Who retires early?

Authors: Henry J. Aaron, Jean Marie Callan

Chestnut Hill, Mass.: Center for Retirement Research at Boston College, May 2011

CENTER for RETIREMENT RESEARCH at BOSTON COLLEGE

WHO RETIRES EARLY?

Henry J. Aaron and Jean Marie Callan

CRR WP 2011-10
Date Released: May 2011
Date Submitted: April 2011

Center for Retirement Research at Boston College
Hovey House
140 Commonwealth Avenue
Chestnut Hill, MA 02467
Tel: 617-552-1762 Fax: 617-552-0191
http://crr.bc.edu

Henry Aaron is a senior fellow at the Brookings Institution and Jean Marie Callan is a research assistant at the Brookings Institution. The research reported here was performed pursuant to a grant from the U.S. Social Security Administration (SSA) funded as part of the Retirement Research Consortium (RRC). The opinions and conclusion expressed are solely those of the authors and do not represent the opinions or policy of SSA, any agency of the federal government, the RRC, the Brookings Institution, or Boston College.

About the Center for Retirement Research

The *Center for Retirement Research at Boston College*, part of a consortium that includes parallel centers at the University of Michigan and the National Bureau of Economic Research, was established in 1998 through a grant from the Social Security Administration. The Center's mission is to produce first-class research and forge a strong link between the academic community and decision-makers in the public and private sectors around an issue of critical importance to the nation's future. To achieve this mission, the Center sponsors a wide variety of research projects, transmits new findings to a broad audience, trains new scholars, and broadens access to valuable data sources.

Center for Retirement Research at Boston College
Hovey House
140 Commonwealth Avenue
Chestnut Hill, MA 02467
phone: 617-552-1762 fax: 617-552-0191
e-mail: crr@bc.edu
crr.bc.edu

Affiliated Institutions:

The Brookings Institution
Massachusetts Institute of Technology
Syracuse University
Urban Institute

Abstract

The possibility of increasing the age at which Social Security benefits are first paid merits renewed scrutiny for at least three reasons:

- a decrease in overall benefits would imply that those claiming reduced benefits before the 'full benefits age' may accept benefits that seem adequate when claimed but are insufficient when income earnings ends and savings are depleted;
- life expectancy has increased; and
- an enlarged labor force would increase potential national income and ameliorate projected future deficits.

This paper examines differences in personal circumstances between those who retire and those who remain at work for pay at various ages. The findings, based on the *Health and Retirement Survey*, are that there are differences between these two groups, but they are rather small. Some who claim retirement benefits before the full benefits age would face serious hardship if those benefits were no longer available, however. For that reason, if the age of initial eligibility is increased, consideration should be given to measures targeted on this group. The paper then goes on to consider back-up protections that might be provided to those who now claim early retirement benefits should the age of initial eligibility be increased.

WHO RETIRES EARLY?

Henry J. Aaron and Jean Marie Callan

Abstract

Proposals to 'increase the retirement age' under Social Security now appear frequently as part of plans to close the program's projected long-term deficit.[1] These proposals usually call for an increase in the age at which unreduced benefits are paid. That age, now 66, is scheduled to increase to 67 for everyone turning 62 in 2022 or later. This change is often described misleadingly as an increase in the 'normal retirement age.'[2] The name is doubly misleading: the 'normal' age for claiming benefits is not 66, as well over half of benefit claims come before age 66; and claiming benefits often occurs before and sometimes well after actual retirement. In fact,'raising the full-benefits age' is no different—except in labeling—from a proportional across-the-board benefit cut. In particular, it leaves unchanged the age at which benefits may *first* be claimed. That age, now 62, is set to stay there under current law.[3] Few propose raising the age when benefits can first be claimed.[4] The reason is that raising the 'unreduced benefits age' lowers program costs, while increasing the age of initial eligibility does not. The impact on benefits of raising the age at which 'unreduced' benefits are paid is shown in table 1.[5] The effect on long-term outlays is negligible because the delay in the payment of benefits until a later age triggers an increase in the amount of benefits paid in each period, calculated so that the expected present value of lifetime benefits is approximately unchanged.[6] Given the sizeable bonus for later claiming, it might seem that many people would wait to take benefits. Yet, few do (see table 2).[7]

One justification advanced for raising the age at which unreduced benefits are paid—that is, cutting benefits across the board—rests on increases in life-expectancy. Cuts in benefit amounts can be viewed as an offset to the greater duration of payments. However, increases in longevity have been concentrated among high earners.[8] In contrast, across-the-board benefit cuts affect high and low earners alike. In fact, life expectancy among low earners has risen little in

the last forty years.[9] But cutting benefits while continuing to permit workers to claim benefits at age 62 creates the possibility that early claimants who fail to anticipate the exhaustion or erosion of other income sources may find when older that they have meager incomes. The capacity of the 'young-old' to supplement pensions with earnings from part time work usually diminishes with age. Inflation erodes the value of most private pensions, as few are inflation adjusted. And private assets may be depleted, including defined-benefit pensions, which increasingly carry a lump-sum payment option. For all these reasons, dependence on Social Security can be expected to increase with age; in fact it does (see table 3). Each of these factors helps explain why the proportion of people with incomes below or near poverty increases with age, as shown in table 4.[10] They also contribute to the fact that Social Security is the sole source of income for 22 percent of those over age 65 and provides more than half of their income for 64 percent.[11] To avoid leaving the very old with meager Social Security benefits, some analysts have proposed that any increase in the 'unreduced benefits' age should be matched to an increase in the 'initial entitlements' age.

Those holding this position must answer a threshold question: why should workers not be allowed to take their social Security benefits whenever they want? One reason rests on the same foundation as that for Social Security itself. The case for Social Security rests on three propositions:

- that enough people are short-sighted or procrastinate when it comes to retirement saving, saving too little or starting to save too late to provide adequate income during retirement, to justify collective intervention to mandate saving;
- that more income redistribution to the elderly, disabled, and survivors than to others is acceptable because work disincentive effects from income related transfers is of less concern when directed to these groups than to others in the population; and
- that not all financial and insurance markets exist and operate efficiently.

The case for setting an age before which benefits cannot be claimed is similar: that a sizeable fraction of people would elect to take actuarially reduced benefits at a very early age, thereby failing to achieve optimal lifetime income smoothing and frustrating achievement of the goal of

providing adequate retirement income. These considerations lead to setting an age before which Social Security cannot be claimed. For similar reasons, Congress penalizes withdrawal of funds from tax-sheltered savings accounts before age 59-½. Thus, setting an age before which benefits cannot be claimed increases the chance that retirees, some of whom are myopic, will have socially adequate incomes.

Delaying the age at which benefits are first paid also imposes social costs. It denies financial support to those workers for whom continuing work imposes significant physical or mental hardship. Choosing the 'right' age of initial eligibility involves the policy equivalent of type 1 and type 2 errors in statistics—balancing the conflicting social goals: assuring the elderly 'adequate' income versus allowing people to claim benefits at an early age that will boost their welfare. In a tautological sense, those who retire differ from those who do not—they are more likely to *prefer* to retire. Whether these two groups differ from one another in terms of income, wealth, health, and pension status is an empirical matter.

In this paper, we compare certain characteristics of people in their early 60s who stop working with those who continue working. Over the early retirement ages, the differences appear to be small and to have changed little in recent years. We then estimate a simple equation that generates the degree to which various personal characteristics contribute to the decision to retire. Next, we use as weights the coefficients from this equation to compute a retirement propensity index for each person in a large longitudinal survey and show the distribution of retirement propensities of both those who do and those who do not retire. The overlap of these distributions is substantial. The objective characteristics of those who retire and of those who remain active are quite similar.

We then consider certain policies that might be adopted to provide assistance to those who might suffer significant hardship if the age of initial eligibility for Social Security benefits were increased.

