



ARE EARLY CLAIMERS MAKING A MISTAKE?

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CRR WP 2016-5

July 2016

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Abstract

Using *Health and Retirement Study* (HRS) data and Latent Class Analysis for three cohorts (those born in 1931-1936, 1937-1941, and 1942-1947), this paper explores: 1) who claims Social Security benefits at age 62; 2) what percentage of households claiming at 62 are unprepared for retirement; and 3) whether the unprepared early claimers were pushed into claiming through job shocks and/or poor health or simply decided to take benefits early. Looking across three cohorts makes it possible to see whether these patterns have changed as the average claim age has increased and pension coverage has shifted away from defined benefit (DB) plans. That is, have those who have moved out of age-62 claiming been educated, financially prepared households or unprepared households that have recognized the need to delay claiming?

The paper found that:

- Consistent with previous research, the HRS shows a decline in those claiming at 62.
- Age-62 claimers are less well off than “postponers” in some ways and better off in others.
- Latent class analysis shows that this mixed picture reflects the average of: 1) those with little education and poor job prospects (disadvantaged); and 2) those with at least some college and sufficient resources to claim early (advantaged).
- The percentage of the age-62 claimers in each of these groups has remained virtually constant over the three cohorts.
- Comparing the calculated household replacement rates with target rates from previous research shows that, overall, roughly 65 percent of households claiming at 62 are not prepared; the rate for the disadvantaged group is twice the rate of the advantaged group.
- The percentage unprepared at 62 has increased over time, reflecting an overall trend toward less preparedness.
- A simple probit regression suggests that health and employment shocks and the absence of a DB pension are related to the lack of preparedness for both the disadvantaged and advantaged.

The policy implications of the findings are:

- Given the increasing trend in unpreparedness, further cuts to Social Security benefits would exacerbate this problem.
- Workers claiming at 62 with DB plans were especially likely to be prepared; these plans are not coming back, so the challenge is whether the 401(k) system can be enhanced.

Introduction

Although the prevalence of claiming Social Security early has declined in recent years, almost 40 percent of workers still claim benefits as soon as they turn 62 (Munnell and Chen 2015). These early claimers could substantially increase their monthly retirement incomes were they to postpone claiming, yet it is unclear how many are making a mistake. Early claimers are more likely to be in low socioeconomic status households (U.S. Government Accountability Office 2014). But some early claimers, for example those with generous defined benefit (DB) pension plans, may already be well placed for retirement.

Using *Health and Retirement Study* (HRS) data for three cohorts (those born in 1931-36, 1937-1941, and 1942-1947), this paper investigates: 1) who claims Social Security benefits at age 62; 2) what percentage of households claiming at 62 are unprepared for retirement; and 3) whether the unprepared early claimers were pushed into claiming through job shocks and/or poor health or simply decided to take benefits early. Looking across three cohorts makes it possible to see whether these patterns have changed as the average claim age has increased and pension coverage has shifted away from DB plans. That is, have those who have moved out of age-62 claiming been educated, financially prepared households or unprepared households that have recognized the need to delay claiming?

The analysis focuses on the household as the relevant economic unit. Single men and single women constitute their own households, but a decision is required about how to characterize the claiming age of a married couple. In the 1931-1947 birth cohorts, the husband is usually the primary earner, so the focus is on the husband's claiming age since that will have the stronger effect on the household's post-retirement income. Households are classified as being unprepared if their replacement rate (retirement income as a percentage of pre-retirement earnings) falls short of the relevant target replacement rate calculated by the Georgia State University 2008 RETIRE Project Report (Palmer 2008). These targets vary with income and household type and are designed to permit households to maintain their pre-retirement standard of living.

