, let alone further increases.

If any labor force trend defines the second half of the 20th century, it is the declining participation on the part of persons aged 55 and older. While this decline has tapered off in recent years and may even have bottomed out, there is little evidence that a sizable turnaround is in the offing, at least any time soon. Large numbers of workers may say that they want or expect to work in retirement, but they do not necessarily want to be told that they *must* work longer to collect their retirement benefits. Workers tend to view with disfavor proposals to raise the normal retirement age.

Moreover, although improvements in health status and a decline in arduous, physically demanding jobs suggest that many older workers are capable of working longer, it is by no means certain that all of these workers could--even if they wanted to--keep their jobs until reaching a higher retirement age. Even though the majority of early retirees are apparently just as healthy as those who work beyond age 62, health problems remain a significant factor in the decision of many workers to begin collecting Social Security benefits at the youngest possible age. Labor force withdrawal prior to age 62 is not uncommon and may reflect job-seeking and job-keeping difficulties, as well as health limitations, on the part of certain workers. How would such workers cope until a higher retirement age? The same question could be asked of any workers who lost or left a job for a variety of reasons prior to a new, higher retirement age.

The study discussed in this report was commissioned by AARP’s Public Policy Institute to examine the capacity of older workers to remain at work beyond the ages currently observed. AARP was especially interested in workers who experience what might be termed “involuntary” retirement, i.e., who have been forced to stop working before they might otherwise have wanted to as a result of job loss, pressure to accept an early retirement incentive, ill health, or disability.

Using data from the Survey of Income and Program Participation (SIPP) and the Health and Retirement Study (HRS), Cori Uccello of the Urban Institute examines how workers who continue to work after early and normal retirement age differ from workers who retire before then. She pays particular attention to the relative importance of health status, income,

employment characteristics, and a number of demographic characteristics in the decision to retire.

Uccello concludes that “the vast majority of workers, even those aged 65 and older, are in good health” and have no functional conditions that would limit work. Not surprisingly, retirees tend to be in worse health than their working counterparts, but the majority of them are healthy. Still, a sizable minority do have work-limiting conditions that may not be severe enough to qualify for Social Security Disability Insurance benefits but that would make prolonged labor force attachment difficult or impossible.

The study also finds that the youngest “retirees,” especially those who were unmarried, reported much less wealth than older retirees, which raises questions about their ability to manage a delay or reduction in Social Security benefits resulting from an increase in retirement age. Uccello provides evidence that a higher retirement age might also adversely affect unmarried persons, especially women, and nonwhites. Her research underscores the importance of paying particular attention to the impact of Social Security reform options on the more vulnerable in society.

Sara E. Rix, Ph.D.
Senior Policy Advisor
AARP Public Policy Institute

Executive Summary

Background

The age of eligibility for full Social Security benefits, commonly referred to as the “normal retirement age,” will increase gradually over the next 25 years, from age 65 to 67. To help reduce the long-term deficit in the Social Security trust fund, further and/or more rapid increases in the normal retirement age have been proposed. Proposals to increase early retirement age, which is currently 62, have also been advanced. Either of these options would have an impact on older Americans, since the majority of workers begin to collect Social Security benefits prior to the normal retirement age.

Purpose

This study attempts to shed light on the impact on workers of a higher normal retirement age. Using data from the 1990 panel of the Survey of Income and Program Participation (SIPP) and the 1994 wave of the Health and Retirement Study (HRS), the study addresses the following questions:

- How do workers who continue to work at and after age 62 differ from those who are retired by age 62? How do workers who continue to work at and after age 65 differ from those who are retired by age 65?
- How much of retirement at various ages might be considered “involuntary” retirement?
- How important are health status, employment characteristics, income, age, and other demographic characteristics in the decision to retire?

Methodology

The study analyzes data from the 1990 panel of the Survey of Income and Program Participation (SIPP) and the 1994 wave of the Health and Retirement Study (HRS). The SIPP is a nationally representative longitudinal data set. The 1990 panel, which is the most recently available longitudinal panel with sufficient sample size to perform the required analyses, surveyed 26,000 households every four months for a period of 32 months. Each four-month interview period is referred to as a wave. The core of the SIPP--those survey questions repeated in each wave of the interviewing process--is built around labor force participation, public program participation (e.g., Medicaid), and income questions designed to measure the economic circumstances of persons in the United States. Topical modules on subjects of special interest are conducted during certain waves of the survey and include information on work history, pension plan availability, assets, and health and disability status. Although the SIPP includes

data for persons of all ages, this paper limits its analysis to men and women at or near retirement age, defined here as persons aged 55 to 70. The SIPP-based tables in the report use the longitudinal panel weights to produce nationally representative estimates.

Data from the Health and Retirement Study, a rich source of information regarding retirement and early labor force withdrawals, supplements the analysis using the SIPP. Conducted by the University of Michigan for the National Institute on Aging, the HRS interviewed over 9,700 persons between the ages of 51 and 61 and their spouses in 1992 and every two years thereafter. The HRS contains detailed information on current employment status, job history, health and disability status, and income and assets. It also includes detailed questions regarding the decision to retire, including pension plan availability and early retirement incentives. The present study uses Wave 2 of the HRS, which was conducted in 1994 and contains information on persons aged 53 to 63 and their spouses. Because the HRS will not contain information on persons aged 64 and older until future waves are released, the HRS analysis in this paper is limited to persons aged 55 to 63, including both primary respondents and spouses within this age range. The HRS-based tables in this report use the Wave 2 population-based weights to produce nationally representative estimates.

To assess differences among workers by age and retirement status, this paper first compares workers and retirees by health status to gauge the relative ability of workers and retirees to extend their working lives. Second, a comparison of workers and retirees by family income and wealth provides insight into their relative ability to absorb a reduction in Social Security income. Third, workers and retirees are compared by gender and marital status and by race and ethnicity to identify whether certain groups would be affected disproportionately by an increase in the Social Security retirement age. To assess the extent to which retirement is voluntary and how that might vary by age, the paper next examines the reasons given for labor force departure. Finally, to address the impact of health status, employment characteristics, income, age, and other demographic characteristics on workforce departure, a multivariate model is used to determine the relative effects of the various demographic and employment factors on the decision to retire.

Principal Findings

The comparisons by health status in this study reveal that retirees are in poorer health than workers of the same age and are more likely to have a condition that limits or prevents work. In addition, the findings suggest that workers in physically demanding jobs retire earlier than those in less physically demanding jobs. The comparisons by family income and wealth reveal that unmarried retirees have lower levels of family income and wealth than married retirees and both married and unmarried workers. Thus, they may find it harder to adapt to a delay or a reduction in Social Security benefits. Furthermore, although workers with pension coverage (through a defined benefit plan and/or a defined contribution plan) retire earlier than those without pension coverage, a large proportion of retirees are not currently collecting pension

income. Further comparisons suggest that unmarried women and nonwhites are likely to be particularly vulnerable.

The reason given for labor force departure varies by age: the younger a worker when leaving a job, the more likely it is that the departure is involuntary, whether the result of job loss or poor health. Only one-quarter of workers leaving a job between ages 55 and 61 retire voluntarily, compared to over one-half of those leaving a job at or after age 62.

Factors that are significantly related to retirement among men include: being aged 61 to 64; having three or more functional limitations; working in agriculture, mining, construction, or transportation industries; working fewer than 20 hours per week; having pension coverage; and having 13 or more years of education. For women, these factors include being age 65, having three or more functional limitations, and working in a physically demanding occupation. Several factors are correlated with delayed retirement. For instance, both men and women are much less likely to retire if they have health insurance coverage from their employer. They are also much less likely to retire if they have a spouse who is working. However, after controlling for the presence of a working spouse, marital status does not appear to be a significant factor for either men or women. Among women, other significant factors that are negatively related to retirement include working 20 to 34 hours per week and being nonwhite.

In general, the study's findings are consistent with previous research. In particular, the findings corroborate previous studies that find that (1) workers with pension coverage are more likely to retire than workers without pension coverage, (2) workers who would lose health insurance coverage upon retirement are less likely to retire, and (3) workers in poor health are more likely to retire.

The ability of workers to adapt to further increases in the Social Security retirement age depends on their ability to extend their working lives, to accumulate enough savings to offset a delay or reduction in Social Security income, or to get by on reduced income. The ability to extend working lives, in turn, depends in part on health and disability status. The vast majority of workers, even those aged 65 and older, are in good health and do not have any functional limitations or conditions that limit work. Furthermore, the trend away from physically demanding jobs will further increase the ability of workers to extend their working lives.

Although retirees, especially early retirees, are in worse health than workers, the majority of retirees are also in good health and do not have any functional limitations or conditions that limit work. On the other hand, a large minority do. Although the Social Security Disability Insurance (DI) program can bridge the gap between the time those in poor health can no longer work and the time they reach the normal retirement age, not all of those in poor health will meet the strict DI eligibility requirements.

To better inform such options, it is necessary to develop better estimates of the size of the population that will be unable to continue working. This involves examining actual job

demands, reported health limitations, and employer accommodations. In addition, it will be necessary to estimate how the size of this group might change in the future. And, there is evidence that the timing of the onset of disability matters. In particular, persons whose health declined relatively recently are more likely to leave the labor force than persons whose health declined earlier (Bound et al 1998). The HRS provides an opportunity for exploring these issues.

Extending working lives also requires that jobs be available. Although an analysis of the demand for older workers is beyond the scope of this study, examining the reasons for labor force departure can help shed some light on this issue. Workers leaving the workforce at or beyond age 62 were only half as likely to report leaving involuntarily due to job loss as those leaving prior to age 62. This may imply that persons retiring at age 62 and older are more likely to have been able to continue working. On the other hand, the availability of Social Security benefits beginning at age 62 may result in underestimates of the reports of job loss among those 62 and older, meaning job loss might be just as problematic for persons aged 62 and over.

Those who cannot extend their working lives will be less affected by a delay or a reduction in Social Security benefits resulting from an increase in the retirement age if they have adequate savings and/or pension income. However, the findings suggest that the youngest retirees, especially those who are unmarried, have much less wealth than those who retire later. Because the measures of wealth exclude pension wealth, however, they may understate the ability of retirees to offset any decreases in Social Security income, especially since persons with pension coverage are more likely to retire early. Even so, many retirees do not have pension coverage. Therefore, policies to increase pension coverage as well as to increase private savings would help counter the negative effects of a decrease in Social Security income.

Although the analysis presented in this study has the advantage of incorporating many factors simultaneously in a simple model of retirement, it does not attempt to explain how these factors influence individuals' decisions in a structural model. Rather than providing a model of people's behavior, it can show only correlation between these factors and retirement. Future research should attempt to develop structural economic models of the decision to retire that account for all of these factors simultaneously. That would provide a better guide to policymakers about who can delay retirement, as well as mechanisms by which the people who are most able to delay retirement might be induced to work longer while allowing those who are unable to work to retire with some level of security.

Table of Contents

Foreword	
Executive Summary	
Table of Tables	
Introduction	1
Previous Research	2
The Data Sources for This Study	4
Worker Characteristics by Age and Retirement Status	5
Can Individuals Extend Their Working Lives?	7
Are People Financially Equipped to Handle a Reduction in Social Security Income?	18
Are Certain Demographic Groups Especially Vulnerable?	25
Reasons for Workforce Departure	33
Relative Effects of the Factors Influencing Retirement	38
Data and Methods	41
Empirical Results	42
Simulation Results	57
Conclusion	59
Notes	61
References	64
Appendix: Workers/Retirees by Gender	67

Table of Tables

Table 1a	Workers/Retirees, by Health and Disability Status, SIPP
Table 1b	Workers/Retirees, by Health and Disability Status, HRS
Table 2	Workers/Retirees, by Occupation, SIPP
Table 3a	Workers/Retirees, by Industry, Tenure, and Self-Employment Status, SIPP
Table 3b	Workers/Retirees, by Tenure, Self-Employment Status, and Union Status, HRS
Table 4a	Workers/Retirees, by Years of Schooling, SIPP
Table 4b	Workers/Retirees, by Years of Schooling, HRS
Table 5a	Workers/Retirees, by Income, Pension Coverage, and Wealth, SIPP
Table 5b	Workers/Retirees, by Income, Pension Coverage, and Wealth, HRS
Table 6a	Workers/Retirees, by Gender and Marital Status, SIPP
Table 6b	Workers/Retirees, by Gender and Marital Status, HRS
Table 7a	Workers/Retirees, by Race/Ethnicity, SIPP
Table 7b	Workers/Retirees, by Race/Ethnicity, HRS
Table 8a	Reason for Labor Force Departure, SIPP
Table 8b	Reason for Labor Force Departure, by Gender, SIPP
Table 8c	Reason for Labor Force Departure, by Marital Status, SIPP
Table 9a	Reason for Labor Force Departure, HRS
Table 9b	Reason for Labor Force Departure, by Gender, HRS
Table 9c	Reason for Labor Force Departure, by Marital Status, HRS
Table 10a	Logit Regression Results, Probability of Retiring in a Four-Month Period for Men
Table 10b	Logit Regression Results, Probability of Retiring in a Four-Month Period for Women
Table 11	Probability of Retiring in a Four-Month Period, by Age
Table 12	Probability of Retiring in a Four-Month Period, by Number of Functional Limitations
Table 13	Probability of Retiring in a Four-Month Period, by Occupation
Table 14	Probability of Retiring in a Four-Month Period, by Industry

Table 15	Probability of Retiring in a Four-Month Period, by Hours Worked Per Week
Table 16	Probability of Retiring in a Four-Month Period, by Employment Status of Spouse
Table 17	Probability of Retiring in a Four-Month Period, by Earnings and Wealth
Table 18	Probability of Retiring in a Four-Month Period, by Pension Coverage
Table 19	Probability of Retiring in a Four-Month Period, by Health Insurance Coverage
Table 20	Probability of Retiring in a Four-Month Period, by Demographic Characteristic
Table 21	Proportion of Retirements Attributable to Selected Characteristics

Appendix Tables

Table A-1	Workers/Retirees, by Health and Disability Status, SIPP
Table A-2	Workers/Retirees, by Occupation, SIPP
Table A-3	Workers/Retirees, by Industry, Tenure, and Self-Employment Status, SIPP
Table A-4	Workers/Retirees, by Years of Schooling, SIPP
Table A-5	Workers/Retirees, by Income, Pension Coverage, and Wealth, SIPP
Table A-6	Workers/Retirees, by Race/Ethnicity, SIPP

Introduction

The age of eligibility for full Social Security benefits, commonly referred to as the “normal retirement age,” will increase gradually over the next 25 years, from age 65 to 67. To help reduce the long-term deficit in the Social Security trust fund, further and/or more rapid increases in the normal retirement age have been proposed. Proposals to increase early retirement age, which is currently 62, have also been advanced. Either of these options would have an impact on older Americans, since the majority of workers begin to collect Social Security benefits prior to the normal retirement age. What would be the impact on workers of further increases in retirement age? Would workers be able to remain in the labor force longer than they now do?

Currently, workers can begin receiving their full Social Security retirement benefits at age 65. Alternatively, they can collect benefits as young as age 62, but the benefits at 62 are permanently reduced by 20 percent to take into account the longer period over which they are paid. Beginning with those who turn 62 in the year 2000, the normal retirement age will increase by two months each year until it reaches 66 in 2005. It will begin to increase again in 2017, reaching 67 for workers turning 62 in 2022. Although workers will still have the option of receiving benefits as early as age 62, their benefits will be reduced by 30 percent, rather than the current 20 percent.

Proposals to hasten the increase in the normal retirement age and/or increase the early retirement age raise questions about the consequences of such changes for workers, especially since the majority of new benefit awards presently go to people under age 65. In 1995, over two-thirds of new Social Security retired worker benefit awards went to persons aged 62 to 64 (Social Security Administration 1996); three-quarters of these early retirees were 62. Many of these retirees would experience economic hardship by retiring with benefits that were further reduced. One obvious way that some workers might adjust to retirement-age changes is to work longer. This paper explores the feasibility of that option.

The study discussed in this report analyzes data from the 1990 panel of the Survey of Income and Program Participation (SIPP) and the 1994 wave of the Health and Retirement Study (HRS) to answer the following questions:

- How do workers who continue to work at and after age 62 differ from those who are retired by age 62? How do workers who continue to work at and after age 65 differ from those who are retired by age 65?
- How much of retirement at various ages might be considered “involuntary” retirement?
- How important are health status, employment characteristics, income, age, and other demographic characteristics in the decision to retire?

This paper begins with a summary of the previous research that examines the factors influencing retirement decisions. This section is followed by a brief overview of the SIPP and HRS. The next section compares workers and retirees by age to determine whether retirees have particular characteristics that make them less likely to work than those who remain in the labor force and whether these characteristics become more prevalent with age. Next, the reasons people give for leaving the workforce are examined for insights into the proportion of labor force withdrawals that might be considered involuntary. This is followed by an analysis of the relative effects of various factors on the retirement decision, including selected demographic and job characteristics. The paper concludes with a discussion of the policy implications of the findings.

Previous Research

The labor market participation decisions of older Americans are extremely complex. In addition to having concerns, such as balancing work and family, that are similar to those of younger people, older people also have to consider rules governing pensions and Social Security. They are more likely to be forced to leave their jobs because of ill health or, perhaps, skills obsolescence. Moreover, because older people are at greater risk for major health expenses, the availability of health insurance (both on the job and in retirement) is an important factor in labor market participation decisions.