CHARACTERISTICS OF WORKERS RETIRING AT VARIOUS AGES

We focus on people between the ages of 55 and 66, the years during which most people end their working careers. Our objective is to detect differences between the personal characteristics of those who stop working and those who continue. How do they differ at a point in time? How have they changed over time? We rely on data from the Health and Retirement Survey (HRS), a longitudinal survey consisting of five cohorts, the first of which was initially surveyed in 1992. Cohort members are surveyed roughly every two years. The latest of ten survey waves was done in 2006. Members of two of the cohorts were first interviewed when their members were at least 68 years old, beyond the ages on which we are focusing; accordingly, we omit these observations.[12] The included groups are:

- *The HRS cohort*. Its members were born from 1931 through 1941 and were first interviewed in 1992. Those members of the HRS cohort born before 1936 were over age 56 when first interviewed and are excluded. We divided the other HRS households into three groups based on birth years: 1936-37, 1938-39, and 1940-41.
- *The War Babies cohort*. Its members were born from 1942 through 1947. They were first interviewed in 1998. The War Babies cohort is about the same size as each of the HRS sub-groups. We treat it as a single group.
- *Early Baby Boomers*. Its members were born from 1948 through 1953. They were first interviewed in 2004. None of its members was older than 58 as of 2006, the date of the last survey.

Appendix tables A1 through A7 present information on the education, health, income, earnings, assets, job characteristics, and pension status of members of successive cohorts who were initially working, some of whom remained at work and some of whom did not. The tables report the personal characteristics of people working, respectively at ages 55, 58, 61, 62, and 63, who stopped working before the next survey, when they were, respectively 56-58, 59-61, 62-63, 63-65, and 64-66. Those in the first two groups who stopped working are not eligible under current law for Social Security retirement benefits. Those in the latter three groups are eligible under current law, but might not be if the age of initial eligibility were increased.

Table 5 shows the number of observations in each of the five age groups in each of five birth cohorts. Because sample sizes are modest all of the results are subject to considerable sampling error. The following general picture emerges:

- Educational attainments of both retirees and those remaining active have increased over time. Those who retire are, in general, less well educated than are those who remain economically active.
- Those who retire are more likely than those who remain active to be in poor or fair health, but the large majority of both those who retire and those who remain active report that their health is the same as it was or better than previously. The proportion of both those who retire and of those who remain active who report limitations on activities of daily living is small, but most of both groups report some functional limitations. Once again, those who retire report somewhat more difficulties in both categories than do those who remain active.
- There is little systematic difference in the reported likelihood of living to age 75 between those who retire and those who remain active. Oddly, the probability does not increase as respondents age.
- There is little consistent difference in asset holdings between those who retire and those who remain active.
- Most conditions of employment for those who retire are similar to those of people who remain economically active. There is one important and unsurprising exception—those who worked thirty or more hours per week when initially surveyed were more likely to be economically active at the next survey than are those who are working fewer than 30 hours.
- Earnings and total family income differ widely both among those who leave the labor force before the age of eligibility for Social Security and those who remain economically active until after they are eligible for benefits.
- The patterns of pension holdings do not differ consistently between those who retire and those who remain economically active.

These two-way correlations between each of these worker attributes and the decision whether or not to remain economically active are less informative than are estimates of the simultaneous impact of all of these factors on the retirement decision. We therefore estimate two

equations (OLS and logit) relating the decision to retire to personal characteristics. The dependent variable takes on a value of one if the respondent in a prior survey year reported that he/she was working for pay and is *now* not working for pay, and a value of zero if the respondent is still working for pay. The independent variables are personal characteristics: age, sex, race, education, self-rated health status, change in self-rated health, limitations in activities of daily living, functional limitations, total household assets, pension status, self-reported job characteristics, and earnings. In addition, we include dummy variables for survey cohorts to identify trend changes in retirement propensities. The variable definitions are shown in table 6.

The equations do not show structural relationships between the decision to stop working and the personal characteristics. Rather, they provide weights for the estimation of a 'retirement propensity score' which can be used to determine how different those who continue working are from those who stop working. We estimated equations that included either all decisions to stop working for pay or the first such decision within the age ranges on which we are focusing. We ran the regressions with and without weights on the observations. With few exceptions, the results are of the same sign and similar in size and significance level regardless of the definition of stopping work, weights, and regression method. Table 7 shows OLS coefficients and logit odds ratios for the run on all cessations of working for pay run on unweighted observations.

These runs omit other variables that turned out to be insignificant including a variable for whether the respondent is or is not Hispanic and a series of fifteen dummy variables for the respondents' occupations (professional, sales, clerical, and so on) none of which was close to significant.

- Quite unsurprisingly, as workers age, they tend to stop working. However, conditional on initially working for pay at a given age, the disposition to withdraw from the labor force does not increase consistently with age. This pattern differs from the timing of claiming Social Security retirement benefits, which shows a large spike at age 62, the first age of eligibility, and a smaller spike at ages 65 and 66, the age at which "unreduced" benefits have been paid.
- Women are more disposed to stop working than men, other things held constant.
- Other variables held constant, the likelihood of stopping working for pay has been falling over time, a fact that is readily apparent in labor-force participation data.

- After controlling for other factors, the decision to stop working for pay does not differ meaningfully between whites and other racial groups.
- More educated workers are less likely than less educated workers to leave the work force.
- The level and change of health status are powerfully related to the cessation of work. Compared to people in excellent health, working for pay is progressively lower if health is only good, fair, or poor. Even a small decline in health status is associated with an increased likelihood of stopping work, and a large decline greatly increases the likelihood. It is possible that survey respondents believe that poor health or claiming a decline in health status is a respectable reason for stopping work. If so, the statistical estimates may overstate the real contribution of health to the decision to retire.
- Limitation in performing activities of daily living and functional limitations both increase the likelihood of stopping work, independently of general health status or change in health status.
- Standard economic theory predicts that the propensity to stop working will increase with wealth. The regression results are generally consistent with that prediction, although the gradient is rather shallow.
- Having a pension has no significant impact on the decision to stop working, but having a *defined benefit* pension has a strong effect.
- Perhaps the most surprising result is the weakness of the independent effect of job characteristics on the tendency to stop working. Physical effort, stooping and bending, and lifting heavy weight have no statistically significant effect on the decision to stop working and some of the signs are opposite to what one might expect. This result is strikingly at odds with the conventional impression that those engaged in physically burdensome work are differentially forced to retire at early ages. Stress is the only job characteristic associated with retirement.

RETIREMENT PROPENSITY AND VULNERABILITY SCORES

The retirement propensity, z_{ijt}, of each person, *i,* or age, *j*, working at a given time, *t,* is the value from equation (1).

(1) z_{ijt} =.029 sex^ + .010 race -.028 High School$^{\#}$ -.052 Some College)^

(.006) (.008) (.008) (.010)

-.084 College or more^ + .028 Good Health^ + .059 Fair Health^
(.010) (.007) (.010)

+ .098 Poor Health^ + .075 Worse Health^ + .336 Much Worse Health^
(.022) (.008) (.021)

+ .029 1+ADL Limit^{+} + .022 1+ Functional Limit$^{\#}$
(.013) (.006)

+.016 Liq. Asset $25-50K + .021 Liq.Asset $50-100K^{+}
(.010) (.010)

+.033 Liq.Asset $100-250K$^{\#}$ + .026 Liq.Asset $250-1m*+ .042 Liq.Asset >$1m^{+}
(.009) (.009) (.017)

-.004 Pension + .082 DB Pension^ + .006 Job-Much Phys.Effort
(.008) (.009) (.009)

+.008 Job Much Lifting -.005 Job Much Stooping -.022 Job Much Stress$^{\#}$
(.010) (.008) (.006)

-.0003 Earnings$^{\#}$ + .00003 EarningsSq.$^{+}$
(.00008) (.00001)

R^2 =
Significance levels: ^ .9999; # .999; * .99; $^{+}$ .95

Based on this equation, we computed retirement propensity scores for every person working at ages 62, 63, 64, 65, 66, 67, and 68 or older. We arrayed the scores of all persons who were working and all persons who had stopped working since the last survey within each age group. Propensity scores are higher on the average for those who stopped working than for those who continued working. That is, they tended to be non-white, have lower education, have poorer health, be more likely to have deteriorating health, to have one or more limits on activities of daily living or functional limitations, to have greater assets, to have a defined benefit pension, and low earnings. The distributions of workers and those who had stopped working overlapped to a considerable extent.