Consistent with previous research, the HRS data show that the percentage of households claiming at 62 has declined. In terms of the characteristics of the age-62 claimers, they are less well off than "postponers" in some ways and better off in others. The early claimers are more likely to have no college, a blue-collar job, and lower earnings. Interestingly, the health status

and wealth measures of early claimers are quite similar to postponers. And early claimers are more likely to have a DB plan. Latent Class Analysis shows that this mixed picture of those claiming at 62 reflects the average of two very different groups: those with little education and poor job prospects (disadvantaged) and those with at least some college and sufficient resources to claim early (advantaged). The percentage of the age-62 claimers in each of these groups has remained virtually constant over the three cohorts, suggesting that the disadvantaged and advantaged have moved out of the age-62 claiming category in proportionate numbers. In terms of being prepared for retirement, the results of comparing the calculated household replacement rates with the relevant Georgia State targets show that, overall, roughly 65 percent of households claiming at 62 are not prepared; and the rate for the disadvantaged group is twice the rate of the advantaged group. The percentage unprepared at 62 has increased over time, reflecting an overall trend toward less preparedness rather than any shift of in the early claiming population. A simple probit regression suggests that health and employment shocks and the absence of a DB pension are related to the lack of preparedness for both the disadvantaged and advantaged.

The remainder of the paper is as follows. The first section summarizes previous research. The second presents the administrative data that show a sharp decline in the percentage of men and women claiming at 62. The third section describes the HRS data and the methodology for calculating replacement rates and presents the Georgia State targets. The fourth section presents the results, and the fifth section concludes.

These results are discouraging. One might have thought that, with the movement to later retirement, preparedness at 62 might have increased, as the unprepared got the message and claimed later and the prepared remained. Instead, the composition of early claimers has remained unchanged so that the trend among age-62 claimers in terms of preparedness simply reflects the overall trend towards less preparedness due to declining annuity rates and lower replacement rates under Social Security as a result of the increase in the FRA and the increased labor force participation of women. The other disturbing finding is the importance of DB plans to preparedness. These plans may persist in the public sector, but are not coming back in the private sector. The challenge is whether 401(k)s can be enhanced enough to fill that gap.

Previous Research

This paper brings together two lines of research: 1) the characteristics of early claimers and the reasons for early claiming; and 2) whether people are adequately prepared for retirement.

The Early Claiming Literature

Many of the early studies of the characteristics of age-62 claimers were aimed at identifying who might be hurt by an increase in the Earliest Eligibility Age. The 1996 study by Burkhauser, Couch, and, Phillips, using the 1992 and 1994 waves of the HRS, finds that the majority of those who claimed at 62 are not in poor health and have other pension income, but a small minority did have health problems and substantially less income and wealth than the healthy majority. Coile et al. (2002) also find that early claimers consist of both those who are healthy and pensioned and those with poor health and few financial resources. Li, Hurd, and Loughran (2008), using eight waves of the HRS, find that age-62 claimers compared to “postponers” are less educated, less healthy, and more likely to have physically demanding jobs. However, consistent with earlier findings, less than one fifth reports a work-limiting health condition.

Another group of papers explores how specific factors might lead to early claiming. Hurd, Smith, and Zissimopoulos (2004) find that individuals with very low self-reported probability of survival are more likely to claim early than those with high probabilities of survival, but the difference is not large. Haaga and Johnson (2012), using the *Survey of Income and Program Participation* (SIPP), and Rutledge and Coe (2012), using the HRS, find that early claiming is sensitive to the cyclical fluctuations in the labor market. Von Wachter (2009) finds that rising replacement rates for less-educated workers provide an incentive to retire early. Butrica and Karamcheva (2013) explore the extent to which household debt, and the liquidity problems it creates, influences early claiming versus working longer.

The upshot of work to date is that early claimers in the aggregate seem to be less well off than postponers, but the group is heterogeneous – some have pensions and good health and others have poor health and few resources. Early claimers are responding to a variety of factors – their subjective life expectancy, fluctuations in the labor market, replacement rates, and illiquidity – when making the decision to claim benefits as soon as they become available.