An extensive literature review shows that the relative importance of these factors has been changing over time. In their review of the early literature on retirement, Quinn and Burkhauser (1994) find that the vast majority of retirement transitions in the 1940s and 1950s were involuntary, that is, due to poor health, layoffs, and mandatory retirement policies. They find an increase in voluntary retirement during the 1960s and 1970s, although most retirement transitions remained involuntary.

By the 1980s, evidence from the 1982 New Beneficiary Survey suggests that more people retired for voluntary reasons than for involuntary reasons. Using this survey, Packard and Reno (1989) examine very early retirees, i.e., persons who stopped working at least six months before they became eligible for reduced Social Security retired worker benefits at age 62. They find that, overall, 47 percent of workers left their last job voluntarily (because they wanted to retire or for family reasons), 41 percent left involuntarily (due to health problems, job loss, or mandatory retirement), and the remaining 12 percent left for other reasons. However, the reasons for leaving varied by age, gender, and marital status. For instance, among men, very early retirees reported that they left their last job involuntarily more often than men who retired later.

About half of all workers were covered by mandatory retirement policies before mandatory retirement became illegal in 1986 (Quinn and Burkhauser 1994, Gustman and Steinmeier 1984). Today, few older workers say that they face discrimination, and employers often view older workers favorably (Hurd 1990, 1996). Although older workers face more limited employment options than younger workers, Straka (1994) demonstrates that these

limitations are due more to sources of labor market adversity that increase with age than to age discrimination directly. Older workers, for example, often suffer from technological skills obsolescence and/or physical limitations, which may reduce their employment options.

Despite the fact that mandatory retirement has been eliminated for most occupations, older workers may be pressured to retire, either directly or indirectly. For instance, by the late 1980s, many large firms were offering their employees inducements to retire early as part of downsizing efforts (Brown 1993). In addition, powerful economic incentives induce many workers to retire earlier than they might have otherwise. Most defined benefit pension plans financially penalize those who choose to work past the plan's normal retirement age, usually age 65 (Burkhauser and Quinn 1983a, 1983b; Kotlikoff and Wise 1989; Lumsdaine and Wise 1994). Moreover, these financial penalties can begin prior to age 65, providing further incentive to retire early (Kotlikoff and Wise 1989). However, as more employees become covered by defined contribution plans, which are age neutral with respect to the retirement decision, these retirement incentives should decrease over time (Turner and Beller 1992, Quinn, Burkhauser, and Myers 1990).

Social Security also provides an incentive to retire early. Steuerle and Bakija (1994) observe that persons tend to receive higher net benefits from Social Security by retiring before the normal retirement age. In addition, older workers who choose to continue working are also subject to a retirement earnings test under Social Security that results in a reduction in benefits when earnings exceed a certain exempt amount.¹ The earnings test may discourage workers from earning more than the exempt amount (Burtless and Moffitt 1985; Friedberg 1997; Leonesio 1991; Quinn, Burkhauser, and Myers 1990).

The availability of health insurance also plays a role in retirement decisions. Access to either employer-sponsored health insurance in retirement or mandated continuation² coverage provides an incentive to retire early, and workers with these coverage options retire earlier than those without such options (Gruber and Madrian 1995, Gustman and Steinmeier 1994, Madrian 1994, Karoly and Rogowski 1994). In other words, many employees who would lose their health insurance at retirement choose to remain at work until age 65, when they qualify for Medicare. Rust and Phelan (1997) point out that the spike in retirement at age 65 is larger for those whose health insurance is tied to employment than for those with either no coverage or coverage that is independent of employment. This finding suggests that those with coverage as active workers but without access to retiree coverage delay retirement to retain coverage. Loprest and Zedlewski (1995) report a sharp decline in the number of employers who provide health insurance for retirees, which may exacerbate this "job lock." At the same time, however, the number of employers offering health insurance even to their active workers is declining.

The availability of disability insurance, either through private employers or through public sources, also affects retirement decisions. Bound and Waidmann (1992) find that disability transfer programs are an important factor in the labor force participation decisions of those under age 65. (See also Aarts, Burkhauser, and DeJong 1992; Haveman, Wolfe, and

Warlick 1984.)

Health and disability status directly affect the timing of an individual's labor force withdrawal. Workers in poor health are more likely to retire earlier than those in good health (Burtless and Moffitt 1985). Furthermore, workers in poor health with physically demanding jobs are more likely to leave the labor force early, although the effect seems to be small (Hurd and McGarry 1993). However, recent research suggests that those who opt for Social Security benefits at age 62 are only slightly less healthy than those who postpone Social Security benefit receipt (Burkhauser, Couch, and Phillips 1996). The effect of health and disability status on retirement varies by gender and marital status. Loprest, Rupp, and Sandell (1995) find evidence that married women with disabilities are less likely to leave the labor force than unmarried women or men.

The Data Sources for this Study

The primary data set in this analysis is the 1990 panel of the Survey of Income and Program Participation (SIPP), a nationally representative longitudinal data set. The 1990 SIPP panel, which is the most recently available longitudinal panel with sufficient sample size to perform the required analyses, surveyed 26,000 households every four months for a period of 32 months. Each four-month interview period is referred to as a wave. The core of the SIPP--those survey questions repeated in each wave of the interviewing process--is built around labor force participation, public program participation (e.g., Medicaid), and income questions designed to measure the economic circumstances of persons in the United States. Topical modules on subjects of special interest are conducted during certain waves of the survey and include information on work history, pension plan availability, assets, and health and disability status. Although the SIPP includes data for persons of all ages, this paper limits its analysis to men and women at or near retirement age, defined here as persons aged 55 to 70. The SIPP-based tables in the following sections use the longitudinal panel weights to produce nationally representative estimates.

Data from the Health and Retirement Study (HRS), a rich source of information regarding retirement and early labor force withdrawals, supplements the analysis using the SIPP. Conducted by the University of Michigan for the National Institute on Aging, the HRS interviewed over 9,700 persons between the ages of 51 and 61 and their spouses in 1992 and every two years thereafter. This survey contains detailed information on current employment status, job history, health and disability status, and income and assets. It also includes detailed questions regarding the decision to retire, including pension plan availability and early retirement incentives. The present study uses Wave 2 of the HRS, which was conducted in 1994 and contains information on persons aged 53 to 63 and their spouses. Because the HRS will not contain information on persons aged 64 and older until future waves are released, the HRS analysis in this paper is limited to persons aged 55 to 63, including both primary respondents and spouses within this age range. The HRS-based tables in the following sections use the Wave 2 population-based weights to produce nationally representative estimates.

Worker Characteristics by Age and Retirement Status

One way to gauge the ability of workers to remain at work beyond the age at which they currently retire is to examine who has retired and who continues to work, using cross-sections of the SIPP and HRS. This section compares the demographic and employment-related characteristics of workers and retirees by age to help answer the following questions:

- Are individuals able to extend their working lives? In other words, could workers continue to work and could retirees have worked longer?
- Are people financially able to handle a reduction in Social Security income? Do workers and/or retirees have other resources upon which to draw in the event of a delay or a reduction in Social Security benefits?
- Are certain demographic groups especially vulnerable? Would certain demographic groups be disproportionately affected by an increase in the Social Security retirement age?

Comparisons of workers and retirees by various health status measures are used to help inform the question of whether individuals can extend their working lives. These comparisons reveal that retirees are in poorer health than workers of the same age and are more likely to have a condition that limits or prevents work. In addition, workers in physically demanding occupations appear to retire earlier than those in less physically demanding occupations.

A comparison of workers and retirees by family income and wealth provides insight into their relative ability to handle a reduction in Social Security income.³ Unmarried⁴ retirees have lower levels of family income and wealth than married retirees and both married and unmarried workers. Thus, they may find it hard to adapt to a delay or a reduction in Social Security benefits. Workers with pension coverage (through a defined benefit plan and/or a defined contribution plan) retire earlier than those without pension coverage; however, a large proportion of retirees is not currently collecting pension income.

Comparisons of workers and retirees by gender and marital status and by race and ethnicity help identify whether certain groups would be affected disproportionately by an increase in the Social Security retirement age. The findings suggest that unmarried women and nonwhites may be adversely affected by such a change.

The following sections present these and other findings in more detail. Before proceeding, however, two definitional issues warrant discussion. First, because persons with little or no attachment to the labor force are unlikely to be eligible for Social Security retirement benefits based on their own work records, their labor force behavior would not be much affected by an increase in either the Social Security early or normal retirement age. Therefore, analysis

should be restricted to those workers and retirees who are eligible for Social Security retirement benefits on their own work records. One way to approximate eligibility for Social Security is to restrict the analysis to persons who have worked for at least ten years. Unfortunately, the SIPP does not include information on previous work experience for persons aged 65 or older, so it is not possible to determine whether they have ten or more years of work experience. Therefore, the analysis in this section is performed on two SIPP samples.

The first SIPP sample includes all persons aged 55 to 70, some of whom have little or no attachment to the workforce. The second SIPP sample is more restrictive--persons aged 55 to 64 with at least ten years of work experience. This sample approximates the group eligible for Social Security retirement benefits on their own work records. Although information on prior work experience is available for everyone in the HRS, two similar sets of analyses are performed with the HRS: one for all persons aged 55 to 63 and one for only those with at least 10 years of work experience. Thus, the HRS findings can be compared with the SIPP findings. Not surprisingly, the restricted samples disproportionately exclude persons not working at the time of the survey, the majority of whom are women.

The second issue involves how to distinguish workers from retirees. This distinction is not straightforward because retirement can be defined in many ways. One option is to use self-reported retirement. However, workers who retire from a career job and take another job, either full- or part-time (i.e., a bridge job), may report themselves as retired. Thus, many people who say they are retired are still active in the workforce. Another option would be to identify as retired those who receive Social Security or pension income. Again, however, many persons collecting retirement income continue to work. Because this analysis focuses on determining whether persons who are working could continue to work and whether persons no longer working would have been able to continue working if they desired, it treats as retired only persons who are not working.

Because Social Security benefits become available at a reduced level at age 62 and full benefits become available at age 65, the SIPP analysis uses three age categories: ages 55 to 61, ages 62 to 64, and ages 65 to 70. Since Wave 2 of the HRS includes persons up to age 63 only, two age breaks are used for the HRS analysis: ages 55 to 61 and ages 62 to 63. The comparisons in the following sections are for men and women combined. The appendix presents similar comparisons by gender.

In general, the results do not vary by data set (SIPP or HRS) or by whether the sample of all persons (which includes those with little or no work experience) or the restricted sample (which excludes those with less than ten years of work experience) is used. Therefore, although the following sections include tables with results for each data set and sample, the discussion focuses on the full SIPP sample results. Where the restrictive sample differs from the full SIPP, however, the discussion addresses the results of that sample. Similarly, the HRS results are discussed only when they differ from the SIPP results.

Can Individuals Extend Their Working Lives?

Whether individuals can extend their working lives depends partly on their physical ability to continue working, which, in turn, depends on both their health status and the physical demands of their job. Other employment-related characteristics, such as industry, job tenure, self-employed status, and union membership can also affect whether individuals can continue working at their current jobs. In addition, a worker's level of educational attainment may affect employment prospects at any job.⁵

Health and Disability Status of Workers and Retirees. Health and disability status play a major role in determining whether workers can continue to work and whether retirees would be able to work if they so desired. Specifically, workers in poor health are less able to continue working, and retirees in poor health are less able to have worked longer than they did. Within each age group, retirees are less healthy than workers using each of four different measures of health and disability status: (1) self-reported health status, (2) the existence of a condition that limits work, (3) the number of functional limitations, and (4) receipt of Social Security disability benefits (Tables 1a and 1b).

According to the SIPP sample of all persons, retirees report being less healthy than workers, regardless of age (Table 1a). Retirees are less likely than workers to report being in excellent health and much more likely than workers to report poor health. About two-fifths of retirees but less than one-fifth of workers report being in fair or poor health. Retirees are also more likely to report having a physical, mental, or health condition that limits work at a job. For instance, 11 percent of workers aged 55 to 61 report such conditions, compared with 42 percent of retirees. Not surprisingly, a majority of retirees citing a limiting condition report that this condition prevents them from working. These self-reported measures may overstate health problems, if, for example, retirees claim poor health status to rationalize not working.

Two more objective measures of health status include the number of functional limitations and the receipt of Social Security Disability Insurance (DI) benefits. Retirees are more likely than workers to report having one or more functional limitations, with functional limitations defined as difficulty with specific activities, ranging from walking a block to bathing and dressing.^{6,7} Similarly, a strong relationship exists between work status and the receipt of DI benefits. According to the SIPP sample of all persons, retirees are much more likely to have applied for DI benefits at some time. Moreover, of those who did apply for benefits, retirees are much more likely to have received them. Although Wave 2 of the HRS does not include information on whether persons ever applied for DI benefits, it does ascertain whether they currently receive DI benefits. According to the HRS sample of all persons, 17 percent of retirees aged 55 to 61 and 11 percent of retirees aged 62 to 63 currently receive DI benefits (Table 1b). Almost no workers currently receive DI benefits, because the eligibility rules for DI restrict benefit receipt to those who cannot work.⁸

Table 1a
Workers/Retirees, by Health and Disability Status
Survey of Income and Program Participation

	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
All Persons						
N	1,522	992	424	784	448	1,780
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Health status						
Excellent	19.4	10.4	17.8	10.8	15.8	8.3
Very good	33.3	20.8	28.0	17.8	28.5	19.6
Good	33.9	28.8	37.6	32.3	36.2	35.9
Fair	11.3	21.9	13.3	21.6	17.4	24.5
Poor	2.1	18.1	3.3	17.5	2.2	11.7
Condition that limits work at a job						
Yes	11.4	42.3	15.5	36.0	na	na
Prevent working	na	82.3	na	80.9	na	na
Does not prevent working	na	17.7	na	19.1	na	na
No	88.6	57.7	84.5	64.0	na	na
Functional limitations						
None	88.8	61.2	86.5	62.4	82.9	66.7
1-2 Limitations	9.2	17.9	9.6	15.5	12.7	16.2
3+ Limitations	2.0	20.9	4.0	22.0	4.4	17.0
Ever applied for Social Security Disability Insurance (DI) benefits						
Yes	2.9	25.3	4.2	20.7	2.5	10.2
Ever received benefits	39.3	65.1	52.0	72.6	59.1	70.8
Never received benefits	60.7	34.9	48.0	27.4	40.9	29.2
No	97.1	74.7	95.8	79.3	97.5	89.8

Table 1a (continued)
Workers/Retirees, by Health and Disability Status
Survey of Income and Program Participation

	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
Persons Working 10+ Years						
N	1,442	630	403	561	na	na
	100.0%	100.0%	100.0%	100.0%	na	na
Health status						
Excellent	19.4	9.8	18.5	10.8	na	na
Very good	33.3	20.7	27.6	19.9	na	na
Good	34.3	27.0	37.2	30.8	na	na
Fair	11.0	23.4	13.4	20.6	na	na
Poor	2.0	19.1	3.3	17.9	na	na
Condition that limits work at a job						
Yes	11.4	45.1	14.7	36.5	na	na
Prevent work	na	81.1	na	79.7	na	na
Does not prevent work	na	18.9	na	20.3	na	na
No	88.6	54.9	85.3	63.5	na	na
Functional limitations						
None	88.8	59.8	87.0	63.0	na	na
1-2 Limitation	9.4	19.3	9.6	16.0	na	na
3+ Limitations	1.8	21.0	3.4	21.0	na	na
Ever applied for Social Security Disability Insurance (DI) benefits						
Yes	2.8	28.6	3.5	21.9	na	na
Ever received benefits	38.3	70.4	43.2	73.5	na	na
Never received benefits	61.7	29.6	56.8	26.5	na	na
No	97.2	71.4	96.5	78.1	na	na

Source: Urban Institute tabulations of the 1990 SIPP.

Note: Tabulations are weighted to be nationally representative.

Table 1b
Workers/Retirees, by Health and Disability Status
Health and Retirement Study

	Age 55-61		Age 62-63	
	Workers	Retirees	Workers	Retirees
All Persons				
N	3,557	1,951	665	777
	100.0%	100.0%	100.0%	100.0%
Health status				
Excellent	23.1	11.9	20.8	15.0
Very good	34.5	21.2	33.7	27.9
Good	30.5	27.4	33.2	25.0
Fair	10.4	21.7	10.7	19.7
Poor	1.5	17.8	1.6	12.5
Condition that limits work at a job				
Yes	9.7	50.8	11.1	43.8
Prevents work	4.6	71.2	5.3	69.8
Does not prevent work	95.4	28.8	103.7	30.2
No	90.3	49.2	88.9	56.2
Functional limitations				
None	53.7	30.1	50.1	35.7
1-2 Limitation	32.1	26.8	35.3	27.7
3+ Limitations	14.2	43.1	14.7	36.5
Receiving Social Security Disability Insurance (DI) benefits				
Yes	0.3	16.5	0.0	11.4
No	99.7	83.5	100.0	88.7

Table 1b (continued)
Workers/Retirees, by Health and Disability Status
Health and Retirement Study

	Age 55-61		Age 62-63	
	Workers	Retirees	Workers	Retirees
Persons Working 10+ Years				
N	2,966	1,064	568	496
	100.0%	100.0%	100.0%	100.0%
Health status				
Excellent	23.2	12.2	21.6	17.3
Very good	35.5	21.5	33.2	30.2
Good	30.0	27.7	33.1	23.8
Fair	9.9	21.0	10.5	18.1
Poor	1.4	17.6	1.6	10.6
Condition that limits work at a job				
Yes	9.0	52.4	10.6	39.5
Prevents work	3.2	70.4	4.7	64.8
Does not prevent work	96.8	29.6	95.3	35.2
No	91.0	47.6	89.5	60.5
Functional limitations				
None	54.5	31.6	53.0	39.5
1-2 Limitation	32.5	26.4	33.2	28.6
3+ Limitations	13.0	42.0	13.8	31.9
Receiving Social Security Disability Insurance (DI) benefits				
Yes	0.3	19.3	0.0	10.7
No	99.7	80.8	100.0	89.4

Source: Urban Institute tabulations of Wave 2 of the HRS.