Typically, about one third of those who stopped working had a lower retirement propensity score than did the median person who continued to work. About one third of those

who continued to work had a higher retirement propensity score than the median of those who stopped working.

The propensity scores include variables that both make continued work difficult or unremunerative, such as poor health, low education, and low income, and variables that make retirement an attractive option, such as high wealth. Accordingly, we also compute a retirement vulnerability score, based on all of the variables used in estimating equation (1) other than wealth. The results are shown in equation (2).

(2) z_{ijt} =.028 sex^ + .002 race -.023 High School* -.045 Some College)^
(.006) (.008) (.008) (.009)

-.072 College or more^ + .027 Good Health# + .055 Fair Health^
(.010) (.009) (.010)

+ .093 Poor Health^ + .075 Worse Health^ + .335 Much Worse Health^
(.021) (.008) (.021)

+ .028 1+ADL Limit+ + .021 1+ Functional Limit*
(.013) (.006)
-.004 Pension + .082 DB Pension^ + .005 Job-Much Phys.Effort
(.008) (.009) (.009)

+.007 Job Much Lifting -.006 Job Much Stooping -.022 Job Much Stress#
(.010) (.008) (.006)

-.0002 Earnings* + .00003 EarningsSq.
(.00008) (.00001)

R^2 =
Significance levels: ^ =.9999; # = .999; * = .99; + = .95

The retirement vulnerability scores overlap even more than do the retirement propensity scores. Large proportions of those who stop work have lower vulnerability scores than do those who continue working, and many of those who continue working have higher retirement vulnerability scores than do those who stop working.

We next ranked those who retired and those who continued to work by retirement vulnerability scores, within age groups: 62, 63, 64, 65, 66, 67, and 68 or older. We then separated those within each age group who retired and those who continue to work for pay by retirement vulnerability score deciles. The results are shown in table 8. The proportion of

members of each decile who retire rises with retirement vulnerability score, but a majority of the members of even the most vulnerable deciles continue to work, and roughly one-fifth of those in even the least vulnerable deciles stop working for pay.

ALTERNATIVES TO EARLY SOCIAL SECURITY BENEFITS

Retirees and workers of a given age have different objectively measurable personal characteristics, those characteristics overlap to a remarkable degree. That their subjective preferences differ is close to tautological. To be sure, something approaching necessity drives some retirement decisions. In other cases, however, the decision to stop working is clearly a matter of preference and choice. Should Social Security benefits be reduced across-the-board by increasing the full-benefits age, the issue of whether to raise the age of initial eligibility needs to be faced, in order to avoid early claims that leave workers with inadequate pensions. If the initial eligibility age were increased, it would be important to provide support for those who stop working because of something approaching exigent circumstances.

Because of the large weight of poor or deteriorating health in the retirement vulnerability score, attention should be given to changes in rules governing access to disability insurance for workers at age 62. People are ruled ineligible for Disability Insurance benefits if they have not worked in jobs covered by Social Security for five of the last ten years, even if they satisfy all other requirements. Most of those who fail this test will nonetheless have worked ten years since age 21, the requirement for retirement benefits. People may fail this continuity of work requirement if they have been ill or unemployed for a sizeable portion of the decade before they reach age 62. They may also fail the continuity of work test if they have been employed by one of the four states whose employees are not covered by Social Security. One study reports that approximately 12 percent of early retirees would be eligible for Disability Insurance but for the 'continuity of work' requirement.[13] It would be straightforward to relax this requirement for workers once they reach age 62. Doing so would permit people with spotty work records who become disabled to receive disability insurance benefits, which are equal to the retirement benefits they would have received had they claimed benefits at age 66, the full benefits age. These benefits are 25 percent higher than the early retirement benefits they receive at age 62.

By enabling approximately 240,000 people in 2009 and similar numbers in other years to claim Disability Insurance benefits, rather than reduced, Old-Age Insurance benefits, this change in rules would boost the long term cost of Social Security by about 2 percent (0.3 percent of payroll) and increase the projected long-term funding gap by 15 percent. The budgetary impact of these added program costs would be offset to the extent that increasing the age of initial entitlement encouraged some of the large majority of early claimants who are not disabled but who otherwise would have withdrawn from the labor force to remain active. The result of an enlarged labor force would be increased economic output at full employment, with correspondingly increased taxes and reduced government spending on assistance programs other than Social Security.

Similarly, it would be possible to modify Supplemental Security Income in various ways at age 62. SSI provides modest benefits–up to $674 per month for individuals, $1,011 for couples—to the elderly, blind, and people with disabilities (with disability defined by the same standards as under Social Security Disability Insurance) who have low incomes and few assets. Income limits in 2011 are $1,433 per month for individuals and $2,107 for couples, if all income is from earnings (less if income is from other sources). Applicants must have 'countable' assets of less than $2,000 for individuals or $3,000 for couples. Assets include most things that can be readily converted into cash—defined-contribution pensions count, but defined-benefit pensions do not.

Several changes in SSI could cushion the effect of raising the initial age of eligibility for Social Security retirement benefits. The age of eligibility for SSI benefits for the elderly could be lowered from age 65 to age 62. The definition of disability under the SSI program could be relaxed at age 62, even to the point of making low income the sole criterion for benefits, as is now the case for Medicaid enrollment under the Affordable Care Act. The asset test for SSI disability benefits could be relaxed at age 62.

In general, the case for relaxing the asset test for all SSI applicants is strong. Since the SSI law was enacted in 1972, the asset limit has been increased in nominal terms by 33 percent, while mean nominal per capita income has increased nearly 400 percent. Furthermore, a

common asset that was not included in countable assets, defined-benefit pensions, has been mostly replaced by defined-contribution pensions, which are counted, making the asset test more stringent than in the past, even if the value of household assets is otherwise the same.

CONCLUSION

All assistance programs are prone to two errors: providing help when it is not intended and failing to provide help when it is intended. For the reasons stated earlier in this paper, setting any minimum age of initial eligibility for Social Security will inevitably generate both errors. Whether the decisions to provide reduced retirement benefits at age 62 properly balanced the likelihood of each type of loss when this age was set—in 1956 for women and in 1961 for men—depended on both objective considerations, such as life expectancy and the health of people at the early entitlement age, and on the values of decision makers and the public at the time.

Since then, objective considerations have changed. Life expectancy has increased, most for those with comparatively high earnings. Defined-benefit pensions have been supplanted by defined-contribution pensions. Labor force participation rates of older workers first fell and more recently have begun to increase. The tabulations in this paper suggest that while those at each age who retire and those who remain active differ in some degree in objectively measurable personal characteristics, those characteristics overlap to a great extent. Given these developments, it seems sensible to reexamine the age of initial eligibility for Social Security retirement benefits, especially if ways can be designed to protect those early retirees for whom continued work poses a particular hardship.