The Retirement Preparedness Literature

The life-cycle model of savings behavior postulates that households should smooth the marginal utility of consumption over their lifetimes. Although households that experienced income or expenditure shocks may consume less in retirement than in the years leading up to retirement, large average declines in consumption at retirement are inconsistent with the life-cycle model.

A substantial literature shows that most households are able to sustain pre-retirement consumption in the years immediately after retirement (Hurst 2008, Hurd and Rohwedder 2013). However, researchers disagree as to whether households possess sufficient wealth to sustain pre-retirement levels of consumption throughout retirement. Munnell, Rutledge, and Webb (2014) show that estimates of the adequacy of financial resources to sustain post-retirement consumption are sensitive to assumptions regarding: 1) whether households reduce consumption after the children have left home; and 2) whether households decrease consumption during the course of retirement, reflecting decreasing probabilities of being alive to enjoy it. Hurd and Rohwedder (2013) report that most households possess sufficient wealth to maintain a level of consumption that declines with age at the average percentage rates observed in the HRS data. But it is unclear whether this rate of decline is optimal or whether expenditure is being reduced as a result of a belated recognition of the inadequacy of lifetime resources.

Two recent studies explore the adequacy of financial resources and claim ages, where adequacy is defined as the ability to maintain pre-retirement living standards throughout retirement. Munnell, Orlova, and Webb (2013) show that only 26-33 percent of households are financially prepared for retirement at age 62 (depending on whether they take out a reverse mortgage), compared with 41-47 percent at age 65. Munnell, Webb, and Chen (2015), attempting to determine how much longer people would need to work to be prepared, show that roughly 70-75 percent of households would be unprepared if they actually claimed at their planned retirement age of 62. That range increases to 78-83 percent if restricted to households of low socioeconomic status (SES). They also find that the large retirement gaps for low-SES households are due to poor planning for retirement rather than late-career shocks. That finding is consistent with Diamond and Gruber (1999), who find that people retire too early because of the myopia in decision making, evaluating only the consumption possibilities in the near term rather than over the full remaining lifespan.

The purpose of this study is to look at both the characteristics and preparedness of three cohorts of early claimers against a background of a sharp decline in the rate of early claiming.

The Decline in Early Claiming

The Social Security Administration provides two sources of data that make it possible to calculate the percentage of each age-62 cohort claiming benefits immediately. The first source, which is published annually, shows, *of all workers claiming benefits in a given year*, the percentage that are age 62, 63, 64, etc. (see Figure 1). The distribution of workers by claim year, however, cannot be used to provide an accurate picture of claiming behavior over time. The problem is that the size of the group turning 62 is increasing significantly, with the annual number of men turning 62 rising from 829,000 in 1997 to around 1.4 million in 2013. Thus, the claim-year data will show that 62-year-old claimants make up a larger portion of total new claimants in a given year even if few 62-year-old workers claim immediately.¹

Fortunately, SSA also has a second source – unpublished data on the number of people eligible for benefits by birth year.² Using the eligibility data as the starting point, it is possible to allocate cohort totals among claiming ages based on SSA’s published data to determine, of the potential claimants turning 62 in a given year, the percentage who claim benefits as soon as possible. For example, the unpublished data show 863,753 men born in 1923 turning 62 and eligible for benefits in 1985. The published data show 448,630 men claimed benefits at 62 in 1985, all of whom by definition must be 1923-cohort men. Similarly, the published data show that 82,900 men claimed benefits at 63 in 1986, 110,580 claimed at 64 in 1987, etc., so the published data allow one to follow the claiming activity of the 1923 birth cohort over time. When the process is complete, it is possible to calculate the percentage of each cohort claiming at each age.