Note: Tabulations are weighted to be nationally representative.

Perhaps surprisingly, there is little difference between the health and disability characteristics of the full sample and those of the sample restricted to persons with at least ten years of work experience.⁹ It might have been expected that a more tenuous attachment to the workforce could be the result of a disability, implying that those with more work experience would tend to have fewer disability characteristics than those with less of an attachment to the labor force. However, these findings suggest that this is not the case. Indeed, a slightly higher proportion of persons in the restricted sample report having a condition that limits work at a job than do persons in the full sample. Thus, persons have a weaker labor force attachment for reasons other than disability.

Although retirees consistently appear to be less healthy than workers, regardless of the health/disability measure used, these differences narrow with age because the proportion of workers in poor health increases with age and the proportion of retirees in poor health decreases with age. According to the SIPP sample of all persons, the difference between the proportion of workers in fair or poor health and the proportion of retirees in fair or poor health decreases from 27 percentage points for persons aged 55 to 61, to 23 percentage points for persons aged 62 to 64, and to 17 percentage points for persons aged 65 to 70. This finding suggests that health problems are a more important reason for not working among younger persons than older persons.¹⁰ In other words, the earlier someone leaves the labor force, the more likely it is that the individual has a health-related problem that limits or prevents work.

The proportion of retirees who, because of health reasons, could not have extended their working lives can be estimated as the proportion of retirees who have ever received DI benefits.¹¹ According to the SIPP sample of all persons, 16 percent of retirees aged 55 to 61, 15 percent of retirees aged 62 to 64, and 7 percent of retirees aged 65 to 70 have at some time received DI benefits.¹² However, since most of these persons are already receiving disability benefits (or, in the case of persons aged 65 to 70, have shifted to Social Security retirement benefits), they would not be affected by an increase in the Social Security retirement age.

Perhaps a better way to measure those who would be most affected by an increase in the Social Security eligibility age would be to estimate the proportion of retirees who have a condition that prevents working, even if the condition is not severe enough to enable them to receive DI benefits. This could be estimated as the difference in the proportion of persons who have a condition that prevents work and the proportion that has ever received disability benefits. Calculating this measure using the full SIPP sample suggests that 18 percent of retirees aged 55 to 61 and 14 percent of retirees aged 62 to 64 would be most adversely affected by an increase in the Social Security retirement age.¹³ In other words, 18 percent of the younger retirees and 14 percent of the older retirees could not have continued working but do not have a condition severe enough to qualify them for DI benefits. Again, however, this may overstate the proportion most adversely affected if retirees exaggerate their poor health status to rationalize the fact that they are not working.

Occupation of Workers and Retirees. The extent to which workers can prolong their working lives also depends on the nature of their job responsibilities. In particular, workers with more physically demanding jobs are likely to retire earlier and would be less able to extend their working lives than those in less physically demanding jobs.

Because the SIPP does not include information on an individual's physical work requirements, this analysis uses occupation as a proxy for the level of a job's physical demands. Using evidence from the HRS, Loprest, Rupp, and Sandell (1995) developed an index to reflect physical demands across occupations and found that workers in managerial/professional, sales, and clerical positions have the least physical demands at work. Occupations with high levels of physical demands include farm/fishing/forestry, mechanical/construction/production, and operators/laborers.

Retirees from more physically demanding occupations, especially operators/laborers, make up a disproportionate share of retirees (Table 2).^{14 15} For instance, according to the SIPP sample of all persons who have ever worked, operators/laborers constitute 16 percent of workers aged 55 to 61 and 22 percent of retirees. In contrast, managers/professionals make up 25 percent of workers aged 55 to 61 and 19 percent of retirees. Moreover, the proportion of workers in the more physically demanding occupations decreases with age, dropping sharply after age 65; 32 percent of workers aged 55 to 61 are in farm/fishing/forestry, craft/production, or operator/laborer occupations, compared with 20 percent of workers aged 65 to 70.

Although information on occupation can be used to help assess the relative proportions of workers and retirees in physically demanding jobs, not all workers in, for example, operator/laborer positions hold physically demanding jobs. Indeed, as of the mid-1980s, the Social Security Administration (1986) was estimating that about 11 percent of workers approaching retirement held physically demanding jobs. Projected changes in the occupational mix are likely to reduce this proportion in the future.

Employment Characteristics of Workers and Retirees. Aside from differences caused by the level of a job's physical demands, some workers may find it easier to remain on their current job than others. Information on industry, tenure, self-employment status, and union status can help assess the prospects for workers to continue at their current jobs and the likelihood that retirees could have worked longer at their last job.

Retirement patterns likely vary by industry. For instance, workers in manufacturing are more likely to be unionized and have greater access to pension benefits, which, in turn, may affect retirement decisions. In addition, workers with physically demanding occupations are more likely to be employed in certain industries than others. Almost two-thirds of workers in manufacturing are craftsmen or operators/laborers. In contrast, business/personal services, public administration, and finance, insurance, and real estate industries are less likely to employ persons in these occupations.

Table 2
Workers/Retirees, by Occupation
Survey of Income and Program Participation

Occupation ^a	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
Persons Who Have Ever Worked						
N ^a	1,522	864	424	702	448	na
	100.0%	100.0%	100.0%	100.0%	100.0%	na
Manager/Professional	24.8	18.8	23.1	22.1	20.2	na
Sales/Technician	11.7	9.4	9.8	9.5	13.5	na
Clerical	18.8	21.0	16.2	14.3	21.4	na
Services	13.1	16.5	19.4	18.7	24.7	na
Farm/Fishing/Forestry	2.2	2.4	3.1	1.5	2.6	na
Craft/Production	13.5	10.0	10.1	12.9	5.4	na
Operator/Laborer	16.0	21.8	18.2	20.9	12.2	na
Persons Working 10+ Years						
N ^a	1,442	630	403	561	na	na
	100.0%	100.0%	100.0%	100.0%	na	na
Manager/Professional	25.5	20.3	22.8	23.4	na	na
Sales/Technician	11.5	8.1	10.1	9.2	na	na
Clerical	18.4	21.0	16.3	13.8	na	na
Services	13.1	15.2	19.3	16.6	na	na
Farm/Fishing/Forestry	1.9	2.5	3.1	1.6	na	na
Craft/Production	13.6	10.8	10.7	13.2	na	na
Operator/Laborer	16.1	22.1	17.8	22.2	na	na

^a Self-employed persons are excluded.

Source: Urban Institute tabulations of the 1990 SIPP.

Note: Tabulations are weighted to be nationally representative.

A comparison of workers and retirees by industry reveals that a disproportionate share of retirees were previously employed in agriculture, mining, construction, manufacturing, and transportation industries. In fact, according to the SIPP sample of all persons who have ever worked, almost one-half of retirees aged 62 to 64 were previously employed in one of these industries, compared to just under one-third of current workers (Table 3a).¹⁶ The proportion of workers in manufacturing declines with age: 24 percent of workers aged 55 to 61 are in manufacturing, compared with 21 percent of workers aged 62 to 64 and only 10 percent of workers aged 65 to 70. In contrast, the proportion of workers in business/personal services industries increases with age, and while the proportion in wholesale/retail trade dips slightly between ages 55 to 61 and 62 to 63, it increases by nearly 10 percentage points for workers aged 65 to 70.

Tenure may also play a role in retirement decisions. A shorter tenure on a current job may indicate that a worker is more at risk of losing that job than a person with a longer tenure. Although over one-half of all workers aged 55 to 64 have been at their current job for 10 years or more, fewer than one-third have been at their current job for less than five years (Tables 3a and 3b). Retirees show similar tenure patterns. Because this measure of tenure indicates time at the current job (last job for retirees) rather than cumulative work experience over all jobs, it is unclear whether those with shorter tenures have weaker attachments to the workforce in general (i.e., they are intermittent labor force participants). Alternatively, shorter-tenured workers could be those with greater job mobility, meaning that even if they left their current job, they would be more able to find another job of comparable wages and benefits.

The self-employed are in a somewhat different position than those who work for others. Self-employed persons typically have more control over their employment decisions and have more flexibility in terms of the hours they work and when they retire. On the other hand, self-employment can be more unstable than wage employment due to the greater fluctuation in earnings among the self-employed. Current workers are much more likely to be self-employed than were retirees in their last job. For instance, according to the SIPP sample of all persons who have ever worked, 21 percent of workers aged 55 to 61 are self-employed, while only 8 percent of retirees this age were self-employed on their last job. In addition, the proportion of workers who are self-employed increases with age; among persons aged 62 to 64, 26 percent of workers are self-employed. These findings reflect two possible factors: (1) the self-employed are less likely to retire early, and (2) persons who leave career jobs move into self-employment rather than leaving the workforce entirely.

Table 3a
Workers/Retirees, by Industry, Tenure, and Self-Employment Status
Survey of Income and Program Participation

	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
Persons Who Have Ever Worked						
N	1,522	864	424	702	448	na
	100.0%	100.0%	100.0%	100.0%	100.0%	na
Industry^a						
Agriculture, Mining, Construction	7.0	8.0	5.4	10.8	5.8	na
Manufacturing	23.6	26.1	20.6	25.2	9.6	na
Transportation	8.8	8.3	5.6	9.7	5.2	na
Wholesale/Retail Trade	15.4	16.8	14.4	14.2	24.0	na
Finance, Insurance, and Real Estate	6.0	4.5	5.1	5.9	6.0	na
Business/Personal Services	32.3	31.4	40.9	28.1	42.7	na
Public Administration	7.0	4.7	8.0	6.1	6.7	na
Tenure on job						
1-4 Years	28.4	36.2	30.5	26.2	na	na
5-9 Years	15.4	14.4	16.4	11.2	na	na
10-14 Years	13.3	12.0	10.9	10.2	na	na
15+ Years	43.0	37.4	42.2	52.4	na	na
Self-employed						
Yes	20.8	8.0	25.6	8.9	29.6	na
No	79.2	92.0	74.4	91.1	70.4	

Table 3a (continued)
Workers/Retirees, by Industry, Tenure, and Self-Employment Status
Survey of Income and Program Participation

	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
Persons Working 10+ Years						
N	1,442	630	403	561	na	na
	100.0%	100.0%	100.0%	100.0%	na	na
Industry^a						
Agriculture, Mining, Construction	6.9	8.5	5.5	11.1	na	na
Manufacturing	24.0	26.9	21.2	26.6	na	na
Transportation	8.9	9.3	5.9	9.8	na	na
Wholesale/Retail Trade	14.9	15.0	14.0	14.0	na	na
Finance, Insurance, and Real Estate	5.9	4.2	5.3	6.1	na	na
Business/Personal Services	32.1	30.7	41.3	26.4	na	na
Public Administration	7.2	5.2	7.0	6.0	na	na
Tenure on job						
1-4 Years	27.7	32.0	30.9	23.2	na	na
5-9 Years	15.1	12.7	16.3	11.2	na	na
10-14 Years	13.5	13.3	11.1	10.7	na	na
15+ Years	43.8	42.0	41.6	54.9	na	na
Self-employed						
Yes	20.9	7.9	25.5	9.3	na	na
No	79.1	92.1	74.5	90.7	na	na

^a Self-employed persons are excluded.

Source: Urban Institute tabulations of the 1990 SIPP.

Note: Tabulations are weighted to be nationally representative.

The union status of workers and retirees is compared using the HRS (Table 3b).¹⁷ Union workers are less likely to lose their jobs than non-union workers. On the other hand, union workers are more likely to have pension coverage, thus enabling them to retire earlier. According to the HRS sample of all persons who have ever worked, workers and young retirees (aged 55 to 61) are equally likely to have been union members. Twenty-one percent of each group belonged to a union. However, retirees aged 62 to 63 were more likely to have belonged to a union on their last job than are workers on their current job. Restricting the HRS sample to those persons who have worked at least 10 years reveals that retirees are more likely to have belonged to a union on their previous job than workers, regardless of age group. This suggests that unionized workers are more likely to retire early, perhaps reflecting the greater likelihood of pension coverage among union workers as well as the types of jobs union workers hold.

Educational Attainment of Workers and Retirees. A worker's level of educational attainment can affect his or her employment prospects at any job. Persons with more schooling likely enjoy a broader set of employment options than persons with less schooling.

Retirees of all ages have less education than workers (Tables 4a and 4b). Retirees are much less likely than workers to have completed high school or graduated college. For instance, according to the SIPP sample of all persons, 42 percent of retirees aged 62 to 64 have not completed high school, compared with 27 percent of workers. Therefore, retirees may have more limited employment prospects than those still at work.

Are People Financially Equipped to Handle a Reduction in Social Security Income?

The effect of an increase in the Social Security retirement age will vary depending on the level of family income and wealth. Families with higher incomes in general and with pension income in particular can better absorb a delay or a reduction in Social Security benefits. The same holds for families with greater wealth.

According to the SIPP sample of all persons, the median worker's family income¹⁸ exceeds that of retirees, but the income gap decreases with age (Table 5a). For instance, the median family income for married workers aged 55 to 61 is \$45,960 compared to \$28,122 for married retirees. By ages 65 to 70, the size of the income gap is smaller; the median family income for married workers aged 65 to 70 is \$35,628, compared to \$24,321 for married retirees. Similar patterns are evident among unmarried persons; the median family income for unmarried workers aged 55 to 61 is \$24,600, compared to \$9,410 for unmarried retirees. By ages 65 to 70, the median incomes for unmarried workers and retirees are \$23,763 and \$12,750, respectively.

Table 3b
Workers/Retirees, by Tenure, Self-Employment Status, and Union Status
Health and Retirement Study

	Age 55-61		Age 62-63	
	Workers	Retirees	Workers	Retirees
Persons Who Have Ever Worked				
N	3,557	1,756	665	720
	100.0%	100.0%	100.0%	100.0%
Tenure on job				
1-4 Years	26.7	41.8	23.8	34.7
5-9 Years	15.8	14.3	14.5	11.0
10-14 Years	10.7	9.3	11.1	10.3
15+ Years	46.9	34.6	50.5	43.9
Self-employed				
Yes	19.5	na	26.4	na
No	80.6	na	73.7	na
Union status				
Yes	21.2	20.8	16.3	22.7
No	78.9	79.2	83.7	77.3
Persons Working 10+ Years				
N	2,966	1,064	568	496
	100.0%	100.0%	100.0%	100.0%
Tenure on job				
1-4 Years	22.0	18.2	20.1	14.9
5-9 Years	10.9	9.8	11.1	6.7
10-14 Years	10.6	15.0	10.7	14.7
15+ Years	56.5	57.0	58.2	63.7
Self-employed				
Yes	19.6	na	25.1	na
No	80.4	na	74.9	na
Union status				
Yes	21.4	29.4	17.4	29.9
No	78.6	70.6	82.6	70.1

Source: Urban Institute tabulations of Wave 2 of the HRS.

Note: Tabulations are weighted to be nationally representative.

Table 4a
Workers/Retirees, by Years of Schooling
Survey of Income and Program Participation

Years of Schooling	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
All Persons						
N	1,522	992	424	784	448	1,780
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Less than 12 Years	23.5	35.5	27.3	41.6	30.6	37.5
12 Years	37.3	39.7	33.9	35.8	28.3	37.5
13-15 Years	19.1	13.4	15.0	13.9	19.0	14.5
16+ Years	20.2	11.4	23.9	8.8	22.1	10.5
Persons Working 10+ Years						
N	1,442	630	403	561	na	na
	100.0%	100.0%	100.0%	100.0%	na	na
Less than 12 Years	23.2	34.0	26.9	37.2	na	na
12 Years	37.0	38.1	34.2	38.3	na	na
13-15 Years	19.4	15.3	14.9	14.5	na	na
16+ Years	20.4	12.6	24.1	10.0	na	na

Source: Urban Institute tabulations of the 1990 SIPP.

Note: Tabulations are weighted to be nationally representative.

Table 4b
Workers/Retirees, by Years of Schooling
Health and Retirement Study

Years of Schooling	Age 55-61		Age 62-63	
	Workers	Retirees	Workers	Retirees
All Persons				
N	3,557	1,951	665	777
	100.0%	100.0%	100.0%	100.0%
Less than 12 Years	20.6	32.3	23.8	33.6
12 Years	38.2	39.4	32.1	38.6
13-15 Years	20.4	15.7	20.5	13.0
16+ Years	20.7	12.6	23.5	14.9
Persons Working 10+ Years				
N	2,966	1,064	568	496
	100.0%	100.0%	100.0%	100.0%
Less than 12 Years	19.3	25.9	22.3	29.0
12 Years	38.4	39.4	32.7	37.8
13-15 Years	20.8	16.7	20.6	15.0
16+ Years	21.4	18.1	24.5	18.2

Source: Urban Institute tabulations of Wave 2 of the HRS.