TABLE 1

Benefits Payable If Claimed At Ages 62 to 70 and Above as Percent of Benefits Payable at the "Full Benefits Age" as percent of 'Primary Insurance Amount'

Workers Who Turn Age 62 in	Benefit Received at Age 62	Benefit Received a Age 65	Benefit Received at Age 66	Benefit Received at Age 67	Benefit Received at Age 70
1999[1]	80	100	106 ½	113	132 ½
2005–2016[1]	75	93 ⅔	100	108	132
2022 and after[1]	70	86 ⅔	93 ⅓	100	124

Note: (1) Between 1999–2005 and from 2016–2022, the full-benefit retirement age moves up from age 65 to 66 and then from age 66 to 67, two months each year, for workers turning age 62 in those intervals. As a result, the ratio of the pension available at each age shown declines linearly in that interval.

TABLE 2

AGES AT WHICH RETIREMENT BENEFITS WERE CLAIMED IN 2009

AGE A	NUMBER	PERCENT OF CLAIMS
62	1,284,754	53.2
63	187,856	7.8
64	200,272	8.3
65	332,667*	13.8
66	326,612	13.5
67	22,740	0.9
68	13,895	0.6
69	12,245	0.5
70 or older	35,697	1.5

* excludes 323,456 conversions of Disability Insurance to Retirement Insurance benefits

Source: Social Security Administration, Annual Statistical Supplement to the Social Security Bulletin, 2010, table 6.A4/

Table 3
SOURCES OF INCOME OF THE ELDERLY, BY AGE

Income Source		Age Bracket				
		62 to 64	65 to 69	70 to 74	75 to 79	80 and older
	percent of income from each source					
Earnings	84.9	70.4	46.6	30.3	15.3	9.3
Income from pensions other than Social Security	5.0	11.3	15.2	18.1	21.5	22.0
Social Security	2.4	9.0	25.4	36.8	44.5	50.6
Asset income	5.0	6.7	10.6	12.3	15.7	14.6
Public Assistance and all other	2.7	2.6	2.1	2.5	3.0	3.5
Social Security as share of income other than earnings– average, all persons	15.9	30.4	47.6	52.8	52.5	55.8

TABLE 4
INCIDENCE OF POVERTY AND NEAR POVERTY BY AGE

Income as percent of official poverty threshold	Age Groups			
	50 TO 59	60 TO 64	65 TO 74	75 OR OLDER
≥0.50 to <1.0	9.3	9.4	8.0	10.0
≥1.0 to <1.5	6.2	7.1	9.3	14.1
≥1.5 to <2.0	6.5	7.8	11.3	15.8

TABLE 5

NUMBER OF OBSERVATIONS, BY AGE BRACKET AND BIRTH YEARS

		Birth Years				
		1936-1937	1938-1939	1940-1941	1942-1947	1948-1952
Ages	55/56-58	571	576	520	759	259
	58/59-61	488	497	516	426	n.a.
	61/62-63	401	400	405	159	n.a.
	62/63-65	341	263	372	79	n.a.
	63/64-65	301	297	333	n.a.	n.a.

Table 6
Variable Definitions

Variables	Variable Name	Values	Explanation
Dependent variable:			
Retirement decision		1, 0	Worked for pay in prior survey, does not work for pay in current survey
Independent variables			
Age	Age (x)	1, 0	Dummy variables for age in year when working for pay is tested: 62, 63, 64, 65, 66, 67, 68 or older; age 59 to 61, omitted class
Cohort	Cohort (x)	1, 0	Birth cohort: 1934-1937, 1938-1941, 1942-1945, 1946-1951; 1929-1933, omitted class
Sex	Sex	1, 0	1 = Female, 0 = Male
Race	Race	1, 0	1 = black or other; 0 = white
Education	HighSch, sCollege, Collegep	1, 0	high-school or GED, some college, college degree only or post-graduate degree; less than high-school/GED is omitted
Health status	srh_good, srh_fair, srh_poor	1, 0	health status is good, fair, poor; excellent health is omitted
Health change	srhc_sworse, srhc_mworse	1, 0	health status is somewhat worse, much worse; health status is the same, somewhat better, or much better is omitted
Activities of daily living	adl_sum	1, 0	reports some difficulty with any one or more activities of daily living, including walking across a room, dressing, bathing/showering, getting in or out of bed; no difficulties is omitted
Functional limitations	fl_sum	1, 0	reports some functional limitation, including walking several blocks, sitting for two hours, getting up from a chair, climbing several flights of stairs, stooping/kneeling/ crouching, lifting/carrying 10 pounds, picking up a dime, reaching or extending arms up, or pushing/pulling a large object; no functional limitation is omitted

Liquid assets	LA25_50, LA50_100, LA100_250, LA250_1m LA_1m	1, 0	liquid assets equal the sum of IRAs, Keogh plans, stocks, mutual funds, investment trusts, checking and saving account balances, money market accounts, CDs, government bonds, all expressed in 2007 dollars; included categories are $25,000-$50,000, $50,000-$100,000; $100,000-$250,000, $250,000-$1,000,000, more than $1,000,000; assets of less than $25,000 is omitted
Pension	Pension	1, 0	has a pension of any sort; no pension is omitted
Defined-benefit pension	Pen_DB	1, 0	has a defined benefit pension; no defined benefit pension or pensions other than defined benefit is omitted
Job characteristics	job_PE, job_lift, job_stoop, job_stress	1, 0	job requires a lot of physical effort all or almost all of the time job requires lifting heavy loads all or almost all of the time job requires stooping/kneeling/crouching all or almost all of the time job involves a lot of stress another response to each question is omitted
Earnings	earnings, earnings2	Continuous values	all earned income, including wages, salaries, and self-employment income, expressed in 2007 dollars or as 2007 dollars squared

TABLE 7

REGRESSION RESULTS

Variable	OLS Coefficient	Logit odds ratio
Intercept	0.150**	
Age62	0.099**	1.865**
Age63	0.115**	2.034**
Age64	0.075**	1.633**
Age65	0.132**	2.219**
Age66	0.136**	2.264**
Age67	0.101**	1.898**
Age68plus	0.113**	2.012**
sex	0.029**	1.175**
Cohort2	-0.032**	0.846**
Cohort3	-0.039**	0.810**
Cohort4	-0.030*	0.847*
Cohort5	-0.079*	0.509*
race	0.010	1.061
HighSch	-0.028**	0.867**
sCollege	-0.052**	0.759**
Collegep	-0.084**	0.626**
srh_good	0.028**	1.176**
srh_fair	0.059**	1.360**
srh_poor	0.098**	1.620**
srhc_sworse	0.075**	1.470**
srhc_mworse	0.336**	4.549**
adl_sum	0.029*	1.145*

fl_sum	0.022**	1.139**
LA25_50	0.016	1.091
LA50_100	0.021*	1.123*
LA100_250	0.033**	1.198**
LA250_1m	0.026**	1.160**
LA_1m	0.042*	1.283**
Pension	-0.004	0.967
Pen_DB	0.082**	1.606**
job_PE	0.006	1.037
job_lift	0.008	1.043
job_stoop	-0.005	0.979
job_stress	-0.022**	0.885**
earnings	-0.00028**	0.998
earnings2	0.00003*	0.999

* = coefficient or odds ratio significant at 95 percent level
** = coefficient or odds ratio significant at 99 percent level

TABLE 8

Retirement Decisions, by Retirement Vulnerability Index Deciles

Decile 1 = lowest retirement vulnerability — Decile 10 = greatest retirement vulnerability