¹ An example of the cohort effect might be helpful. Suppose that beneficiaries can only claim at age 62 or 63 and that 55 percent of all people born in any given year will claim at age 62 and the other 45 percent will claim the following year when they turn 63. If the number of people who attain ages 62 and 63 remains constant from one year to the next, then the SSA published data on claim year and the cohort data will tell the same story. If the number of people attaining age 62 grows by 10 percent in a given year, then the SSA published data will show that 57 percent of people who claim benefits each year are 62 ($.5735 = (1.1*.55)/(1.1*.55+1.0*.45)$), and that 43 percent are 63. In this case, the SSA published data will exceed the unchanged age-62 claiming rate for each cohort.

² U.S. Social Security Administration (2015b). These data on initial benefit awards and eligibility status were obtained from SSA’s Beth Hima.

Figure 2 shows a significant decline in the percentage of men and women in each cohort who claimed retired-worker benefits at age 62. Between 1996 and 2013, the percentage of men claiming at age 62 dropped from 56.0 percent to 35.6 percent; the comparable decline for women was 62.8 percent to 39.5 percent. Interestingly, all claiming before the Full Retirement Ages (FRA) of 65/66 has declined, with the percentage claiming later increasing significantly (see Figure 3).

The question of interest is what types of households are claiming at age 62 and whether the prepared or the unprepared have moved out as the age-62 claiming category has declined. To answer these questions, we need to determine how many households in each of the three cohorts claimed benefits at 62 and what portion of them were prepared – that is, their estimated replacement rate equals or exceeds the target replacement rate. The following sections lay out the data and methodology used in the analysis.

Data and Methodology

The data for this analysis come from waves 1-10 of the HRS linked to U.S. Social Security earnings records, which are available to qualified researchers on a restricted basis. The HRS is a nationally representative panel survey of household heads over the age of 50 and their spouses irrespective of age that has been administered every two years. The initial cohort comprised 12,560 individuals born in 1931-41 or married to someone born between those years. These individuals have been interviewed every two years since 1992. The 1942-47 birth cohort was added in 1998, and subsequent birth cohorts were added in 2004 and 2010. The focus here is households whose head was born 1931-36 (cohort 1) or 1937-41 (cohort 2) and first interviewed in 1992, and households whose head was born in 1942-47 (cohort 3) and first interviewed in 1998. All individuals who reported being single are defined as household heads. For couples, the male is identified as the head. For same-sex couples, the higher-earning spouse is the head or the older one if earnings are equivalent.

A key variable in our analysis is when the household claimed Social Security. To identify the claiming age of the household, administrative data are preferable to self-reported

data. However, in many cases administrative data are not available.³ To ensure as large a sample as possible, the approach taken was to give priority to the administrative data but, when not available, to fill in claiming age with self-reported data. This approach seemed reasonable given that the correlation between self-reported and actual claiming ages is 0.85.

The starting sample consisted of 8,116 households of married men, single men, and single women born in 1931-1947 and who attained age 62 in 1993-2009 (see Table 1). The sample is reduced by dropping 679 household heads who had claimed Social Security Disability Insurance (SSDI), 1,784 not in the sample at age 62, 1,232 who did not claim between ages 62 and 70, and 120 with no earnings histories.⁴ The final sample is 4,301 households, in which 1,950 heads were born in 1931-36, 1,541 born in 1937-41, and 810 born in 1942-47.⁵

To calculate the percentage of each cohort that claimed benefits at 62 and is unprepared for retirement involves two steps. The first step is to identify a target replacement rate for each household using the Georgia State RETIRE Project targets. The next step is to calculate actual replacement rates at 62 for each household.

The following sections discuss the validity of the replacement rate targets and the methodologies used to calculate retirement income.

Replacement Rate Targets

According to the life-cycle model of saving behavior, households should accumulate wealth during their working years and draw down that wealth during retirement. Specifically, households select a saving and drawdown plan that maximizes expected discounted lifetime utility, subject to the household's budget constraint. Utility will depend on both consumption and leisure. Mathematically, the household chooses a consumption plan that maximizes:

³ This lack of data generally occurs for one of two reasons: 1) the individual did not grant permission for the data to be collected; or 2) the individual gave permission, but that permission was given before the individual claimed and data were only collected retroactively. The second issue was primarily a problem before 2004, when administrative data could only be collected for the time before permission was granted. After 2004, once an individual gave permission to have administrative data collected, it was collected for both the period before and after.