Note: Tabulations are weighted to be nationally representative.

Table 5a
Workers/Retirees, by Income, Pension Coverage, and Wealth
Survey of Income and Program Participation

	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
All Persons						
N	1,522	992	424	784	448	1,780
Median Income (\$)						
Married	45,960	28,122	39,885	27,435	35,628	24,321
Unmarried	24,600	9,410	21,906	12,972	23,763	12,750
Pension coverage on current job (%)	65.5	na	53.0	na	32.1	na
Currently receiving pension income (%)	11.5	23.5	17.8	35.8	27.9	42.6
Median Wealth (\$)^a						
Married	170,214	154,162	209,492	186,042	241,648	181,825
Unmarried	52,724	25,010	68,893	36,980	81,579	61,633
Persons Working 10+ Years						
N	1,442	630	403	561	na	na
Median Income (\$)						
Married	46,275	27,552	40,130	28,464	na	na
Unmarried	24,762	9,822	21,060	14,196	na	na
Pension coverage on current job (%)	66.8	na	54.3	na	na	na
Currently receiving pension income (%)	11.8	32.8	18.6	43.0	na	na
Median Wealth (\$)^a						
Married	170,010	155,573	209,963	195,304	na	na
Unmarried	54,437	25,601	70,780	45,000	na	na

^a Includes housing.

Source: Urban Institute tabulations of Wave 2 of the HRS.

Note: Tabulations are weighted to be nationally representative.

The difference in income between married workers and married retirees decreases with age. However, the reduction in the income gap results from decreasing income among married workers rather than increasing income among retirees. This may be the result of fewer married workers aged 65 to 70 having working spouses, compared with workers aged 55 to 61. Alternatively, higher-wage earners may be able to retire earlier than lower wage earners. In contrast, the reduction in the income gap among unmarried persons results more from an increase in income among retirees. In particular, the median income for unmarried retirees aged 62 and older exceeds that for retirees under age 62, presumably the result of the availability of Social Security retirement benefits and other pension income.

In contrast to the findings using the SIPP, the HRS data generally show less of a difference in median income for workers by age (Table 5b). It is unclear why the SIPP shows a drop in income whereas the HRS does not. However, unmarried retirees in both the SIPP and the HRS have higher median incomes upon reaching age 62, and both data sets show that married persons have a higher median family income than unmarried persons, regardless of employment status. The median family income for unmarried persons is only one-third to one-half that of married persons. And as will be discussed below, unmarried persons are disproportionately women.

Although income from any source can help lessen the impact of a delay or reduction in Social Security benefits, pension income in particular can reduce dependence on Social Security by providing another source of income during retirement. A delay or a reduction in Social Security income will more adversely affect persons without access to pension income. Here, access to pension income is measured in two ways. First, the proportion of workers with pension coverage (through either a defined benefit plan or a defined contribution plan or both) on their current job is examined. According to the SIPP sample of all persons, two-thirds of workers aged 55 to 61 have coverage on their current job (see Table 5a). However, this proportion decreases with age; 53 percent of workers aged 62 to 64 and 32 percent of workers aged 65 to 70 have pension coverage. This finding is consistent with previous research findings that persons with pension coverage are more likely to retire early, and it implies that older workers would be more affected by a decrease in Social Security income.

Second, access to pension coverage can be measured by examining the proportions of workers and retirees who currently receive pension income. Pension receipt increases with age. According to the SIPP sample of all persons, 24 percent of retirees and 12 percent of workers aged 55 to 61 receive pension income.¹⁹ The SIPP measure of current pension receipt reflects whether an individual reports receiving pension income. This pension income can be through the individual's own employer-sponsored pension plan or through a spousal benefit from the pension plan of a spouse. By ages 65 to 70, 43 percent of retirees and 28 percent of workers receive pension income. Although a greater proportion of retirees currently receive pension income than workers, the majority of retirees do not receive pension income. Three-quarters of retirees aged 55 to 61, 64 percent of retirees aged 62 to 64, and 57 percent of retirees aged 65 to 70 do not receive pension income.

Table 5b
Workers/Retirees, by Income, Pension Coverage, and Wealth
Health and Retirement Study

	Age 55-61		Age 62-63	
	Workers	Retirees	Workers	Retirees
All Persons				
N	3,557	1,951	665	777
Median Income (\$)				
Married	53,500	30,562	52,312	30,008
Unmarried	24,000	7,100	23,322	9,512
Pension coverage on current job (%)				
	46.7	na	35.5	na
Currently receiving pension income (%)				
	14.8	33.8	24.8	47.2
Median Wealth (\$)^a				
Married	150,740	136,500	192,000	173,000
Unmarried	53,866	10,000	66,094	34,798
Persons Working 10+ Years				
N	2,966	1,064	568	496
Median Income (\$)				
Married	54,080	32,800	54,000	31,583
Unmarried	26,600	11,280	25,200	12,500
Pension coverage on current job (%)				
	48.5	na	37.4	na
Currently receiving pension income (%)				
	15.3	43.2	25.5	57.3
Median Wealth (\$)^a				
Married	153,000	152,000	193,684	190,000
Unmarried	56,250	29,350	70,000	54,000

^a Includes housing.

Source: Urban Institute tabulations of Wave 2 of the HRS.

Note: Tabulations are weighted to be nationally representative.

Relatively more persons report pension income in the HRS than in the SIPP; however, over 50 percent of retirees in the HRS sample of all persons have no pension income (Table 5b).^{20 21} Some of the younger retirees may be delaying the receipt of pension benefits because they have not yet attained their plan's minimum eligibility age (for either reduced or full benefits); however, it is less likely that older retirees are delaying receipt. Instead, older retirees who do not currently receive pension income are most likely not covered under a pension plan and will not receive pension income in the future.

Net family wealth provides a better indication of the overall financial status of workers and retirees than do income measures.²² Persons with greater net family wealth can draw on their other assets in the event of a decrease in Social Security income. Because the SIPP measure of wealth includes a slightly different set of assets than the HRS measure, the SIPP and HRS median wealth figures are not directly comparable.²³ However, the SIPP and HRS show similar patterns of median wealth by work status and age.

The median wealth of workers exceeds that of retirees, but the wealth gap varies by age and marital status. According to the SIPP sample of all persons, the median wealth of married workers exceeds that of married retirees by only 10 percent for persons aged 55 to 64, but by 33 percent for persons aged 65 to 70 (see Table 5a), largely as a result of an increase in wealth among married workers. Therefore, younger married retirees may not fare much worse than married workers in the event of a decrease in Social Security benefits. In contrast, the median wealth of unmarried workers aged 55 to 61 is more than twice that of unmarried retirees. Although this gap decreases with age, a large gap persists even for persons aged 65 to 70, when the median wealth of unmarried workers exceeds that for unmarried retirees by nearly one-third.

Regardless of age or work status, unmarried persons have much lower wealth than married persons, and this is especially true of unmarried retirees. For instance, the median wealth of unmarried retirees aged 55 to 61 is only one-sixth that of married retirees. Therefore, unmarried retirees may find it hardest to adapt to a delay or reduction in Social Security benefits.²⁴

Notably, both the pension coverage and wealth measures in the samples restricted to workers with at least 10 years of work experience exceed those of the sample of all persons. Persons with more work experience have greater access to pension income and have a greater opportunity to accumulate wealth.

Are Certain Demographic Groups Especially Vulnerable?

If certain demographic groups make up disproportionate shares of retirees, these groups may bear more of any adverse effects of an increase in the Social Security retirement age. In this section, workers and retirees are compared across gender and marital status as well as by race and ethnicity.

Retired men aged 55 to 64 are disproportionately unmarried relative to workers this age (Tables 6a and 6b). The opposite is true among men aged 65 to 70, when working men are disproportionately unmarried. Working women are disproportionately unmarried, regardless of age category. And women are much more likely to be unmarried than men, especially among workers. For instance, according to the SIPP sample of all persons, 45 percent of working women aged 62 to 64 are unmarried, compared with 14 percent of working men. Therefore, it is particularly important to assess how proposals to increase the early retirement age will affect unmarried women.

Among married persons, there is a correlation between one spouse's work status and the work status of the other spouse. With a few exceptions, workers are more likely to have working spouses, and retirees are more likely to have nonworking spouses. One exception in the SIPP sample of all persons is that married men aged 62 and over are more likely to have nonworking spouses than working spouses, regardless of their own work status. However, the HRS sample of all persons reveals that among married men aged 62 to 63, workers are more likely to have working spouses, and retirees are more likely to have nonworking spouses. Another exception can be found in the HRS sample of all persons--retirees aged 55 to 61 are about equally likely to have a working or nonworking spouse.

Nonwhites may also be disproportionately affected by a decrease in Social Security income because they make up a larger proportion of retirees than workers (Tables 7a and 7b). For instance, according to the SIPP sample of all persons, 21 percent of retirees aged 55 to 61 are nonwhite or Hispanic, compared with 16 percent of workers. Although this difference decreases with age and approaches zero by ages 65 to 70, the difference among younger retirees implies that an increase in the Social Security retirement age may disproportionately affect nonwhites. This will be particularly true if employment prospects vary by race and ethnicity, due to education and other factors that vary by race and ethnicity or to discrimination. Moreover, the proportion of persons who are white increases with age, regardless of work status, presumably because nonwhites suffer higher mortality than whites. Therefore, it is particularly important to assess how proposals to change the Social Security eligibility age will affect nonwhites.

Table 6a
Workers/Retirees, by Gender and Marital Status
Survey of Income and Program Participation

	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
All Persons						
Male						
N	795	332	242	285	250	710
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unmarried	12.8	26.8	14.3	25.3	23.6	17.7
Married						
Spouse working	50.0	29.5	32.8	28.2	27.2	12.4
Spouse not working	37.1	43.3	52.8	46.2	49.1	69.9
Female						
N	727	660	182	499	198	1,070
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unmarried	38.9	29.3	45.2	35.9	66.1	43.4
Married						
Spouse working	40.4	36.2	30.0	23.6	18.2	9.2
Spouse not working	20.7	34.4	24.9	40.5	15.6	47.2

Table 6a (continued)
Workers/Retirees, by Gender and Marital Status
Survey of Income and Program Participation

	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
Persons Working 10+ Years						
Male						
N	778	284	236	260	na	na
	100.0%	100.0%	100.0%	100.0%	na	na
Unmarried	12.6	23.6	13.5	24.9	na	na
Married						
Spouse working	50.3	33.2	32.9	29.7	na	na
Spouse not working	37.0	42.8	53.5	45.2	na	na
Female						
N	664	346	167	301	na	na
	100.0%	100.0%	100.0%	100.0%	na	na
Unmarried	39.9	33.0	46.2	34.6	na	na
Married						
Spouse working	38.8	31.5	28.4	23.6	na	na
Spouse not working	21.2	35.5	25.4	41.8	na	na

Source: Urban Institute tabulations of the 1990 SIPP.

Note: Tabulations are weighted to be nationally representative.

Table 6b
Workers/Retirees, by Gender and Marital Status
Health and Retirement Study

	Age 55-61		Age 62-63	
	Workers	Retirees	Workers	Retirees
All Persons				
Male				
N	1,896	682	369	302
	100.0%	100.0%	100.0%	100.0%
Unmarried	14.0	28.7	13.3	22.3
Married				
Spouse working	55.1	35.1	48.2	25.5
Spouse not working	30.9	36.2	38.5	52.2
Female				
N	1,661	1,269	296	475
	100.0%	100.0%	100.0%	100.0%
Unmarried	34.7	25.8	33.9	32.1
Married				
Spouse working	44.3	38.0	38.6	24.5
Spouse not working	21.0	36.2	27.5	43.4

Table 6b (continued)
Workers/Retirees, by Gender and Marital Status
Health and Retirement Study

	Age 55-61		Age 62-63	
	Workers	Retirees	Workers	Retirees
Persons Working 10+ Years				
Male				
N	1,693	545	334	257
	100.0%	100.0%	100.0%	100.0%
Unmarried	14.2	25.2	13.3	19.8
Married				
Spouse working	55.0	37.4	48.0	25.1
Spouse not working	30.8	37.4	38.6	55.1
Female				
N	1,273	519	234	239
	100.0%	100.0%	100.0%	100.0%
Unmarried	35.3	28.5	32.9	34.2
Married				
Spouse working	43.0	32.3	39.9	24.3
Spouse not working	21.8	39.3	27.2	41.6

Source: Urban Institute tabulations of Wave 2 of the HRS.

Note: Tabulations are weighted to be nationally representative.

Table 7a
Workers/Retirees, by Race/Ethnicity
Survey of Income and Program Participation

Race/Ethnicity	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
All Persons						
N	1,522	992	424	784	448	1,780
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
White, Non-Hispanic	83.8	79.1	84.6	82.3	86.9	86.5
Black, Non-Hispanic	8.0	9.8	8.0	9.2	8.3	7.4
Hispanic	4.7	7.3	4.6	5.4	3.2	4.5
Other	3.5	3.8	2.9	3.2	1.6	1.6
Persons Working 10+ Years						
N	1,442	630	403	561	na	na
	100.0%	100.0%	100.0%	100.0%	na	na
White, Non-Hispanic	83.4	80.3	85.0	83.6	na	na
Black, Non-Hispanic	8.2	11.0	8.4	9.8	na	na
Hispanic	4.6	6.1	4.6	4.5	na	na
Other	3.7	2.7	2.1	2.2	na	na

Source: Urban Institute tabulations of the 1990 SIPP.

Note: Tabulations are weighted to be nationally representative.

Table 7b
Workers/Retirees, by Race/Ethnicity
Health and Retirement Study

Race/Ethnicity	Age 55-61		Age 62-63	
	Workers	Retirees	Workers	Retirees
All Persons				
N	3,557	1,951	665	777
	100.0%	100.0%	100.0%	100.0%
White, Non-Hispanic	84.9	79.3	86.5	80.0
Black, Non-Hispanic	10.2	13.0	8.9	13.3
Hispanic	4.7	7.5	4.6	6.3
Other	0.1	0.3	0.1	0.4
Persons Working 10+ Years				
N	2,966	1,064	568	496
	100.0%	100.0%	100.0%	100.0%
White, Non-Hispanic	85.8	81.8	88.6	84.5
Black, Non-Hispanic	9.1	12.4	7.1	10.5
Hispanic	5.0	5.8	4.1	4.9
Other	0.1	0.0	0.1	0.2

Source: Urban Institute tabulations of Wave 2 of the HRS.

Note: Tabulations are weighted to be nationally representative.

Reasons for Workforce Departure

People stop working for many reasons. Those who voluntarily leave the workforce presumably are more able to continue working than those who leave involuntarily.

The SIPP provides data on the main reason workers leave their jobs. Workers who leave their jobs during the panel are asked the main reason for leaving and can respond with one of the following: (1) retired (2) laid off, (3) discharged, (4) job was temporary and ended, (5) quit to take another job, or (6) quit for some other reason. Notably, the SIPP does not include a separate category for leaving a job due to health reasons; presumably that is included within the 'quit for some other reason' category.

Excluding persons who were self-employed, 904 workers aged 55 to 70 (or about two-fifths of the workforce in this age group) leave the workforce for at least one month during the 32 months of the SIPP panel. Information on the reason for labor force departure is available for 565 of the 904 job leavers.²⁵ This analysis examines only a worker's first observed departure from the workforce, regardless of whether he or she re-enters the workforce at a later date.

Among those leaving the workforce, the reason given for leaving varies with age. The younger a worker is when he or she leaves a job, the more likely it is that the departure is involuntary--either laid off or discharged--and the less likely it is that the departure is voluntary (Table 8a). Among workers aged 55 to 61 who leave the workforce, more leave involuntarily, as a result of being laid off or discharged (35 percent) than voluntarily due to retirement (27 percent). Among workers aged 62 and 64 who leave the workforce, however, the opposite is true--more workers leave voluntarily due to retirement (60 percent) than involuntarily as a result of being laid off or discharged (11 percent). Although the proportion of workers aged 65 to 70 leaving the workforce due to retirement (47 percent) is lower than that among those aged 62 to 64, it greatly exceeds the proportion of those aged 65 to 70 leaving involuntarily due to being laid off or discharged (14 percent). The increase in the proportion of persons leaving to retire beginning at age 62 likely reflects their ability to collect Social Security benefits. On the other hand, the availability of these Social Security benefits may influence the reason given for leaving a job. Individuals may be more likely to report that they left their last job due to voluntary retirement if they are able to collect Social Security benefits, even if the actual reason for leaving was due to a lay off or poor health.

There are substantial differences by gender and marital status in the reasons given for labor force departure.²⁶ For instance, men are more likely than women to leave voluntarily, and the difference is most pronounced for persons aged 62 and older (Table 8b). Unmarried persons are more likely to have been laid off or discharged than married persons (Table 8c). These findings are not surprising, given the earlier findings related to income and wealth differences by marital status. Since unmarried workers have less income and accumulated wealth than married workers, they are less likely to have accumulated the resources required to be able to retire voluntarily.