	1		2		3		4		5		6		7		8		9		10		Total
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#
AGE 62																					
Still working	212	83.5%	205	80.7%	205	80.4%	201	79.4%	183	72.0%	189	74.4%	168	66.4%	166	65.4%	173	68.1%	160	63.0%	1,862
Stopped working	42	16.5%	49	19.3%	50	19.6%	52	20.6%	71	28.0%	65	25.6%	85	33.6%	88	34.6%	81	31.9%	94	37.0%	677
Total	254		254		255		253		254		254		253		254		254		254		2,539
AGE 63																					
Still working	199	85.4%	182	78.8%	177	76.3%	183	78.9%	181	78.0%	157	67.7%	161	69.4%	155	66.8%	144	62.3%	133	57.3%	1,672
Stopped working	34	14.6%	49	21.2%	55	23.7%	49	21.1%	51	22.0%	75	32.3%	71	30.6%	77	33.2%	87	37.7%	99	42.7%	647
Total	233		231		232		232		232		232		232		232		231		232		2,319
AGE 64																					
Still working	170	91.9%	143	77.7%	148	80.4%	143	77.7%	144	78.7%	140	76.1%	141	76.6%	116	63.0%	125	68.3%	127	69.0%	1,397
Stopped working	15	8.1%	41	22.3%	36	19.6%	41	22.3%	39	21.3%	44	23.9%	43	23.4%	68	37.0%	58	31.7%	57	31.0%	442
Total	185		184		184		184		183		184		184		184		183		184		1,839
AGE 65																					
Still working	142	84.0%	128	78.0%	136	81.4%	120	72.3%	121	72.9%	110	66.3%	108	65.5%	107	64.1%	103	62.4%	97	58.4%	1,172
Stopped working	27	16.0%	36	22.0%	31	18.6%	46	27.7%	45	27.1%	56	33.7%	57	34.5%	60	35.9%	62	37.6%	69	41.6%	489
Total	169		164		167		166		166		166		165		167		165		166		1,661
AGE 66																					
Still working	105	79.5%	98	74.2%	94	71.2%	97	74.0%	97	73.5%	95	72.0%	93	71.5%	89	67.4%	79	59.8%	76	58.0%	923
Stopped working	27	20.5%	34	25.8%	38	28.8%	34	26.0%	35	26.5%	37	28.0%	37	28.5%	43	32.6%	53	40.2%	55	42.0%	393
Total	132		132		132		131		132		132		130		132		132		131		1,316
AGE 67																					
Still working	92	86.0%	86	81.1%	84	79.2%	83	77.6%	82	77.4%	74	67.9%	74	71.2%	74	69.8%	70	66.0%	67	63.2%	786
Stopped working	15	14.0%	20	18.9%	22	20.8%	24	22.4%	24	22.6%	35	32.1%	30	28.8%	32	30.2%	36	34.0%	39	36.8%	277
Total	107		106		106		107		106		109		104		106		106		106		1,063
AGE 68+																					
Still working	442	82.0%	419	78.0%	383	70.9%	404	75.4%	352	65.5%	381	70.8%	361	66.9%	350	65.5%	342	63.6%	328	61.0%	3,762
Stopped working	97	18.0%	118	22.0%	157	29.1%	132	24.6%	185	34.5%	157	29.2%	179	33.1%	184	34.5%	196	36.4%	210	39.0%	1,615
Total	539		537		540		536		537		538		540		534		538		538		5,377

Appendix Table 1

Question: Of those still working at age 55/58/61/62/63 and ____, what proportion retire/keep working in the next period?

Education levels, Workers and Retirees, age 55 through 66 (unweighted)

Age groups and Birth years	High school education or less			Some College			College degree or more		
	Retired	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*
55/56-58 (1)									
1936-1937	13.0	87.0	354	12.2	87.8	98	10.1	89.9	119
1938-1939	12.3	87.7	341	5.7	94.4	124	4.6	95.5	110
1940-1941	10.3	89.7	271	3.5	96.6	116	9.9	90.1	131
1942-1947	14.1	85.9	319	8.9	91.1	202	9.7	90.3	238
1948-1952	6.5	93.5	77	6.9	93.1	87	8.4	91.6	95
58/59-61 (1)									
1936-1937	16.1	83.9	286	15.7	84.3	102	9.1	90.9	99
1938-1939	15.2	84.8	290	17.2	82.8	116	11.1	88.9	90
1940-1941	15.2	84.8	269	12.6	87.4	135	10.7	89.3	112
1942-1947	15.9	84.1	195	5.6	94.4	89	7.0	93.0	142
1948-1952									
61/62-63(1)									
1936-1937	35.2	64.8	233	30.7	69.3	75	17.4	82.6	92
1938-1939	33.9	66.1	230	32.6	67.4	89	20.0	80.0	80
1940-1941	20.4	79.6	211	22.4	77.7	85	19.4	80.6	108
1942-1947	27.6	72.4	58	23.9	76.1	46	20.4	79.6	54
62/63-65(1)									
1936-1937	27.2	72.8	195	21.3	78.7	75	21.1	78.9	71
1938-1939	23.4	76.6	137	25.0	75.0	72	13.0	87.0	54
1940-1941	19.8	80.2	187	24.5	75.5	94	12.4	87.6	89
1942-1947	26.7	73.3	30	28.6	71.4	21	14.3	85.7	28
63/64-66 (1)									
1936-1937	29.5	70.5	166	26.9	73.1	52	23.2	76.8	82
1938-1939	30.3	69.7	155	32.4	67.6	71	12.9	87.1	70
1940-1941	23.0	77.0	174	18.5	81.5	65	25.8	74.2	93

1. The designation '55/56-58 refers to people who were working when surveyed at age 55 and reports the indicated response when they were next surveyed, which may be when they were 56, 57, or 58;
The years refer to birth years.

Appendix Table 2

Question: Of those still working at age 55/58/61/62/63 and , what proportion retire/keep working in the next period?

Impact of Health on Retirement Decisions

Age groups and Birth years	Health Status			Change in Health Status (2)			Any ADL (3)			Any Funct. Limit (4)			Live to 75-Prob.< .50 (5)		
	Poor or Fair Health			Same or Better											
	Retired	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*
55/56-58 (1)															
1936-1937	23.1	76.9	78	10	90	501	29	71	31	12.8	87.2	399	13.7	86.3	131
1938-1939	18.4	81.6	87	7.3	92.7	482	14.3	85.7	7	11.3	88.7	284	11	89	127
1940-1941	15.9	84.1	44	6.3	93.8	432	28	72	25	12.1	87.9	231	11.2	88.8	116
1942-1947	22.0	78.1	82	10.1	89.9	636	25	75	32	12.7	87.3	355	10.6	89.4	170
1948-1952	19.6	80.4	51	5.5	94.5	219	20	80	15	11.1	88.9	117	13.4	86.6	67
58/59-61 (1)															
1936-1937	16.4	83.6	61	13.6	86.4	419	28.6	71.4	21	17.5	82.5	240	11.3	88.7	115
1938-1939	29.3	70.7	75	13.5	86.5	408	32.3	67.7	31	18.9	81.1	259	17.8	82.2	118
1940-1941	23.5	76.5	85	11.3	88.7	425	21.1	78.9	19	15.7	84.3	281	12.7	87.3	134
1942-1947	15.5	84.5	58	8	92	350	27.8	72.2	18	11	89	219	10.1	89.9	99
61/62-63(1)															
1936-1937	27.3	72.7	77	28.4	71.6	331	42.1	57.9	19	33	67	212	34.3	65.7	108
1938-1939	39.4	60.6	66	28.4	71.6	317	23.1	76.9	26	32.7	67.3	220	31.1	68.9	90
1940-1941	36.4	63.6	55	17.6	82.4	318	30.8	69.2	13	24.8	75.2	214	25.3	74.7	87
1942-1947	37.5	62.5	24	17.4	82.6	132	64.3	35.7	14	27.4	72.6	84	32.4	67.7	34
62/63-65(1)															
1936-1937	25.5	74.5	47	22.6	77.4	279	27.8	72.2	18	28.2	71.8	188	31.2	68.8	77
1938-1939	30.0	70.0	50	19.4	80.6	211	25	75	16	25.3	74.7	150	25.8	74.2	66
1940-1941	19.2	80.8	52	19	81	311	7.7	92.3	13	21.2	78.8	222	17.9	82.1	84
1942-1947	18.2	81.8	11	23.2	76.8	69	0	100	4	19.4	80.6	36	18.8	81.3	16
63/64-66 (1)															
1936-1937	43.6	56.4	39	25.3	74.7	253	28.6	71.4	21	26.5	73.5	170	36.4	63.6	66
1938-1939	38.3	61.7	47	25.6	74.4	234	50	50	20	32.8	97.2	177	25.4	74.7	71
1940-1941	25.0	75.0	48	21.9	78.1	260	37.5	62.5	8	26.9	73.1	182	25	75	56

1. The designation '55/56-58 refers to people who were working when surveyed at age 55 and reports the indicated response when they were next surveyed, which may be when they were 56, 57, or 58;
The years refer to birth years.