⁴ We do not drop observations in which the spouse has been in non-covered employment or has otherwise worked insufficient years to earn an entitlement to benefits.

⁵ Claiming by the 1942-47 cohort is only observed up to ages 64-69. When reporting the percentage of this cohort that has claimed by various ages, the denominator is adjusted to reflect an estimate of the percentage of individuals for whom administrative or self-reported claim data will eventually be missing.

$$1) E_t \sum_{t=0}^T \beta^t U(C_t, L_t)$$

Where β is a rate of time preference, C is consumption, and L is leisure. The budget constraint is:

$$2) c_t + a_{t+1} = (1+r_t)a_t + y_t$$

where a_t and y_t are assets and income at time t.

Assuming that consumption and leisure are separable in the utility function, and ignoring mortality risk, the optimal consumption path is one that satisfies the following first order condition:

$$3) u(c_t) = \beta E_t [(1+r_{t+1})u(c_{t+1})]$$

where r is the rate of interest. The household will choose a consumption path such that the marginal utility of this period's consumption equals the expected marginal utility of next period's consumption, discounted by a rate of time preference, and multiplied by 1 plus the rate of interest. The intuition is that the household cannot increase total expected utility by shifting consumption from one period to another. If the rate of interest equals the rate of time preference, then the household, in the absence of uncertainty, would choose level consumption. In reality, households face uncertain labor income and investment returns. If the second derivative of the utility function is positive, so that bad outcomes decrease marginal utility more than good outcomes increase marginal utility, households will engage in precautionary saving. On average, consumption will increase with age, though some households – those that experience bad capital and labor market outcomes – will have lower consumption at older ages.

The model developed by the Georgia State RETIRE project can be thought of as a special case of the life-cycle model that assumes no risk. Table 2 reports the Georgia State targets. The Georgia State Project uses information from the *Consumer Expenditure Survey*, released by the U.S. Department of Labor's Bureau of Labor Statistics, to estimate age- and work-related expenses. The target rates are less than 100 percent of pre-retirement income, because households, once retired, no longer pay Social Security and Medicare payroll taxes or contribute to 401(k) plans, and federal income taxes are lower because – at most – only a portion of their Social Security benefits are taxable. Targets are higher for lower earners, reflecting lower taxes and higher Social Security replacement rates. The question is how the replacement rates for age-62 claimers compare to the Georgia State targets.

Calculation of Retirement Income

Retirement income is calculated at age 62 for all households in the sample, both claimers and postponers. Retirement income consists of Social Security and defined benefit pensions and the annuity income that can be purchased with defined contribution wealth and other financial assets and, in an alternative scenario, the proceeds of a reverse mortgage. The calculation ignores labor market income, because, although many households continue to work after claiming benefits, labor market income declines rapidly with age.

Social Security. When possible, Social Security benefits are calculated using the HRS Social Security earnings records. When these earnings records are not available, earnings histories are imputed using current earnings, earnings at the first HRS interview, and final earnings in the individual's previous job.⁶ The entire wage history is then indexed by the Average Wage Index (U.S Social Security Administration, 2015). In the case of both the administrative and estimated earnings, the highest 35 years of indexed wages are used to calculate the Average Indexed Monthly Earnings (AIME). The benefit formula is then applied to the AIME to derive the individual's Primary Insurance Amount (PIA). An actuarial reduction is then applied to the PIA to reflect early claiming.