The HRS also provides information about the reasons workers aged 55 to 63 leave the workforce. Workers who reported leaving a job in the two-year period between Waves 1 and 2 are asked why they left. In addition to the SIPP categories, the HRS explicitly includes poor health and disability as reasons for leaving.

Table 8a
Reason for Labor Force Departure
Survey of Income and Program Participation

	Age at Departure		
	Age 55-61	Age 62-64	Age 65-70
N	263 100.0%	145 100.0%	157 100.0%
Voluntary			
Retirement	27.0	60.3	46.8
Quit to take another job	2.4	0.7	2.5
Involuntary			
Laid off/discharged	34.6	10.8	14.4
Other			
Job temporary and ended	12.2	12.5	15.0
Quit for some other reason	23.7	15.8	21.3

Source: Urban Institute tabulations of the 1990 SIPP.

Note: Tabulations are weighted to be nationally representative.

Table 8b
Reason for Labor Force Departure, by Gender
Survey of Income and Program Participation

	Age at Departure		
	Age 55-61	Age 62-64	Age 65-70
Males			
N	134	87	78
	100.0%	100.0%	100.0%
Voluntary			
Retired	30.6	73.0	55.7
Quit to take another job	0.6	0.0	3.9
Involuntary			
Laid off/discharged	39.3	4.0	10.6
Other			
Job temporary and ended	9.9	11.4	13.1
Quit for some other reason	19.6	11.5	16.6
Females			
N	129	58	79
	100.0%	100.0%	100.0%
Voluntary			
Retirement	23.0	39.3	37.0
Quit to take another job	4.4	1.7	1.0
Involuntary			
Laid off/discharged	29.2	21.9	18.7
Other			
Job temporary and ended	15.0	14.2	17.0
Quit for some other reason	28.4	22.8	26.4

Source: Urban Institute tabulations of the 1990 SIPP.

Note: Tabulations are weighted to be nationally representative.

Table 8c
Reason for Labor Force Departure, by Marital Status
Survey of Income and Program Participation

	Age at Departure		
	Age 55-61	Age 62-64	Age 65-70
Married			
N	184 100.0%	98 100.0%	93 100.0%
Voluntary			
Retired	32.0	59.8	47.3
Quit to take another job	2.5	1.0	4.1
Involuntary			
Laid off/discharged	31.6	5.7	12.7
Other			
Job temporary and ended	12.2	13.9	14.1
Quit for some other reason	21.6	19.7	21.8
Unmarried			
N	79 100.0%	47 100.0%	64 100.0%
Voluntary			
Retirement	12.9	61.2	46.0
Quit to take another job	2.0	0.0	0.0
Involuntary			
Laid off/discharged	43.1	22.0	17.2
Other			
Job temporary and ended	12.3	9.5	16.3
Quit for some other reason	29.7	7.2	20.5

Source: Urban Institute tabulations of the 1990 SIPP.

Note: Tabulations are weighted to be nationally representative.

Here, the HRS is used to examine the reason for leaving the workforce among persons who were working in Wave 1 and not working in Wave 2. Excluding those who were self-employed, 684 persons aged 55 to 63 (or about one-sixth of the workforce this age) left the workforce between Waves 1 and 2. The HRS findings corroborate those in the SIPP: the earlier a worker leaves a job, the more likely it is an involuntary departure (Table 9a). Persons aged 55 to 63 who leave a job are more likely to do so involuntarily due to job loss (14 percent) or poor health (22 percent) than are persons aged 62 to 63 (9 percent and 11 percent, respectively). The likelihood of leaving due to retirement increases with age; 27 percent of persons aged 55 to 61 cite retirement as the reason for leaving, compared with 57 percent of persons aged 62 to 63.

Table 9a
Reason for Labor Force Departure
Health and Retirement Study

	Age at Departure	
	Age 55-61	Age 62-63
N	541 100.0%	143 100.0%
Voluntary Retirement	26.8	57.1
Involuntary		
Business closed/laid off	13.8	8.5
Poor health/disabled	22.2	11.3
Other		
Family care	1.8	0.0
Other	35.5	23.1

Source: Urban Institute tabulations of Wave 2 of the HRS.

Note: Tabulations are weighted to be nationally representative.

Again, reasons for leaving the workforce vary by gender and marital status. Men are more likely than women to leave the workforce due to retirement (Table 9b). Among persons leaving the workforce at ages 55 to 61, unmarried persons are more likely to leave due to job loss or poor health than married persons (Table 9c). However, only minimal differences by marital status exist for persons aged 62 to 63.

Older workers are more likely to leave the labor force voluntarily. Those leaving prior to age 62 are much more likely to have done so involuntarily due to job loss or poor health than persons aged 62 and older. Therefore, an increase in the Social Security retirement age would most adversely affect persons who leave the workforce by age 62.

Relative Effects of the Factors Influencing Retirement

The previous section established that retired people differ from workers in many ways, but it did not establish what factors actually lead to retirement or the relative importance of those factors. To measure such effects, it is necessary to examine a sample of working people at or near retirement age. In particular, multivariate statistical techniques can be used to estimate how each of the factors thought to influence retirement does so, holding everything else constant.

This section presents the results of a multivariate logit model of retirement. The advantage of this multivariate model is that it produces estimates of each factor, holding constant all of the other factors that influence retirement. For example, although it is evident that people in poor health are more likely to be retired than healthier people, does this effect still exist after controlling for age and employment characteristics? How much of an independent effect does health status play in the decision to retire?

For the estimation, the sample is restricted to people between the ages of 55 and 70 who are working at the beginning of the sample, thus allowing measurement of the factors affecting retirement at the point in time when the person retires. In the tables presented above, the pool of retired people in each age group includes people who had recently retired and people who had been retired for many years. The factors affecting the latter group may differ greatly from the factors affecting recent retirees. Moreover, the length of time in retirement might affect the size of variables that affect retirement, such as income and wealth. Examining these effects at the time of retirement avoids these problems.

It is important to note that the logit model merely suggests the effects of different factors affecting retirement. It does not provide conclusive evidence of causality. The model is what economists call a reduced form--basically, a summary of all the factors thought to be at work without an explicit model of how those factors are related. The reduced form is very useful in showing the correlation between each factor and retirement. It is of course possible that a particular variable is correlated with something that is left out of the model, thus creating a spurious correlation. For example, the availability of employer-sponsored health insurance

Table 9b
Reason for Labor Force Departure, by Gender
Health and Retirement Study

	Age at Departure	
	Age 55-61	Age 62-63
Males		
N	236	72
	100.0%	100.0%
Voluntary Retirement	32.5	69.0
Involuntary		
Business closed/laid off	14.8	4.2
Poor health/disabled	25.7	9.0
Other		
Family care	0.9	0.0
Other	26.1	17.8
Females		
N	305	71
	100.0%	100.0%
Voluntary Retirement	22.4	44.2
Involuntary		
Business closed/laid off	12.9	13.1
Poor health/disabled	19.5	13.9
Other		
Family care	2.5	0.0
Other	42.7	28.8

Source: Urban Institute tabulations of Wave 2 of the HRS.

Note: Tabulations are weighted to be nationally representative.

Table 9c
Reason for Labor Force Departure, by Marital Status
Health and Retirement Study

	Age at Departure	
	Age 55-61	Age 62-63
Married		
N	380	105
	100.0%	100.0%
Voluntary Retirement	29.6	57.5
Involuntary		
Business closed/laid off	12.9	9.0
Poor health/disabled	19.0	10.3
Other		
Family care	1.2	0.0
Other	37.3	23.2
Females		
N	161	38
	100.0%	100.0%
Voluntary Retirement	20.9	56.1
Involuntary		
Business closed/laid off	15.5	7.3
Poor health/disabled	28.7	13.8
Other		
Family care	3.1	0.0
Other	31.8	22.8

Source: Urban Institute tabulations of Wave 2 of the HRS.

Note: Tabulations are weighted to be nationally representative.

might be correlated with other job characteristics that are unmeasurable or unmeasured. As a result, even though health insurance is highly correlated with retirement decisions, extending health insurance coverage to other workers might not have much of an effect on retirement because the other unmeasured job characteristics remain the same.

Data and Methods

This multivariate analysis takes advantage of the longitudinal nature of the SIPP to estimate the relative effects of various factors on the retirement decision. A logit model is used to predict the probability of retiring during a wave, a four-month period. This method has the advantage of capturing the effects of time-varying explanatory variables, such as marital status and income.

Workers are considered retired once they leave the workforce for at least one month, regardless of whether they reenter the workforce at a later date.²⁷ Because pension coverage information is available only for those who are working in Wave 4, the initial sample consists of persons aged 55 to 70 who are working at the beginning of Wave 4. The analysis includes one record per person-wave for each of these workers until they leave the workforce. In other words, each person aged 55 to 70 who is working in Wave 4 contributes one observation to the analysis. Of these workers, those who continue to work in Wave 5 contribute an additional observation to the analysis. Workers contribute additional observations up to and including the wave in which they stop working.²⁸ Therefore, persons who work throughout the rest of the panel contribute five person-waves to the analysis. In contrast, persons who leave the workforce in Wave 6 contribute only three person-waves. The sample for the logit regression analysis pools each of these person-wave observations.²⁹ Excluding the self-employed, there are 1,840 workers aged 55 to 70 in Wave 4, and these workers contribute 8,069 person-waves to the analysis.

Some demographic covariates used in the analysis are constant across the waves; gender, race/ethnicity, and years of schooling are measured as of the first month of the first wave. In contrast, age and marital status vary over time and, therefore, are measured as of the first month of each wave.

Health/disability status is measured using information from the Functional Limitations and Disability topical module administered in Wave 3.³⁰ Specifically, the model includes a measure of functional limitations based on the number of specific activities the respondent reports having difficulty performing. As discussed above, these activities range from walking a block to bathing and dressing.

Occupation as of the first month of each wave is included as a proxy for the level of physical demands on a job. In addition, industry and the number of hours worked per week are included to account for other employment characteristics.

Although it would be preferable to include a measure of job tenure in the analysis, tenure

information is available only for workers younger than age 65. Preliminary analyses that included tenure information for workers younger than 65 revealed no significant relationship between tenure at the current job and retirement, so the final model excludes measures of tenure.

Because the employment status of a worker's spouse affects the decision to retire, the model includes a variable that indicates whether the worker has a working spouse. To identify the effect of income on retirement, the model includes separate measures of the worker's monthly earnings and the spouse's monthly earnings. Each of these is measured as of the first month of each wave. Wealth is measured using information from the Assets and Liabilities topical module and the Real Estate Property and Vehicles topical module, each conducted in Wave 4.

A series of variables is used to identify pension coverage. Persons are considered to have pension coverage if they report they were covered by a retirement plan either at a current job or a previous job or if they receive pension income at any time during the panel. Using pension coverage information for both the worker and his or her spouse, the model includes variables to indicate whether both the worker and the spouse, only the worker, only the spouse, or neither the worker nor the spouse, have pension coverage.

Another series of variables is used to identify health insurance coverage. However, the model is limited to measures of current health insurance coverage because the SIPP does not include information regarding access to retiree health insurance. Five hierarchical health insurance coverage categories are defined based on the first month of each wave: own employer coverage only; own employer coverage plus coverage from another source (i.e., coverage through a spouse's employer or other private or public coverage); coverage through a spouse's employer (alone or in combination with other private or public coverage); other private or public coverage; or no coverage.

Dummy variables for each wave are included to allow the intercept in the logit regressions to vary by wave. Since the factors that influence retirement might have different effects by gender, separate regressions are run for men and women.

Empirical Results

Excluding the self-employed, 1,840 persons were working in the beginning of Wave 4. Of these, 478 (26 percent) retire by the end of the panel 20 months later. The proportion of women retiring (24 percent of 930 women) is slightly lower than the proportion of men retiring (28 percent of the 910 men).

Tables 10a and 10b present the regression results. Factors that are significantly related to retirement among men include being age 61 to 64, having three or more functional limitations, working in agriculture, mining, construction, or transportation industries, working fewer than 20 hours per week, having pension coverage, and having 13 or more years of education. For

Table 10a
Logit Regression Results, Probability of Retiring in a Four-Month Period for Men

	Men		
	coefficient	standard error	mean
Intercept	-2.701 ***	0.543	
Age 56	-0.541	0.421	0.118
Age 57	-0.157	0.409	0.103
Age 58	-0.337	0.446	0.085
Age 59	0.200	0.386	0.100
Age 60	-0.379	0.431	0.098
Age 61	0.791 **	0.372	0.088
Age 62	0.669 *	0.401	0.065
Age 63	0.806 **	0.400	0.055
Age 64	0.835 **	0.401	0.052
Age 65	0.367	0.451	0.043
Age 66	0.668	0.452	0.035
Age 67	0.258	0.534	0.027
Age 68	0.233	0.516	0.026
Age 69	0.359	0.525	0.025
Age 70	0.608	0.517	0.026
1-2 Functional limitations	0.310	0.249	0.065
3 + Functional limitations	0.886 **	0.369	0.020
Sales/Technician/Clerical Services	-0.077	0.236	0.191
Farm/Fish/Forestry; Craft/Prod; Operator/Laborer	0.110	0.275	0.107
Manufacturing	0.216	0.218	0.420
Agriculture, Mining, Construction, Transportation	0.270	0.251	0.286
Wholesale/Retail Trade Services	0.439 *	0.261	0.195
Work 20-34 hours per week	0.218	0.270	0.154
Work less than 20 hours per week	0.043	0.244	0.227
Presence of a working spouse	0.297	0.222	0.104
	0.652 ***	0.241	0.073
	-0.566 ***	0.208	0.416

Table 10a (continued)
Logit Regression Results, Probability of Retiring in a Four-Month Period for Men

	coefficient		Men	
			error	mean
Monthly earnings (1,000s)	0.026		0.049	2.467
Monthly earnings of spouse (1,000s)	0.216	***	0.077	0.598
Family wealth (10,000s)	-0.007	*	0.004	21.872
Pension coverage: worker and spouse	0.458	*	0.247	0.220
Pension coverage: worker only	0.406	**	0.190	0.527
Pension coverage: spouse only	-0.378		0.481	0.042
Health insurance: own employer only	-0.874	***	0.311	0.621
Health insurance: own employer and other	-0.851	**	0.347	0.180
Health insurance: spouse's employer	-0.734	*	0.401	0.067
Health insurance: other coverage	-0.356		0.339	0.102
12 Years of schooling	0.161		0.174	0.281
13-15 Years of schooling	0.389	**	0.198	0.180
16+ Years of schooling	0.454	*	0.255	0.138
Married	-0.157		0.187	0.829
Nonwhite	-0.144		0.182	0.187
Retired during wave 5	-0.043		0.191	0.213
Retired during wave 6	-0.088		0.201	0.198
Retired during wave 7	0.053		0.199	0.186
Retired during wave 8	-0.641	***	0.244	0.172
Log Likelihood	875.640			
N (person-waves)	3945			

* Statistically significant at the .10 level; ** the .05 level; *** the .01 level.

Source: Urban Institute analysis of the 1990 SIPP.

Table 10b
Logit Regression Results, Probability of Retiring in a Four-Month Period for Women

	coefficient		Women	
			standard error	mean
Intercept	-2.163	***	0.546	
Age 56	0.080		0.405	0.108
Age 57	-0.065		0.425	0.099
Age 58	-0.647		0.467	0.098
Age 59	0.021		0.411	0.104
Age 60	0.102		0.416	0.095
Age 61	0.352		0.418	0.081
Age 62	0.374		0.424	0.067
Age 63	0.459		0.435	0.049
Age 64	0.526		0.427	0.053
Age 65	0.785	*	0.435	0.045
Age 66	0.045		0.512	0.034
Age 67	0.124		0.546	0.026
Age 68	-0.919		0.695	0.029
Age 69	0.284		0.518	0.024
Age 70	0.142		0.498	0.034
1-2 Functional limitations	-0.205		0.236	0.116
3 + Functional limitations	0.624	*	0.356	0.024
Sales/Technician/Clerical Services	-0.316		0.224	0.419
Farm/Fish/Forestry; Craft/Prod; Operator/Laborer	-0.040		0.260	0.229
	0.698	**	0.298	0.133
Manufacturing	-0.438		0.315	0.145
Agriculture, Mining, Construction, Transportation	-0.477		0.405	0.052
Wholesale/Retail Trade	-0.364		0.274	0.161
Services	-0.248		0.231	0.516
Work 20-34 hours per week	-0.388	*	0.199	0.239
Work less than 20 hours per week	0.252		0.227	0.115
Presence of a working spouse	-0.442	*	0.247	0.275

Table 10b (continued)
Logit Regression Results, Probability of Retiring in a Four-Month Period for Women

	coefficient		Women	
			error	mean
Monthly earnings (1,000s)	-0.249	**	0.111	1.369
Monthly earnings of spouse (1,000s)	0.058		0.066	0.572
Family wealth (10,000s)	0.002		0.004	15.008
Pension coverage: worker and spouse	0.058		0.256	0.182
Pension coverage: worker only	0.326		0.202	0.416
Pension coverage: spouse only	-0.149		0.269	0.118
Health insurance: own employer only	-0.921	***	0.301	0.458
Health insurance: own employer and other	-0.425		0.339	0.155
Health insurance: spouse's employer	0.305		0.303	0.171
Health insurance: other coverage	-0.023		0.285	0.156
12 Years of schooling	-0.007		0.177	0.406
13-15 Years of schooling	0.114		0.227	0.191
16+ Years of schooling	0.411		0.309	0.089
Married	0.267		0.233	0.482
Nonwhite	-0.492	**	0.204	0.241
Retired during wave 5	0.279		0.198	0.213
Retired during wave 6	0.061		0.213	0.198
Retired during wave 7	-0.043		0.223	0.187
Retired during wave 8	-0.650	**	0.270	0.177
Log Likelihood	800.208			
N (person-waves)	4124			

* Statistically significant at the .10 level; ** the .05 level; *** the .01 level.
Source: Urban Institute analysis of the 1990 SIPP.

women, factors include being age 65, having three or more functional limitations, and working in a physically demanding occupation. Several factors are correlated with delayed retirement. For instance, both men and women are much less likely to retire if they have health insurance coverage from their employer. This applies only to current insurance. Unfortunately, as noted above, the SIPP does not include information on retiree health insurance. Hence, it is not possible to estimate the extent to which access to such insurance affects the decision to retire.