2. Change in health status enquires whether health is better. the same. worse. or much worse than at the previous interview

3. This response indicates whether respondents state they have trouble with activities of daily living: walking across a room, dressing, bathing or showering, eating, getting in or out of bed, or using th

4. This response indicates whether respondents state they have any difficulty with any one of the following: walking several blocks, sitting for two hours, getting up from a chair, climbing several flights of stairs, stooping, kneeling or crouching, lifting and carrying ten pounds, picking up a dime, reaching up and extending one's arms, or pushing and pulling a large object

5. This entry shows the proportion of people surveyed who say they think the probability they will live to age 75 is less than 0.50

Appendix Table 3

Question: Of those still working at age 55/58/61/62/63 and , what proportion retire/keep working in the next period?

Age groups and Birth years	Liquid Assets											
	Up to $25,000			$25,000 to $100,000			$100,000 to $250,000			More than $250,000		
	Retired	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*
55/56-58 (1)												
1936-1937	13.3	86.7	278	12.5	87.5	152	8.3	91.7	84	12.3	87.7	57
1938-1939	13.6	86.4	257	5.8	94.2	156	4.8	95.2	105	8.6	91.4	58
1940-1941	8.0	92.0	238	4.7	95.3	128	11.5	88.5	87	14.9	85.1	67
1942-1947	10.2	89.8	324	13.1	86.9	153	10.3	89.7	146	13.2	86.8	136
1948-1952	8.5	91.5	141	0.0	100.0	36	13.3	86.7	45	2.7	97.3	37
58/59-61 (1)												
1936-1937	13.3	86.7	195	11.2	88.8	143	20.2	79.8	84	18.2	81.8	66
1938-1939	12.8	87.2	235	17.6	82.4	108	16.7	83.3	78	15.8	84.2	76
1940-1941	12.3	87.7	220	12.2	87.8	115	14.6	85.4	82	17.2	82.8	99
1942-1947	11.7	88.3	180	11.9	88.1	101	4.9	95.1	61	11.9	88.1	84
61/62-63(1)												
1936-1937	23.4	76.6	171	32.3	67.7	96	38.6	61.4	57	36.4	63.6	77
1938-1939	32.5	67.5	169	29.0	71.0	100	33.9	66.2	65	25.8	74.2	66
1940-1941	19.3	80.7	176	20.0	80.0	90	26.9	73.1	67	18.1	81.9	72
1942-1947	33.3	66.7	57	25.8	74.2	31	25.0	75.0	28	11.6	88.4	43
62/63-65(1)												
1936-1937	25.5	74.5	141	19.5	80.5	77	27.8	72.2	54	26.1	73.9	69
1938-1939	22.4	77.6	125	21.7	78.3	60	20.6	79.4	34	20.5	79.6	44
1940-1941	21.9	78.1	160	16.3	83.7	86	18.9	81.1	53	16.4	83.6	73
1942-1947	28.6	71.4	28	14.3	85.7	28	33.3	66.7	6	23.5	76.5	17
63/64-66 (1)												
1936-1937	30.3	69.7	145	28.2	71.8	39	27.8	72.2	54	19.1	81.0	63
1938-1939	28.0	72.0	132	30.2	69.8	63	33.3	66.7	51	11.8	88.2	51
1940-1941	18.5	81.5	135	32.0	68.0	75	22.2	77.8	45	21.8	78.2	78

Appendix Table 4

Question: Of those still working at age 55/58/61/62/63 and ____, what proportion retire/keep working in the next period?

Age groups and Birth years	Work Conditions: A lot of physical effort required, All or most of the time			Lifting heavy loads, All or most of the time			Stooping, kneeling, crouching, All or most of the time			A lot of stress, Agree			Hours, 30+ hours/week		
	Retired	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still Working*	*obs*
55/56-58 (1)															
1936-1937	13.6	86.4	243	11.1	88.9	108	10.9	89.1	174	12.9	87.1	357	9.5	90.5	495
1938-1939	11.7	88.3	240	13.5	86.5	96	11	89	155	8.9	91.2	373	8.4	91.6	514
1940-1941	9.5	90.5	179	8.1	91.9	74	10	90	140	7.9	82.1	328	7.9	92.1	455
1942-1947	12.7	87.3	220	16.4	83.7	104	14	86	186	11.6	88.4	467	10.5	89.5	685
1948-1952	3.7	96.3	81	2.6	97.4	38	6.7	93.3	75	6.9	93.1	159	5.2	94.8	231
58/59-61 (1)															
1936-1937	15.1	84.9	205	14.5	85.5	83	14.5	85.5	131	11.6	88.4	285	12.5	87.5	417
1938-1939	15.7	84.3	198	14.1	85.9	64	15	85	140	15.5	84.5	290	13.4	86.6	418
1940-1941	14.9	85.1	175	11.1	88.9	72	12.7	87.3	118	12.3	87.7	309	11.4	88.6	446
1942-1947	9.9	90.1	141	11.9	88.1	59	14.2	85.8	113	6.8	93.2	234	9.2	90.8	369
61/62-63(1)															
1936-1937	32	68	153	31.8	68.3	63	25.5	74.5	102	29.1	70.9	234	29.4	70.6	323
1938-1939	33.8	66.2	133	31	70	42	37.1	62.9	89	32.2	67.8	214	29	71	317
1940-1941	23	77	148	18.5	81.5	65	22.3	77.7	112	21.1	78.95	228	20	80	325
1942-1947	30.4	69.6	46	33.3	66.7	18	27	73	37	30.8	69.2	78	24.8	75.2	121
62/63-65(1)															
1936-1937	26.8	73.2	138	31.1	68.9	45	20.9	79.1	91	24.8	75.2	161	21.8	78.2	248
1938-1939	24.1	75.9	83	29.4	70.6	34	25	75	68	20.6	79.4	141	18.7	81.3	198
1940-1941	19	81	116	21.1	79	57	17.2	82.8	93	14.8	85.2	196	15.7	84.3	268
1942-1947	20	80	25	23.1	76.9	13	18.8	81.3	16	23.7	76.3	38	23.2	76.8	56
63/64-66 (1)															
1936-1937	33.9	66.1	109	43.6	56.4	39	30.7	69.3	75	27.2	72.8	136	27.3	72.7	209
1938-1939	27.1	72.9	96	36.4	63.6	33	34.9	65.2	66	27.3	72.7	161	21.7	78.3	203
1940-1941	26.2	73.8	107	22.2	77.8	45	25.6	74.4	82	19.1	80.9	157	17.2	82.8	233

Appendix Table 5

Question: Of those still working at age 55/58/61/62/63 and , what proportion retire/keep working in the next period?