In addition, both men and women are much less likely to retire if they have a spouse who is working. Among women, other significant factors that are negatively related to retirement include: working 20 to 34 hours per week and being nonwhite. After controlling for the presence of a working spouse, marital status does not appear to be a significant factor for either men or women.

The following sections discuss the findings in more detail.

Age. [Table 11](#) presents the results for the effects of age on retirement. In this and the following tables, results are presented two ways. The first set of columns shows the probability of retiring at each age in a four-month period. For example, the model predicts that 8.3 percent of men and 5.3 percent of women will retire at age 62. The second set of columns compares the probability of retiring at each age to the baseline probability of retiring. In this case, the baseline age is 55. For example, men are 1.84 times as likely to retire at age 62 as at age 55.³¹

The probability of retiring varies by age, especially among men ([Table 11](#)). Although there is little difference in the retirement behavior of men aged 55 to 60, men aged 61 to 64 are more than twice as likely to retire as men age 55. The probability of retirement drops off slightly once men turn age 65. These older men are still more likely to retire than men aged 60 or younger, but the difference is not statistically significant. The coefficients for the older group may be statistically insignificant because so few workers in the sample are over age 65.

Women exhibit a steadier, if smaller, increase in the probability of retirement with age than men, although at most ages, the increase is not statistically significant. At age 65, however, women exhibit a sharp and statistically significant increase in the probability of retirement. Women aged 65 are more than twice as likely to retire as women aged 55. Women exhibit a drop-off in retirement after age 65, as do men, and the drop-off is even larger for women.

Table 11
Probability of Retiring in a Four-Month Period, by Age

	Probability of Retiring in a Four-Month Period		Ratio of Probability of Retiring to Probability of Retiring at Age 55	
	Men	Women	Men	Women
Age 55 (Baseline)	4.4	3.7	1.00	1.00
Age 56	2.6	4.0	0.59	1.08
Age 57	3.8	3.5	0.86	0.94
Age 58	3.2	2.0	0.72	0.53
Age 59	5.4	3.8	1.21	1.02
Age 60	3.1	4.1	0.70	1.10
Age 61	9.3**	5.2	2.09**	1.40
Age 62	8.3*	5.3	1.84*	1.43
Age 63	9.4**	5.8	2.13**	1.55
Age 64	9.7**	6.2	2.18**	1.65
Age 65	6.3	7.8*	1.42	2.10*
Age 66	8.3	3.9	1.87	1.05
Age 67	5.7	4.2	1.28	1.13
Age 68	5.5	1.5	1.25	0.41
Age 69	6.2	4.9	1.41	1.31
Age 70	7.8	4.3	1.77	1.15

* Difference from baseline statistically significant at the .10 level; ** the .05 level.

Functional Limitations. Workers with many functional limitations are much more likely to retire than workers without functional limitations (Table 12). Although workers with one or two functional limitations are not significantly more likely to retire, workers with three or more limitations are much more likely to retire. Men are more likely to retire because of functional limitations than women. Men with three or more functional limitations are more than twice as likely to retire as men with no functional limitations, while women with three or more functional limitations are less than twice as likely to retire as women with no functional limitations. These

findings are consistent with those of Burtless and Moffitt (1985), who find that workers in poor health are more likely to retire earlier than those in good health.

Table 12
Probability of Retiring in a Four-Month Period, by Number of Functional Limitations

Number of Functional Limitations	Probability of Retiring in a Four-Month Period		Ratio of Probability of Retiring to Probability at Baseline	
	Men	Women	Men	Women
None (Baseline)	4.9	4.1	1.00	1.00
1-2	6.6	3.3	1.34	0.82
3+	11.2**	7.3*	2.27**	1.80*

* Difference from baseline statistically significant at the .10 level; ** the .05 level.

Occupation. Even after controlling for functional limitations, there is evidence that workers in more physically demanding jobs are more likely to retire, especially women (Table 13). Women in more physically demanding occupations--namely positions in farm/fishing/forestry, craft/production, or operator/laborers--are almost twice as likely to retire as managers/professionals. Although men in these positions are also more likely to retire than managers/professionals, the difference is not statistically significant.

Because occupation is used as a proxy for the level of a job's physical requirements, the findings may reflect other factors affecting retirement that vary by occupation. Using information from the HRS to measure worker's actual physical demands on the job, Hurd and McGarry (1993) find that physical requirements of the job have only a effect on retirement.

Industry. The probability of retirement varies significantly by industry for men but not for women. Men working in physically demanding industries--agriculture, mining, construction, and transportation--are one and a half times as likely to retire as men in finance, insurance, real estate, and public administration industries, but the result is only marginally significant (Table 14).³² However, more than three-fifths of workers in physically demanding industries are engaged in physically demanding occupations: farm/fishing/forestry, craft/production, or

Table 13
Probability of Retiring in a Four-Month Period, by Occupation

Occupation	Probability of Retiring in a Four-Month Period		Ratio of Probability of Retiring to Probability of Retiring at Baseline	
	Men	Women	Men	Women
Manager/Professional (Baseline)	4.7	4.2	1.00	1.00
Sales/Technician/Clerical	4.4	3.1	0.93	0.74
Services	5.2	4.1	1.11	0.96
Farm/Fish/Forestry; Craft/Prod; Operator/Laborer	5.8	8.1**	1.23	1.93**

** Difference from baseline statistically significant at the .05 level.

Table 14
Probability of Retiring in a Four-Month Period, by Industry

Industry	Probability of Retiring in a Four-Month Period		Ratio of Probability of Retiring to Probability of Retiring at Baseline	
	Men	Women	Men	Women
Finance, Insurance, Real Estate, Public Administration (Baseline)	4.2	5.2	1.00	1.00
Manufacturing	5.4	3.4	1.29	0.66
Agri, Mining, Construction, Transportation	6.4*	3.3	1.52*	0.63
Wholesale/Retail Trade	5.2	3.7	1.23	0.71
Services	4.4	4.1	1.04	0.79

* Difference from baseline statistically significant at the .10 level.

operator/laborer. Men in physically demanding industries who are engaged in demanding occupations are significantly more likely to retire than other men (not shown in the tables).³³

Hours Worked Per Week. Part-time workers retire at different rates than full-time workers, although these differences vary by gender (Table 15). Men who work less than full-time, but more than half-time--that is between 20 and 34 hours per week--are more likely to retire than men who work full-time, but the difference is not statistically significant. Men who work fewer than 20 hours per week, however, are almost twice as likely to retire as men who work full-time, and the difference is highly significant. In contrast, women who work between 20 and 34 hours per week are almost one-third less likely to retire than women who work full-time, and the difference is marginally significant. Similar to men, women who work fewer than 20 hours per week are more likely to retire than women who work full-time, but not significantly so.

Table 15
Probability of Retiring in a Four-Month Period, by Hours Worked Per Week

Hours Worked Per Week	Probability of Retiring in a Four-Month Period		Ratio of Probability of Retiring to Probability at Baseline	
	Men	Women	Men	Women
35+ (Baseline)	4.8	4.3	1.00	1.00
20-34	6.3	2.9*	1.32	0.69*
Less than 20	8.7***	5.4	1.84***	1.27

* Difference from baseline statistically significant at the .10 level; *** the .01 level.

The differences by gender may reflect different approaches to part-time employment. Among men, part-time status may indicate a more intermittent work history or a bridge job or a temporary job. In contrast, women may be more likely to choose part-time employment as a career option.

Employment Status of Spouse. Both women and men are significantly less likely to retire if they have spouses who are also working (Table 16)

Table 16
Probability of Retiring in a Four-Month Period, by Employment Status of Spouse

Employment Status of Spouse	Probability of Retiring in a Four-Month Period		Ratio of Probability of Retiring to Probability at Baseline	
	Men	Women	Men	Women
No Working Spouse Present (Baseline)	5.6	4.5	1.00	1.00
Working Spouse Present	4.5***	3.0*	0.58***	0.65*

* Difference from baseline statistically significant at the .10 level; *** the .01 level.

Working men with working wives are two-fifths less likely to retire than men without working wives. Working women with working husbands are one-third less likely to retire than women without working husbands.

Earnings and Wealth. After controlling for other work and demographic factors, the effects of monthly earnings and family wealth partially offset each other (Table 17). Among men, the likelihood of retirement is negatively associated with wealth; that is, wealthier men are less likely to retire. In contrast, the likelihood of retirement is positively associated with earnings—their own and those of their wives. Men with greater earnings are more likely to retire, although not significantly so. Among men with working wives, those with higher-earning wives are significantly more likely to retire. The additional income from a spouse’s employment presumably reduces the reliance on a worker’s own income.

Table 17
Probability of Retiring in a Four-Month Period, by Earnings and Wealth

	Mean Earnings and Wealth		Change in Probability of Retirement Associated with a 1 Percent Increase in Earnings or Wealth	
	Men	Women	Men	Women
Monthly Earnings	\$2,467	\$1,369	0.0031	-0.0132 **
Spousal Monthly Earnings	\$598	\$572	0.0063 ***	0.0013
Family Wealth	\$218,722	\$150,078	-0.0072 *	0.0012

* Difference from baseline statistically significant at the .10 level; ** the .05 level; *** the .01 level.

Among women, earnings have a sizable and significant negative effect on the likelihood of retirement; women with higher earnings are less likely to retire than women with lower earnings. Offsetting this in part are the positive, yet insignificant, associations between the likelihood of retirement and spousal earnings and family wealth.

These results could reflect the correlation between earnings, wealth, and other labor force variables not included in the model. Earnings can be a proxy for labor force attachment, especially for women. In other words, workers with higher earnings may have a history of stronger labor force attachment and, therefore, be less likely to retire, all else being equal. In addition, the wealth measure is imprecise. It does not include either Social Security wealth or pension wealth, and because it is derived using information from topical modules administered in Wave 4, it is constant across waves and thus does not account for changes in wealth during the panel.

Pension Coverage. Access to pension income, from a current or a previous job or through a spouse, makes it easier for workers to retire. Men with access to income from their own pension, either alone or in addition to a spouse who also has a pension, are about one and a half times as likely to retire as men without any access to a pension (Table 18). Men with pension coverage only through a spouse are less likely to retire than men with no pension coverage, but

not significantly so. Women’s decisions, in contrast, are not significantly affected by pension coverage, regardless of its source.

The results corroborate the findings of previous research. Lumsdaine and Wise (1994), Kotlikoff and Wise (1989), and Burkhauser and Quinn (1983a, 1983b) found that men with pension coverage are more likely to retire than men without pension coverage. Unlike these previous studies, however, data limitations in this study prevent measuring the size of pension wealth and how it would increase with an additional year of work. Instead, the model can only estimate the effects of the presence of pension coverage and, therefore, cannot explicitly account for any incentives to retire due to declines in pension accumulation for those nearest retirement age. Thus, it is possible that the effects of pension coverage are underestimated in the model. This finding may also explain the significant increase in retirement among men aged 61 to 64, even after accounting for pension coverage and other factors. The lack of better pension measures may cause overstatement of the effects of age on retirement.

Table 18
Probability of Retiring in a Four-Month Period, by Pension Coverage

Pension Coverage	Probability of Retiring in a Four-Month Period		Ratio of Probability of Retiring to Probability at Baseline	
	Men	Women	Men	Women
None (Baseline)	3.8	3.6	1.00	1.00
Coverage Through Worker and Spouse	6.0*	3.8	1.55*	1.06
Coverage Through Worker Only	5.7**	4.9	1.47**	1.37
Coverage Through Spouse Only	2.7	3.1	0.69	0.87

* Difference from baseline statistically significant at the .10 level; ** the .05 level.

Health Insurance. Older workers seem particularly sensitive to the availability of health insurance. Workers with health insurance from only their own employer are less than half as likely to retire as persons who are uninsured, regardless of gender (Table 19). Although some of these workers would have access to other sources of coverage if they retire--either through a spouse’s employer, retiree health insurance, or COBRA continuation coverage--these findings may be indicative of job lock. Many workers may be reluctant to retire because they would have to forfeit their employer-sponsored health coverage. Uninsured workers have no such incentives

to continue working. However, even working men with coverage in addition to their own employer-sponsored coverage (i.e., coverage through a spouse’s employer or other private or public coverage) or with coverage from a spouse’s employer plan are significantly less likely to retire than uninsured men.

Table 19
Probability of Retiring in a Four-Month Period, by Health Insurance Coverage

Health Insurance Coverage Source	Probability of Retiring in a Four-Month Period		Ratio of Probability of Retiring to Probability at Baseline	
	Men	Women	Men	Women
Uninsured (Baseline)	10.5	6.1	1.00	1.00
Own Employer Only	4.7***	2.5***	0.45***	0.41***
Own Employer and Other	4.8**	4.1	0.46**	0.67
Spouse’s Employer	5.4**	8.1	0.51**	1.33
Other	7.6	6.0	0.72	0.98

** Difference from baseline statistically significant at the .05 level; *** the .01 level.

Gustman and Steinmeier (1994), Madrian (1994), and Karoly and Rogowski (1994) also found that persons who would lose health insurance coverage upon retirement are less likely to retire. These studies examine whether the availability of retiree health insurance affects retirement and find that those without access to retiree health insurance are less likely to retire than workers with retiree health benefits. Because the SIPP does not include information on retiree health insurance coverage, the model here is limited to current health insurance coverage information. The findings suggest that workers with employer-sponsored health insurance coverage, especially those with coverage only from their own employer, are less likely to retire than workers who have no health benefits to lose upon retirement. Since the model is unable to separate out those workers with access to retiree health benefits, the effect of insurance on retirement may be understated.

Other Demographic Characteristics. After controlling for industry, occupation, and earnings, workers with higher levels of education are more likely to retire (Table 20). This is especially true among men, who are about one and a half times as likely to retire if they have 13

or more years of schooling as men with less than a high school education.

Table 20
Probability of Retiring in a Four-Month Period, by Demographic Characteristic

	Probability of Retiring in a Four-Month Period		Ratio of Probability of Retiring to Probability at Baseline	
	Men	Women	Men	Women
Years of Schooling				
Less than 12 (Baseline)	4.3	3.8	1.00	1.00
12 Years	5.0	3.8	1.17	0.99
13-15 Years	6.2 **	4.3	1.45 **	1.12
16+ Years	6.6 *	5.7	1.54 *	1.48
Marital Status				
Unmarried (Baseline)	5.8	3.6	1.00	1.00
Married	5.0	4.6	0.86	1.29
Race/Ethnicity				
White, Non-Hispanic (Baseline)	5.3	4.5	1.00	1.00
Nonwhite	4.6	2.8 **	0.87	0.62 **

* Difference from baseline statistically significant at the .10 level; ** the .05 level.

There is no statistically significant difference between married and unmarried workers for either men or women. This finding suggests that any differences in retirement behavior by marital status can be explained by the other characteristics for which the model controls, such as the presence of a working spouse. There are, however, differences in the probability of retirement by race and ethnicity for women, but not for men. Although nonwhite men are nearly as likely to retire as white men, nonwhite women are more than one-third less likely to retire than white women, even after controlling for other individual and employment characteristics.

Simulation Results

Although a certain characteristic may be significantly related to retirement, its overall effect may be small if only a few persons have this characteristic. For instance, as discussed above, workers with three or more functional limitations are much more likely to retire than other workers. But only 2 to 3 percent of workers aged 55 to 70 have three or more functional limitations, so the overall effect is small.

Simulations were performed to gauge the overall importance of each of the factors influencing retirement. For these simulations, a baseline estimate is calculated of the number of men and women expected to retire in the sample. Next, each of the dummy variables is set to zero for the entire sample and the number of people who would retire without the influence of that variable is calculated. The simulated percentage change in retirements reflects the combined effects of the estimated coefficient from the logit estimation and the proportion of workers in the sample with the particular characteristic.³⁴ Table 21 presents the results of these simulations. In this table, positive percentages indicate the proportion of all retirements that are estimated to be attributable to that characteristic. Negative percentages indicate the proportion reduction in retirements that are estimated to be attributable to that characteristic. In other words, a negative percentage indicates a characteristic that discourages retirement. For instance, among men, two percent of the retirements in the SIPP sample are attributable to workers having three or more functional limitations. In contrast, 22 percent fewer retirements occurred due to the presence of a working spouse.

Among the characteristics used in this analysis, having health insurance solely from one's own employer has the largest estimated effect on retirement. Among men, 61 percent fewer retirements are estimated to have occurred due to workers' having insurance coverage only through their own employer. In addition, 20 percent fewer retirements occurred due to men's having coverage from their own employer along with other coverage. Among women, the relative effect of health insurance is smaller, but it is still the most important factor--35 percent fewer women retired due to having insurance coverage solely through their own employer. After health insurance, the presence of a working spouse plays the most important role in overall retirement rates. Twenty-two percent fewer men and 13 percent fewer women retire due to the presence of a working spouse.

Among men, pension coverage asserts the largest positive influence on retirement; 17 percent of retirements are attributable to pension coverage of the worker (but not the spouse). And eight percent of retirements are attributable to workers in agriculture, mining, construction, and transportation industries. Although the effects of any single age on retirement are relatively small, 20 percent of retirements are attributable to being between ages 61 and 64.

Table 21
Proportion of Retirements Attributable to Selected Characteristics

	Men	Women
Age 56	-3.7%	0.7%
Age 57	-1.1%	-0.4%
Age 58	-1.6%	-3.7%
Age 59	1.6%	0.2%
Age 60	-2.2%	0.8%
Age 61	6.9% **	2.2%
Age 62	3.8% *	2.3%
Age 63	4.5% **	2.4%
Age 64	4.8% **	3.0%
Age 65	1.6%	4.5% *
Age 66	2.8%	0.2%
Age 67	0.6%	0.3%
Age 68	0.6%	-1.8%
Age 69	0.9%	0.9%
Age 70	1.5%	0.6%
1-2 functional limitations	2.1%	-2.1%
3+ functional limitations	2.1% **	2.0% *
Sales/Technician/Clerical Services	-1.3%	-11.6%
Farm/Fishing/Forestry; Craft/Prod; Operator/Laborer	1.1%	-0.9%
Manufacturing	8.0%	10.1% **
Agriculture/Mining/Construction/ Transportation	5.8%	-7.5%
Wholesale/Retail Trade	7.5% *	-2.4%
Services	2.8%	-6.4%
Work 20-34 hours per week	0.9%	-12.5%
Work fewer than 20 hours per week	3.5%	-9.6% *
Presence of a working spouse	6.3% ***	4.5%
Pension coverage: worker and spouse	-21.7% ***	-13.3% *
Pension coverage: worker only	7.5% *	0.9%
Pension coverage: spouse only	16.9% **	9.6%
	-1.0%	-2.0%

Table 21 (continued)
Proportion of Retirements Attributable to Selected Characteristics

	Men	Women
Health insurance: own employer only	-60.8% ***	-34.8% ***
Health insurance: own employer and other	-20.4% **	-7.2%
Health insurance: spouse's employer	-5.5% *	6.5%
Health insurance: other coverage	-6.0%	-0.5%
12 years of schooling	3.9%	-0.3%
13-15 years of schooling	5.7% **	1.7%
16+ years of schooling	5.1% *	2.8%
Married	-3.9%	11.5%
Nonwhite	-2.6%	-9.6% **

* Statistically significant at the .10 level; ** the .05 level; *** the .01 level.
Source: Urban Institute analysis of the 1990 SIPP.

Among women, the most important factors affecting retirement, aside from health insurance coverage and the presence of a working spouse, are working in a physically demanding occupation, working between 20 and 34 hours per week, and being nonwhite. Ten percent of retirements are attributable to women working in farm/fishing/forestry, craft/production, or operator/laborer positions. In contrast, working between 20 and 34 hours per week and being nonwhite each reduce the number of retirements by about 10 percent.

Although this information helps gauge the relative importance of various factors under the current retirement system, it is not necessarily indicative of what would happen under a change to the system, such as an increase in the Social Security retirement age. Also, as mentioned earlier, inferences about causality are only suggestive because the model is a reduced form.

Conclusion

The ability of workers to adapt to further increases in the Social Security retirement age depends on their ability to extend their working lives, to accumulate enough savings to offset a delay or reduction in Social Security income, or to get by on reduced income. The ability to extend working lives, in turn, depends in part on health and disability status. The vast majority of workers, even those aged 65 and older, are in good health and do not have any functional limitations or conditions that limit work. Furthermore, the trend away from physically demanding jobs will further increase the ability of workers to extend their working lives. However, retirees from physically demanding occupations made up a disproportionate share of

the retirees, suggesting that many blue collar workers and others in more strenuous occupations may be adversely affected by a higher retirement age.

Although retirees, especially early retirees, are in worse health than workers of the same age, the majority of retirees are also in good health and do not have any functional limitations or conditions that limit work. On the other hand, a large minority do. Although the Social Security Disability Insurance (DI) program can bridge the gap between the time those in poor health can no longer work and the time they reach the normal retirement age, not all of those in poor health will meet the strict DI eligibility requirements. Therefore, policymakers considering an increase in the Social Security retirement age might wish to consider loosening (beyond the age, education, and experience step of the sequential evaluation) the DI eligibility criteria for older workers.

To better inform such options, it is necessary to develop better estimates of the size of the population that will be unable to continue working. This involves examining actual job demands, reported health limitations, and employer accommodations. In addition, it will be necessary to estimate how the size of this group might change in the future. And, there is evidence that the timing of the onset of disability matters. In particular, persons whose health declined relatively recently are more likely to leave the labor force than persons whose health declined earlier (Bound et al 1998). The HRS provides an opportunity for exploring these issues.

Extending working lives also requires that jobs be available. Although an analysis of the demand for older workers is beyond the scope of this study, examining the reasons for labor force departure can help shed some light on this issue. Workers leaving the workforce at or beyond age 62 were only half as likely to report leaving involuntarily due to job loss as those leaving prior to age 62. This may imply that persons retiring at age 62 and older are more likely to have been able to continue working. On the other hand, the availability of Social Security benefits beginning at age 62 may result in underestimates of the reports of job loss among those 62 and older, meaning job loss might be just as problematic for persons aged 62 and over.

Those who cannot extend their working lives will be less affected by a delay or a reduction in Social Security benefits resulting from an increase in the retirement age if they have adequate savings and/or pension income. However, the findings suggest that the youngest retirees, especially those who are unmarried, have much less wealth than those who retire later. Because the measures of wealth exclude pension wealth, however, they may understate the ability of retirees to offset any decreases in Social Security income, especially since persons with pension coverage are more likely to retire early. Even so, many retirees do not have pension coverage. Therefore, policies to increase pension coverage as well as to increase private savings would help counter the negative effects of a decrease in Social Security income.

In addition to those persons who have health problems or are displaced workers, unmarried persons, especially unmarried women, and nonwhites may also be adversely affected by an increase in the Social Security retirement age. It is important to assess how any increases

in the retirement age will affect these demographic groups. If changes are to be gradually phased in, it is necessary to determine whether the outlook for these groups will change in the future. For example, greater labor force participation by women might improve the retirement prospects of future cohorts of retiring women.

Although the analysis presented in this study has the advantage of incorporating many factors simultaneously in a simple model of retirement, it does not attempt to explain how these factors influence individuals' decisions in a structural model. Rather than providing a model of people's behavior, it can show only correlation between these factors and retirement. Future research should attempt to develop structural economic models of the decision to retire that account for all of these factors simultaneously.³⁵ That would provide a better guide to policymakers about who can delay retirement, as well as mechanisms by which the people who are most able to delay retirement might be induced to work longer while allowing those who are unable to work to retire with some level of security.

Notes

¹ In 1998, workers between the ages of 62 and 64 have their Social Security benefits reduced by \$1 for each \$2 earned over \$9,120. Workers aged 65 to 69 have their benefits reduced by \$1 for every \$3 earned over \$14,500.

² Under the Consolidated Omnibus Budget Reconciliation Act (COBRA), individuals who leave jobs with insurance coverage have the option of purchasing continuation coverage through their employers for up to 18 months at a cost of up to 102 percent of the plan premium.

³ In this analysis, the family income and wealth measures include the income and wealth of both spouses but exclude income and wealth of any other family members.

⁴ Here and throughout the paper, unmarried persons include persons who are never married, as well as those who are divorced, separated, or widowed.

⁵ Other factors--e.g., supply of younger workers and skills obsolescence--can also affect the ability of an older worker to continue working. However, these factors are beyond the scope of this analysis. See Straka (1992) for more detail on some of them.

⁶ Because the set of activities in the SIPP is slightly different from those in the HRS, results from the two data sets are not directly comparable. The SIPP analysis uses self-reports on the following functions: getting around inside the home, getting into/out of a bed/chair, bathing, dressing, eating, using the toilet, lifting/carrying ten pounds, walking up a flight of stairs, walking three blocks, getting around outside the home, doing light housework. The HRS analysis uses reports on the following functions: walking across the room, getting into/out of a bed/chair, bathing, dressing, eating, lifting/carrying weights over ten pounds, climbing one flight of stairs, walking one block, stooping/kneeling/crouching, picking up a dime from the table, reaching/extending arms, pulling/pushing large objects (e.g. a chair), sitting for 2 hours

⁷ Stricter definitions of functional limitation were also tested, for instance, requiring that a person have a lot of difficulty with an activity, rather than merely any difficulty, to be considered as having a functional limitation. While this restriction reduces the number of persons with a functional limitation, the relationship between having a functional limitation and work status remains the same. Retirees are more likely to have a functional limitation than workers, regardless of the definition of limitation.

⁸ To qualify for DI benefits, a worker must be unable to engage in any substantial gainful activity as a result of a physical or mental impairment that can be expected to last at least a year or end in death. Substantial gainful activity is defined as earnings over \$500 per month.

⁹ An examination of health and disability status by gender reveals that this is true for both men and women.

¹⁰ Alternatively, it may suggest that it is all right not to work when one is older, whether healthy or disabled.

¹¹ The proportion of retirees who have ever received DI benefits overstates the proportion of retirees currently receiving benefits. However, the DI program's strict eligibility criteria, along with the low proportion of DI beneficiaries who transition off the program, suggest this overstatement is low.

¹² The proportions are calculated as (the percentage who have ever applied for DI benefits) x (the percentage who have ever received DI benefits, given that they ever applied).

¹³ The proportions are calculated as (the percentage with a condition that limits work) x (the percentage with a condition that prevents work, given they have a condition that limits work) - (the percentage who ever applied for DI benefits) x (the percentage who have ever received DI, given they every applied for them).

¹⁴ Because persons who have never worked do not have a previous employer, the analysis in this and the next section excludes persons who have never worked. In addition, the self-employed are excluded from the tabulations of workers and retirees by occupation.

¹⁵ Similar data for the HRS have not yet been released for Wave 2.

¹⁶ The self-employed are excluded from tabulations of workers and retirees by industry.

¹⁷ Although the SIPP ascertains information on union status, this information is missing for a majority of workers.

¹⁸ In this analysis, the family income and wealth measures include the income and wealth of both spouses but exclude income and wealth from any other family members.

¹⁹ The SIPP measure of current pension receipt reflects whether an individual reports receiving pension income. This pension income can be through the individual's own employer-sponsored pension plan or through a spousal benefit from the pension plan of a spouse.

²⁰ The HRS measure of current pension receipt reflects whether an individual reports that either he/she or his/her spouse is currently collecting pension income.

²¹ In both the SIPP and the HRS, the proportion of retirees receiving pension income in the sample restricted to persons with at least 10 years of work experience exceeds that in the sample of all persons by about 10 percentage points.

²² Ideally, a measure of wealth would include all assets, including the values of future Social Security and pension benefits. Unfortunately, neither the SIPP data nor the HRS core data include the information required to determine directly the value of future Social Security and/or pension benefits. Therefore, in this analysis, net wealth is limited to net housing wealth and net financial assets (including stocks, bonds, IRAs and any other savings/assets).

²³ For instance, the HRS wealth measure includes the value of a business, whereas the SIPP measure does not. In addition, unlike the HRS, the SIPP does not directly collect information regarding interest-bearing assets other than those held as U.S. Savings bonds or in IRA, Keogh, or 401k accounts. Instead, the amount of these assets must be imputed using interest income.

²⁴ Sample sizes are too small to present median wealth figures by separated/divorced persons, widows/widowers, and never-married persons. In general, separated/divorced persons have the lowest wealth figures and never-married persons have the highest, but, even never-married persons have much lower wealth than married persons.

²⁵ The SIPP four-month waves are conducted consecutively, with no intervening months. However, the SIPP suffers from "seam bias." This means that respondents who leave the workforce in the early part of a

four-month wave are likely to report not working for the entire period. Therefore, their work transitions appear to occur between waves, instead of within waves. Respondents whose transitions occur between waves are not asked the reason for changing jobs because these questions are asked only of persons who report leaving a job within a wave. This results in missing information for 339 persons whose transitions occur between waves. (See Kalton, Hill, and Miller 1990 for further discussion of the seam effect in the SIPP.)

²⁶ The differences by gender and marital status are based on relatively small samples.

²⁷ Ignoring whether someone later returns to the labor force overstates the number of people who permanently retire. The longer an individual remains out of the labor force, the more likely that retirement is permanent. Karoly and Rogowski (1994) consider a labor force departure permanent if it lasts for at least six months. In this analysis, 132 of the 478 persons who left the labor force for one month later returned to work during the SIPP panel. Of these, however, 116 were out of the labor force for at least six months prior to returning. Therefore, the less restrictive definition of retirement used in this analysis should only minimally affect the results.

²⁸ Although the SIPP waves are consecutive, that is, there are no intervening months, the transitions for some workers occur between waves rather than within waves. Workers who are observed to retire between waves are assumed to retire in the last wave in which they are observed to work.

²⁹ This approach is similar to that of a durational logit model. See Allison (1984) for more information on the analysis of longitudinal event data.

³⁰ Alternate models that used data from the Functional Limitations and Disability topical module administered in Wave 6 produce similar results.

³¹ In other words, the probability of retiring at age 62 (8.3) divided by the probability of retiring at age 55 (4.4) equals 1.84.

³² Although industry provides a loose proxy for the level of a job's physical demands, not all workers in agriculture, mining, construction, and transportation hold physically demanding jobs.

³³ The joint test statistic is significant at the .03 level. The separate effects of industry and occupation may be more important than they appear based on the univariate statistical tests, but the significance is obscured by the high degree of collinearity between industry and occupation.

³⁴ The baseline estimate is the weighted sum of the individual probabilities of retirement, based on actual values for the covariates in the logit model and the estimated parameters: $R_0 = \sum_{i=1}^N w_i p(X_i \hat{\beta})$, where N is the sample size, w_i is the population weight, p is the probability of retirement (a logit function), X_i is the vector of covariates for individual i and $\hat{\beta}$ is the estimated parameter vector. For the simulation, dummy variable X_{ij} is set equal to zero for all i and R_{ij} calculated. The simulated effect of variable j is: $100 \times (R_0 - R_{ij}) / R_0$.

³⁵ Much past research has developed structural models of aspects of the retirement decision. What is lacking is a complete model of all the forces at work.

References

- Aarts, Leo J.M., Richard V. Burkhauser, and Philip R. DeJong. 1992. "The Dutch Disease: Lessons for United States Policy," *Regulation*, 15(2), 75-86.
- Allison, Paul D. 1984. *Event History Analysis*, Beverly Hills: Sage Publications.
- Bound, John, and Timothy Waidmann. 1992. "Disability Transfers, Self-Reported Health and Labor Force Attachment of Older Men: Evidence from the Historical Record," *Quarterly Journal of Economics*, 107(4), 1393-1419.
- Bound, John, Michael Schoenbaum, Todd R. Stinebrickner, and Timothy Waidmann. 1998. "The Dynamic Effects of Health on the Labor Force Transitions of Older Workers," Presented at the 1997 International Health and Retirement Surveys Conference, Amsterdam.
- Brown, Charles C. 1993. "Early Retirement Windows," Paper presented at the Health and Retirement Study Early Results Workshop, Ann Arbor, MI.
- Burtless, Gary and Robert A. Moffitt. 1985. "The Joint Choice of Retirement Age and Postretirement Hours of Work," *Journal of Labor Economics*, 3(2), 209-36.
- Burkhauser, Richard V., Kenneth A. Couch, and John W. Phillips. 1996. "Who Takes Early Social Security Benefits? The Economic and Health Characteristics of Early Beneficiaries?" *The Gerontologist*, 36(6), 789-799.
- Burkhauser, Richard V. and Joseph F. Quinn. 1983a. "Is Mandatory Retirement Overrated? Evidence from the 1970's." *Journal of Human Resources*, 18(3), 337-58.
- _____ 1983b. "Financial Incentives and Retirement in the United States," in Lars Soderstrom, ed., *Social Insurance*, Amsterdam, The Netherlands: North Holland Publishing Company, 207-24.
- Friedberg, Leora. 1997. "The Labor Supply Effects of the Social Security Earnings Test," University of California, San Diego Discussion Paper 97-01.
- Gruber, Jonathan, and Brigitte C. Madrian. 1995. "Health Insurance and Early Retirement: Evidence from the Availability of Continuation Coverage," in David A. Wise, ed., *Advances in the Economics of Aging*, Chicago, IL: University of Chicago Press.
- Gustman, Alan L. and Thomas L. Steinmeier. 1984. "Partial Retirement and the Analysis of Retirement Behavior," *Industrial and Labor Relations Review*, 37(3), 403-15.