Age groups and Birth years	Pension Status											
	No pension			Only DB pensions			DB and DC pensions			Only DC pension		
	Retired	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*
55/56-58 (1)												
1936-1937	16.7	83.3	245	9.7	90.3	134	12.7	87.3	79	5.1	94.9	98
1938-1939	11.5	88.5	226	10.8	89.2	176	6.5	93.6	62	5.0	95.1	101
1940-1941	9.8	90.2	194	11.3	88.7	133	7.1	92.9	56	3.4	96.6	119
1942-1947	11.2	88.8	267	11.9	88.1	168	16.8	83.2	107	8.4	91.6	190
1948-1952	11.1	88.9	108	2.5	97.5	40	5.6	94.4	36	6.0	94.0	67
58/59-61 (1)												
1936-1937	18.4	81.6	196	17.3	82.7	139	14.0	86.1	43	3.9	96.1	103
1938-1939	15.8	84.2	228	18.3	81.7	115	19.5	80.5	41	7.5	92.6	94
1940-1941	12.4	87.6	226	17.8	82.2	107	10.6	89.4	47	10.9	89.1	119
1942-1947	16.2	83.8	173	10.5	89.5	76	5.4	94.6	56	5.9	94.1	101
61/62-63(1)												
1936-1937	24.4	75.6	180	41.2	58.8	85	46.7	53.3	30	23.9	76.1	88
1938-1939	26.1	73.9	180	36.0	64.0	75	23.1	76.9	26	35.6	64.4	104
1940-1941	20.0	80.0	190	30.7	69.3	75	17.7	82.4	34	12.6	87.4	95
1942-1947	25.0	75.0	72	44.8	55.2	29	18.8	81.3	16	12.8	87.2	39
62/63-65(1)												
1936-1937	23.4	76.6	175	27.9	72.1	68	36.4	63.6	11	17.3	82.7	75
1938-1939	19.7	80.3	137	28.6	71.4	49	30.8	69.2	13	19.3	80.7	57
1940-1941	21.6	78.4	199	20.7	79.3	58	5.0	95.0	20	14.3	85.7	77
1942-1947	18.9	91.1	37	40.0	60.0	15	25.0	75.0	8	13.3	86.7	15
63/64-66 (1)												
1936-1937	23.2	76.8	164	26.7	73.3	45	31.3	68.8	16	32.4	67.7	68
1938-1939	25.8	74.2	163	36.2	63.8	47	27.8	72.2	18	22.4	77.6	58
1940-1941	24.9	75.1	189	39.1	60.9	46	5.0	95.0	20	10.3	89.7	68

Appendix Table 6

Question: Of those still working at age 55/58/61/62/63 and , what proportion retire/keep working in the next period?

Individual Earnings

Age groups and Birth years	up to $6,500			$6,500 to $12,000			$12,000 to $20,000			$20,000 to $40,000			$40,000 to $75,000			More than $75,000		
	Retired	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*
55/56-58 (1)																		
1936-1937	26.8	73.2	71	15.8	84.2	38	10.5	89.5	57	7.8	92.2	179	11.5	88.5	165	9.8	90.2	61
1938-1939	13.8	86.3	80	21.2	78.8	33	13.3	86.7	60	8.2	91.8	170	7.9	92.1	164	1.5	98.6	69
1940-1941	10.6	89.4	104	13.8	86.2	29	10.4	89.6	48	6.6	93.4	136	8.2	91.9	135	7.4	92.7	68
1942-1947	13.6	86.4	147	8.7	91.3	23	16.9	83.1	65	10.5	89.5	162	8.3	91.7	218	12.5	87.5	144
1948-1952	13.5	86.5	52	12.5	87.5	8	9.5	90.5	21	4.6	95.5	66	6.3	93.8	64	4.2	95.8	48
58/59-61 (1)																		
1936-1937	22.1	77.9	77	12.5	87.5	24	19.2	80.8	52	11.7	88.3	145	15.0	85.0	133	7.0	93.0	57
1938-1939	19.3	80.7	114	27.6	72.4	29	7.1	92.9	56.0	8.9	91.1	124	17.9	82.1	112	14.5	85.5	62
1940-1941	14.3	85.7	112	21.7	78.3	23	13.3	86.7	60	12.5	87.5	136	10.8	89.2	120	16.9	83.1	65
1942-1947	16.7	83.3	84	5.9	94.1	17	10.3	89.7	39	13.3	86.7	98	9.2	90.8	120	4.4	95.6	68
61/62-63(1)																		
1936-1937	28.6	71.4	91	33.3	66.7	24	19.5	80.5	41	39.2	60.8	125	27.5	72.5	80	20.0	80.0	40
1938-1939	31.1	68.9	90	24.1	75.9	29	39.5	60.5	43	29.0	71.0	107	31.0	69.1	84	29.8	70.2	47
1940-1941	23.7	76.3	93	32.4	67.7	34	11.1	88.9	36	18.2	81.8	88	19.8	80.2	101	18.9	81.1	53
1942-1947	24.3	75.7	37	33.3	66.7	6	30.8	69.2	13	22.7	77.3	44	30.3	69.7	33	15.4	84.6	26
62/63-65(1)																		
1936-1937	19.1	80.9	89	29.6	70.4	27	26.2	73.8	42	34.9	65.1	86	17.0	83.1	59	21.1	79.0	38
1938-1939	25.0	75.0	64	7.1	92.9	14	22.2	77.8	27	24.4	75.6	82	14.0	86.0	57	31.6	68.4	19
1940-1941	23.1	76.9	78	11.5	88.5	26	22.5	77.6	49	15.5	84.6	110	20.6	79.4	68	19.5	80.5	41
1942-1947	25.0	75.0	20	0.0	100.0	3	0.0	100.0	4	15.4	84.6	13	28.6	71.4	28	27.3	72.7	11
63/64-66 (1)																		
1936-1937	20.9	79.1	86	29.2	70.8	24	29.4	70.6	51	29.4	70.6	68	34.9	65.1	43	24.1	75.9	29
1938-1939	26.9	73.1	93	38.5	61.5	26	26.7	73.3	30	20.3	79.7	64	30.9	69.1	55	20.7	79.3	29
1940-1941	27.3	72.7	99	42.4	57.6	33	16.2	83.8	37	16.7	83.3	66	18.6	81.4	59	18.0	82.1	39

Appendix Table 7

Question: Of those still working at age 55/58/61/62/63 and _____, what proportion retire/keep working in the next period?