- _____. 1994. "Employer Provided Health Insurance and Retirement Behavior," *Industrial and Labor Relations Review*, 48(10), 86-102.
- Haveman, Robert, Barbara Wolfe, and Jennifer Warlick. 1984. "Disability Transfers, Early Retirement, and Retrenchment," in Henry J. Aaron and Gary Burtless eds., *Retirement and Economic Behavior*, Studies in Social Economic Series, Washington, DC: Brookings Institution, 65-93.
- Hurd, Michael D. 1990. "Research on the Elderly: Economic Status, Retirement, and Consumption and Saving," *Journal of Economic Literature*, 28(2), 565-637.
- _____. 1996. "The Effects of Labor Market Rigidities on Older Workers," in David A. Wise, ed., *Advances in the Economics of Aging*, Chicago, IL: University of Chicago Press, 11-58.
- Hurd, Michael D. and Kathleen McGarry. 1993. "The Relationship Between Job Characteristics and Retirement," NBER Working Paper No. 4558, Cambridge, MA: National Bureau of Economic Research.
- Kalton, Graham, Daniel H. Hill, and Michael E. Miller. 1990. "The Seam Effect in Panel Surveys," SIPP Working Paper No. 9011.
- Karoly, Lynn A. and Jeannette A. Rogowski. 1994. "The Effect of Access to Post-Retirement Health Insurance on the Decision to Retire Early," *Industrial and Labor Relations Review*, 48(1), 103-123.
- Kotlikoff, Laurence J. and David A. Wise. 1989. "Employee Retirement and a Firm's Pension Plan," in David A. Wise, ed., *The Economics of Aging*, Chicago, IL: University of Chicago Press, 283-330.
- Leonesio, Michael V. 1991. "Social Security and Older Workers." ORS Working Paper Series, No. 53, Office of Research and Statistics, Social Security Administration.
- Loprest, Pamela and Sheila Zedlewski. 1995. "Health Insurance Coverage Transitions of Older Americans: Early Results Based on the 1992-1994 Health and Retirement Study," HRS Working Paper Series.
- Loprest, Pamela, Kalman Rupp, and Steven H. Sandell. 1995. "Gender, Disabilities, and Employment in the Health and Retirement Study." *Journal of Human Resources*, 30 (Supplement): S293-S318.
- Lumsdaine, Robin L., James H. Stock, and David A. Wise. 1994. "Pension Plan Provisions and Retirement: Men and Women, Medicare, and Models," in David A. Wise, ed., *Studies in the Economics of Aging*, Chicago, IL: University of

- Chicago Press, 183-212.
- _____. 1996. "Why are Retirement Rates So High at Age 65?," in David A. Wise, ed., *Advances in the Economics of Aging*, Chicago: University of Chicago Press, 61-82.
- Lumsdaine, Robin L. and David A. Wise. 1994. "Aging and Labor Force Participation: A Review of Trends and Explanations," in Y. Noguchi and D. Wise, eds., *Aging in the United States and Japan: Economic Trends*. Chicago: University of Chicago Press.
- Madrian, Brigitte. 1994. "The Effect of Health Insurance on Retirement," *Brookings Papers on Economic Activity*, 1, 181-252.
- Packard, Michael D. and Virginia P. Reno. 1989. "A Look at Very Early Retirees," *Social Security Bulletin*, 52(3), 16-29.
- Quinn, Joseph F. and Richard V. Burkhauser. 1994. "Retirement and Labor Force Behavior of the Elderly," in Linda G. Martin and Samuel H. Preston, eds., *Demography of Aging*, Washington DC: National Academy Press, 50-101.
- Quinn, Joseph, Richard Burkhauser, and Daniel Myers. 1990. *Passing the Torch: The Influence of Economic Incentives on Work and Retirement*. Kalamazoo, MI: Upjohn Institute.
- Rust, John P. and Christopher Phelan. 1997. "How Social Security and Medicare Affect Retirement Behavior in a World of Incomplete Markets," *Econometrica*, 65(4), 781-831.
- Social Security Administration. 1986. "Increasing the Social Security Retirement Age: Older Workers in Physically Demanding Occupations or Ill Health." *Social Security Bulletin*, 49(10), 5-23.
- _____. 1996. *Social Security Bulletin, Annual Statistical Supplement 1996*.
- Steuerle, C. Eugene and Jon M. Bakija. 1994. *Retooling Social Security for the 21st Century: Right and Wrong Approaches to Reform*. Washington, DC: The Urban Institute Press.
- Straka, John W. 1992. "The Demand for Older Workers: The Neglected Side of a Labor Market," *Studies in Income Distribution*, No. 15. Office of Research and Statistics, Social Security Administration.
- Turner, John A. and Daniel J. Beller. 1992. *Trends in Pensions*, Washington, DC: Government Printing Office.

Appendix

Workers/Retirees by Gender

Because the retirement patterns by employment and individual characteristics can vary by gender, it is important to examine men and women separately. This appendix uses the SIPP sample of all persons to determine whether men and women differ across various employment and individual characteristics and whether retirement patterns across these characteristics differ by gender.

Health and Disability Status. Men and women exhibit similar patterns by work status (Table A-1). Both working men and working women are in better health compared to retired men and women. However, according to three of the health status measures (self-reported health status, the existence of a condition that limits work at a job, and application for Social Security Disability Insurance benefits), women in general and retired women in particular appear to be in better health than retired men. In contrast, according to the functional limitations measure--arguably the most objective measure of the four used--women appear less healthy than men. The reason for the discrepancy between these health status measures is unclear.

Occupation. Regardless of gender, workers aged 65 to 70 are much less likely to be working at occupations with high physical demands than workers aged 55 to 64 (Table A-2). Men are much more likely to be in managerial, craft/production, and operator/laborer occupations, whereas women are much more likely to be in clerical and service occupations.

Other Employment Characteristics. Men and women also vary by industry of employment (Table A-3). Men are much more likely to be in the agriculture, mining, construction, manufacturing, and transportation industries, whereas women are more likely to be in wholesale/retail trade and business/personal services industries. Women also have shorter tenures than men and are less likely to be self-employed.

Education. Regardless of gender, retired persons have lower levels of educational attainment than workers (Table A-4). Among both workers and retired persons, however, women have lower levels of educational attainment than men.

Income and Wealth. Family income levels are very similar by gender, even among unmarried persons (Table A-5). Women have similar patterns of pension coverage and receipt as men, and although there are some differences in family wealth by gender and employment status, there is no consistent pattern by gender.

Race/Ethnicity. Women are slightly more likely to be nonwhite than men, especially among persons aged 65 to 70 (Table A-6). This may be due, in part, to the differential mortality rates of men and women.

Table A-1
Workers/Retirees, by Health and Disability Status
Survey of Income and Program Participation

	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
Men						
N	795	332	242	285	250	710
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Health status						
Excellent	21.0	11.7	20.1	10.2	16.1	8.0
Very good	32.8	17.5	28.4	18.7	27.2	18.2
Good	32.3	22.7	37.7	28.3	37.1	34.3
Fair	11.7	26.2	11.2	22.0	17.5	27.0
Poor	2.2	21.9	2.6	20.8	2.1	12.6
Condition that limits work at a job						
Yes	12.1	51.4	17.6	41.3	na	na
Prevent work	na	82.2	na	77.3	na	na
Does not prevent work	na	17.8	na	22.7	na	na
No	87.9	48.6	82.4	58.7	na	na
Functional limitations						
None	90.6	58.0	90.2	61.6	86.9	71.0
1-2 Limitation	7.5	23.0	5.2	17.3	9.5	15.2
3+ Limitations	1.9	19.0	4.5	21.1	3.5	13.8
Ever applied for Social Security Disability Insurance (DI) benefits						
Yes	3.7	39.6	4.8	29.1	2.2	13.1
Ever received benefits	40.9	80.2	58.5	78.3	79.5	71.4
Never received benefits	59.1	19.8	41.5	21.7	20.5	28.6
No	96.3	60.4	95.2	70.9	97.8	86.9

Table A-1 (Continued)
Workers/Retirees, by Health and Disability Status
Survey of Income and Program Participation

	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
Women						
N	727	660	182	499	198	1,070
	100.0%	100.0%	100.0%	100.0%	100%	100%
Health Status						
Excellent	17.4	9.7	14.5	11.1	15.3	8.5
Very good	33.9	22.5	27.3	17.3	30.3	20.5
Good	36.0	32.0	37.5	34.7	35.0	37.1
Fair	10.8	19.7	16.4	21.4	17.2	22.8
Poor	1.9	16.2	4.3	15.4	2.3	11.0
Condition that limits work at a job						
Yes	10.5	37.6	12.4	32.6	na	na
Prevent work	na	82.4	na	83.8	na	na
Does not prevent work	na	17.6	na	16.2	na	na
No	89.5	62.4	87.6	67.4	na	na
Functional limitations						
None	86.6	62.8	80.9	63.0	77.7	63.7
1-2 Limitation	11.3	15.3	16.0	14.4	16.9	17.0
3+ Limitations	2.2	21.9	3.1	22.6	5.5	19.3
Ever applied for Social Security Disability Insurance (DI) benefits						
Yes	1.9	17.9	3.3	15.4	2.8	8.2
Ever received benefits	35.4	47.9	38.2	65.8	37.6	70.2
Never received benefits	64.6	52.1	61.8	34.2	62.4	29.8
No	98.1	82.1	96.7	84.7	97.2	91.8

Source: Urban Institute tabulations of the 1990 SIPP.

Note: Tabulations are weighted to be nationally representative.

Table A-2
Workers/Retirees, by Occupation
Survey of Income and Program Participation

Occupation ^a	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
Men Who Have Ever Worked						
N ^a	795	304	242	271	250	na
	100.0%	100.0%	100.0%	100.0%	100.0%	na
Manager/Professional	27.3	24.2	27.2	26.3	25.4	na
Sales/Technician	10.8	6.9	9.9	7.3	12.2	na
Clerical	7.5	7.7	6.2	3.8	9.6	na
Services	8.1	7.7	12.2	10.5	22.9	na
Farm/Fishing/Forestry	2.9	3.2	5.8	3.3	4.3	na
Craft/Production	22.6	17.5	17.6	20.0	8.0	na
Operator/Laborer	20.8	32.5	21.1	28.8	17.8	na
Women Who Have Ever Worked						
N ^a	727	560	182	431	198	na
	100.0%	100.0%	100.0%	100.0%	100.0%	na
Manager/Professional	21.9	14.6	18.4	18.5	14.4	na
Sales/Technician	12.7	11.4	9.8	11.4	15.0	na
Clerical	32.0	31.1	27.9	23.3	34.7	na
Services	18.9	23.2	27.9	25.8	26.7	na
Farm/Fishing/Forestry	1.3	1.8	0.0	0.0	0.7	na
Craft/Production	2.8	4.1	1.4	6.8	2.5	na
Operator/Laborer	10.3	13.7	14.8	14.2	0.6	na

a/ Self-employed persons are excluded.

Source: Urban Institute tabulations of the 1990 SIPP.

Note: Tabulations are weighted to be nationally representative.

Table A-3
Workers/Retirees, by Industry, Tenure, and Self-Employment Status
Survey of Income and Program Participation

	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
Men Who Have Ever Worked						
N	795	304	242	271	250	na
	100.0%	100.0%	100.0%	100.0%	100.0%	na
Industry ^a						
Agriculture/Mining/Construction	10.3	15.2	9.5	20.2	8.7	na
Manufacturing	30.9	34.8	23.6	30.5	13.2	na
Transportation	13.3	13.8	9.9	16.9	8.9	na
Wholesale/Retail Trade	14.0	12.6	15.3	9.1	21.4	na
Finance, Insurance, and Real Estate	4.1	1.4	5.1	3.8	6.9	na
Business/Personal Services	19.7	15.7	30.7	13.1	34.1	na
Public Administration	7.7	6.5	6.0	6.4	6.7	na
Tenure on job						
1-4 Years	23.9	28.8	30.9	19.0	na	na
5-9 Years	14.4	9.1	16.3	6.5	na	na
10-14 Years	10.7	6.7	6.1	7.7	na	na
15+ Years	51.0	55.4	46.7	66.8	na	na
Self-employed						
Yes	23.6	9.0	32.8	13.5	34.5	na
No	76.4	91.0	67.2	86.5	65.5	na

Table A-3 (Continued)
Workers/Retirees, by Industry, Tenure, and Self-Employment Status
Survey of Income and Program Participation

	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
Women Who Have Ever Worked						
N	727	560	182	431	198.0	na
	100.0%	100.0%	100.0%	100.0%	100.0%	na
Industry ^a						
Agriculture/Mining/Construction	3.1	2.5	0.6	2.8	2.5	na
Manufacturing	15.0	19.4	17.1	20.6	5.5	na
Transportation	3.5	4.2	0.5	3.5	1.0	na
Wholesale/Retail Trade	17.2	20.0	13.4	18.5	26.9	na
Finance, Insurance, and Real Estate	8.1	6.9	5.1	7.7	5.1	na
Business/Personal Services	47.0	43.4	52.9	41.0	52.3	na
Public Administration	6.2	3.4	10.3	5.9	6.6	na
Tenure on job						
1-4 Years	34.0	41.7	29.8	33.1	na	na
5-9 Years	16.5	18.3	16.6	15.8	na	na
10-14 Years	16.5	15.9	18.0	12.6	na	na
15+ Years	32.9	24.1	35.6	38.6	na	na
Self-employed						
Yes	17.3	7.2	15.0	4.6	23.1	na
No	82.7	92.8	85.0	95.4	76.9	na

a/ Self-employed persons are excluded.

Source: Urban Institute tabulations of the 1990 SIPP.

Note: Tabulations are weighted to be nationally representative.

Table A-4
Workers/Retirees, by Years of Schooling
Survey of Income and Program Participation

Years of Schooling	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
Men						
N	795 100.0%	332 100.0%	242 100.0%	285 100.0%	250 100.0%	710 100.0%
Less than 12 Years	24.1	38.8	26.1	42.5	29.8	38.6
12 Years	32.8	31.2	31.9	33.3	25.1	31.3
13-15 Years	20.0	14.4	13.0	13.1	16.1	16.3
16+ Years	23.0	15.7	28.8	11.1	29.0	13.8
Women						
N	727 100.0%	660 100.0%	182 100.0%	499 100.0%	198.0 100.0%	1,070 100.0%
Less than 12 Years	22.6	33.9	28.7	41.0	31.6	36.9
12 Years	43.0	44.1	36.8	37.4	32.4	41.8
13-15 Years	17.9	12.9	17.9	14.3	22.9	13.2
16+ Years	16.5	9.1	16.6	7.3	13.1	8.2

Source: Urban Institute tabulations of the 1990 SIPP.

Note: Tabulations are weighted to be nationally representative.

Table A-5
Workers/Retirees, by Income, Pension Coverage, and Wealth
Survey of Income and Program Participation

	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
Men						
N	795	332	242	285	250	710
Median Income (\$)						
Married	48,219	24,593	40,614	26,391	38,091	24,761
Unmarried	26,568	10,182	22,074	12,972	23,589	13,575
Pension coverage on current job (%)	65.5	na	53.0	na	32.1	na
Currently receiving pension income (%)	11.5	23.5	17.8	35.8	27.9	59.3
Median Wealth (\$)						
Married	172,377	135,790	206,503	179,122	252,668	185,931
Unmarried	55,277	5,000	80,816	49,783	62,772	49,911
Women						
N	1,442	660	403	561	na	na
Median Income (\$)						
Married	43,482	29,958	37,911	28,569	32,178	23,996
Unmarried	23,904	9,276	21,753	12,893	23,783	12,318
Pension coverage on current job (%)	66.8	na	54.3	na	38.5	na
Currently receiving pension income (%)	11.8	32.8	18.6	43.0	15.2	30.7
Median Wealth (\$)						
Married	168,769	170,484	210,433	187,609	206,164	177,345
Unmarried	52,547	31,500	65,245	35,000	89,561	64,900

Source: Urban Institute tabulations of the 1990 SIPP.

Note: Tabulations are weighted to be nationally representative.

Table A-6
Workers/Retirees, by Race/Ethnicity
Survey of Income and Program Participation

Race/Ethnicity	Age 55-61		Age 62-64		Age 65-70	
	Workers	Retirees	Workers	Retirees	Workers	Retirees
Men						
N	795 100.0%	332 100.0%	242 100.0%	285 100.0%	250 100.0%	710 100.0%
White, Non-Hispanic	84.8	78.3	86.9	80.8	89.2	87.5
Black, Non-Hispanic	6.8	11.1	6.0	11.3	5.1	6.1
Hispanic	4.6	6.9	4.2	5.3	3.6	4.4
Other	3.8	3.7	2.8	2.7	2.2	2.0
Women						
N	727 100.0%	660 100.0%	182 100.0%	499 100.0%	198 100.0%	1,070 100.0%
White, Non-Hispanic	82.6	79.5	81.1	83.3	83.9	85.8
Black, Non-Hispanic	9.5	9.2	10.8	7.8	12.6	8.3
Hispanic	4.8	7.4	5.1	5.4	2.8	4.5
Other	3.2	3.9	2.9	3.5	0.7	1.4

Source: Urban Institute tabulations of the 1990 SIPP.

Note: Tabulations are weighted to be nationally representative.