Age groups and Birth years	Total Household Income																	
	up to $15,000			$15,000 to $25,000			$25,000 to $40,000			$40,000 to $60,000			$60,000 to $105,000			More than $105,000		
	Retired	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*	*Retired*	*Still working*	*obs*
55/56-58 (1)																		
1936-1937	31.3	68.8	32	11.8	88.2	51	10.1	89.9	79	12.6	87.4	103	11.2	88.8	169	10.2	89.8	137
1938-1939	16.2	83.8	37	12.9	87.1	31	11.4	88.6	79	13.5	86.6	119	6.9	93.1	174	5.2	94.9	136
1940-1941	19.2	808.0	26	3.5	96.6	29	8.6	91.4	58	10.0	90.0	100	6.9	93.1	159	8.8	91.2	148
1942-1947	18.8	81.3	32	9.5	90.5	42	12.1	87.9	66	12.7	87.3	126	10.7	89.3	234	10.4	89.6	259
1948-1952	10.0	90.0	20	19.1	81.0	21	4.6	95.5	22	5.3	94.7	38	5.1	94.9	78	7.5	92.5	80
58/59-61 (1)																		
1936-1937	26.9	73.1	26	13.3	86.7	30	12.7	87.3	71	10.1	89.9	89	16.5	83.5	152	14.2	85.8	120
1938-1939	15.8	84.2	38	6.7	93.3	30	11.9	88.1	67	21.9	78.1	96	11.0	89.1	137	17.1	83.0	129
1940-1941	17.2	82.8	29	10.8	89.2	37	18.6	81.4	70	9.8	90.2	92	12.4	87.6	145	14.7	85.3	143
1942-1947	25.0	75.0	20	24.0	76.0	25	10.0	90.0	50	12.9	87.1	70	9.7	90.3	124	6.6	93.4	137
61/62-63(1)																		
1936-1937	42.1	57.9	19	33.3	66.7	30	28.6	71.4	77	30.0	70.0	70	36.4	63.6	110	21.1	79.0	95
1938-1939	31.3	68.8	32	19.2	80.8	26	33.3	66.7	54	35.7	64.3	84	33.0	67.0	112	25.0	75.0	92
1940-1941	40.0	60.0	25	21.9	78.1	32	22.2	77.8	54	23.8	76.3	80	16.8	83.2	101	15.9	84.1	113
1942-1947	42.9	57.1	14	27.3	72.7	11	33.3	66.7	24	27.8	72.2	18	27.0	73.0	37	12.7	87.3	55
62/63-65(1)																		
1936-1937	29.2	70.8	24	27.3	72.7	33	25.5	74.6	55	27.6	72.4	58	21.4	78.6	98	23.3	76.7	73
1938-1939	22.2	77.8	18	22.2	77.8	18	30.0	70.0	40	8.5	91.5	47	27.7	72.3	83	17.5	82.5	57
1940-1941	20.8	79.2	24	30.4	69.6	23	14.1	85.9	64	20.3	79.7	69	18.4	81.6	98	19.2	80.9	94
1942-1947	33.3	66.7	3	14.3	85.7	7	0.0	100.0	7	12.5	87.5	16	35.0	65.0	20	26.9	73.1	26
63/64-66 (1)																		
1936-1937	44.4	55.6	18	32.3	67.7	31	25.5	74.6	55	20.8	79.3	53	30.4	69.6	79	23.1	76.9	65
1938-1939	40.0	60.0	15	33.3	66.7	24	31.6	68.4	57	22.2	77.8	54	28.6	71.4	70	19.5	80.5	77
1940-1941	47.8	52.2	23	25.0	75.0	28	13.7	86.3	51	25.8	74.2	62	17.5	82.5	80	23.6	76.4	89

ENDNOTES

1. National Commission on Fiscal Responsibility and Reform, 2010. *The Moment of Truth*. The White House, Washington, D.C.; National Research Council and National Academy of Public Administration, 2010. *Choosing the Nation's Fiscal Future*. Committee on the Fiscal Future of the United States. The National Academies Press, Washington, DC.; Bipartisan Policy Center, 2010. *Restoring America's Future: Reviving the Economy, Cutting Spending and Debt, and Creating a Simple, Pro-growth Tax System*. Bipartisan Policy Center, Washington, DC.
2. The term 'normal retirement age' appears in statute, but it is an inaccurate description, nonetheless.
3. Claimants are subject to a retirement earnings test until they reach the 'full benefits' age. Current benefits are reduced by $1 for each dollar that earnings exceed a floor, but later benefits are actuarially adjusted so that on the average the full value of withheld benefits is returned later.
4. An important exception is National Commission on Fiscal Responsibility and Reform, 2010. *The Moment of Truth*. The White House, Washington, D.C.
5. The reductions in benefits for those who claim benefits before age 66 do not apply to people receiving disability insurance benefits. Their benefits are computed when they are adjudged eligible for disability benefits. Disability, like retirement, benefits are adjusted annually for inflation. When disabled workers reach the age at which unreduced benefits are paid, their benefits are simply relabeled as retiree benefits.
6. This linkage is only approximate. Men and women have different life-expectancies. But Social Security uses a unisex adjustment. Furthermore, the life-time value of benefits depends not only on the worker's longevity, but also on the worker's family situation—married or not, other surviving dependents or not—and on their life-expectancies. Furthermore, raising the age of initial entitlement will encourage some workers to apply for disability insurance benefits who might otherwise have claimed reduced retirement benefits before the 'full benefits' age of 66. Those who qualify for disability coverage will receive unreduced benefits that will be converted from 'disability' to 'retirement' benefits at the full-benefits age.
7. The increase in benefits associated with age of initial claim should not be confused with adjustments for inflation or in recognition of current earnings that may increase average earnings in the thirty-five highest earning years.
8. Waldron, Hilary, 2007. "Trends in Mortality Differentials and Life Expectancy for Male Social Security-Covered Workers, by Average Relative Earnings," ORES Working Paper No. 108. Office of Policy U.S. Social Security Administration, Washington, DC, http://www.ssa.gov/policy/docs/workingpapers/wp108.html

9. Hilary Waldron, "Trends in Mortality Differentials and Life Expectancy for male Social Security-Covered Workers, by Average Relative Earnings," U.S. Social Security Administration, Office of Policy, Working Paper No. 108, October 2007 at http://www.ssa.gov/policy/docs/workingpapers/wp108.html .
10. These reasons do not fully explain the lower incomes of the very old. In addition, the very old on the average had lower life-time earnings than did the less old. The difference translates into an age-gradient in Social Security benefits and other asset holdings. These factors are offset in part by the fact that life expectancy is positively related to socio-economic status.
11. Office of Research, Evaluation, and Statistics, Office of Retirement and Disability Policy, Social Security Administration, *Income of the Population 55 or Older*, Table 9.A1, SSA Publication No. 13-11871, April 2010
12. The groups omitted are those who were part of the Study of Assets and Health Dynamics Among the Oldest Old (AHEAD) cohort, who were born in 1923 or before and who were first surveyed in 1993 and Children of the Depression (CODA) who were born from 1924 through 1930 and were first surveyed in 1998.
13. Michael V. Leonesio, Denton R. Vaughan, and Bernard Wixon, "Increasing the Early Retirement Age Under Social Security: Health, Work, Financial Resources," National Academy of Social Insurance, December 2003.

RECENT WORKING PAPERS FROM THE
CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE

The Potential Impact of the Great Recession on Future Retirement Incomes
Barbara A. Butrica, Richard W. Johnson, and Karen E. Smith, May 2011

Immigrant Diversity and Social Security: Recent patterns and Future Prospects
Melissa M. Favreault and Austin Nichols, May 2011

Why Aren't More Families Buying Life Insurance?
Matthew S. Chambers, Don E. Schlagenhauf, and Eric R. Young, March 2011

Changes in Firm Pension Policy: Trends Away From Traditional Defined Benefit Plans
Kandice A. Kapinos, February 2011

Interdependent Durations in Joint Retirement
Bo Honoré and Áureo de Paula, February 2011

Health and Retirement Effects in a Collective Consumption Model of Elderly Households
Arthur Lewbel and Shannon Seitz, February 2011

Age Differences in Job Displacement, Job Search, and Reemployment
Richard W. Johnson and Corina Mommaerts, January 2011

The Earnings and Social Security Contributions of Documented and Undocumented Mexican Immigrants
Gary Burtless and Audrey Singer, January 2011

How Important Are Intergenerational Transfers for Baby Boomers?
Alicia H. Munnell, Anthony Webb, Zhenya Karamcheva, and Andrew Eschtruth, January 2011

Effect of Informal Care on Work, Wages, and Wealth
Courtney Harold Van Houtven, Norma B. Coe, and Meghan Skira, December 2010

Recessions, Wealth Destruction, and the Timing of Retirement
Barry P. Bosworth and Gary Burtless, December 2010

Measuring the Spillover to Disability Insurance Due to the Rise in the Full Retirement Age
Norma B. Coe and Kelly Haverstick, December 2010

Is the Reduction in Older Workers' Job Tenure a Cause for Concern?
Steven A. Sass and Anthony Webb, December 2010

All working papers are available on the Center for Retirement Research website (http://crr.bc.edu) and can be requested by e-mail (crr@bc.edu) or phone (617-552-1762).