On average in these birth cohorts, the husband is three years older than his wife. Although the wife of a husband who claims at age 62 will be ineligible for spousal or retired worker benefits, she will usually become eligible in the near future. To avoid overstating the degree of unpreparedness, a projected age 62 retired-worker or spousal benefit is provided for wives when their husband claims.⁷

Pensions. Self-reported pension information is used to calculate pension income. In each wave of the HRS, each spouse is asked to report plan details of pension income and wealth on any defined benefit or defined contribution plan from a current job, last job, or any significant job that lasted more than five years. In the case of DB plans, participants can report benefits as a dollar amount or as a percentage of final pay. Gustman, Steinmeier, and Tabatabai (2010)

⁶ When the Social Security earnings records are not available, the procedure follows Gustman and Steinmeier (2001) and estimates earnings histories based on HRS data on previous jobs and wages, using the estimated returns to tenure from Anderson, Gustman, and Steinmeier (1999).

⁷ The benefit is provided for all spouses who are within 7 years of the claimant's age.

convert defined benefit pension income into its lump-sum discounted present value. For the purposes of this study, that present value is re-annuitized using the same 5.8-percent nominal interest rate as the researchers used to arrive at the lump sum. Regardless of when participants start collecting DB benefits, that amount is included in the household's pension income at age 62. For DC pensions (including IRAs), the starting point is the account balance when the household head is 62. The conversion of DC wealth into income is discussed in the next section on financial assets.

Financial Assets. As with DC accumulations, the starting point is the household's accumulation of stocks, bonds, and short-term deposits at age 62. To ensure comparability across households with respect to their mortgage status, the assumption is that they use their financial assets to pay off any remaining mortgage. If financial assets are inadequate, DC assets are used to eliminate the remaining mortgage. For the roughly 20 percent of households with a mortgage that exceeds their combined DC and financial assets, the remaining mortgage is amortized over the household's expected life and the amortization payment subtracted from annuitized income from Social Security and DB plans.⁸

For those households with positive financial assets, the assumption is that at retirement they use all their financial assets, including 401(k) and IRA balances, to purchase a nominal joint- or single-life annuity. Although few households voluntarily annuitize their DC plan balances, annuities act as a proxy for a sustainable withdrawal rate. The annuity calculation is based on historical data for annuity rates for 62-year-olds from Annuity Shopper.⁹

The House. The most important asset for most middle-income households is their home. Accessing home equity could improve retirement preparedness. One way to access that equity is to take out a reverse mortgage. Although few eligible households take a reverse mortgage, the goal here is to tap all available resources to support retirement. The amounts that households can borrow on a reverse mortgage are a function of the age of the younger spouse, the house value,

⁸ Mechanically, the remaining mortgage is annuitized using the annuity rates from Annuity Shopper, described below.

⁹ Annuity Shopper (2015). Annuity Shopper reports average male and female single life annuity rates for ages 60, 65, 70, and 75 at six-month intervals from 1986. We linearly interpolate to obtain rates at other ages.

and the rate on the 10-year Treasury bond. Technically, any outstanding mortgage debt must be repaid out of the proceeds of the reverse mortgage, but the previous exercise eliminated the mortgage. The calculation of the proceeds is based on self-reported house values up to the relevant cap used for reverse mortgages and the 10-year Treasury rate at the date of retirement.¹⁰ The household is assumed to take a lump sum (rather than the lifetime income option) and use that money to purchase an annuity as described above.

Results

The following discussion presents the results for three cohorts – those born in 1931-36, 1937-1941, and 1942-1947 – regarding: 1) who claims Social Security benefits at age 62; 2) what percentage of households claiming at 62 are unprepared for retirement; and 3) whether the unprepared early claimers were pushed into claiming through job shocks and/or poor health or simply decided to take benefits early.

Who Claims at 62?

Table 3 reports the cumulative percentage of claimers by age and birth cohort. Early claiming is less prevalent among the younger cohorts. Between the 1931-36 and 1942-47 birth cohorts, the percentage of households claiming at age 62 declined from 52.1 to 47.0.¹¹ Table 4 compares selected characteristics of age-62 claimers with those of postponers. Early claimers are less well off than postponers in some ways and better off in others. Early claimers are more likely to have no college, a blue-collar job, and earnings (AIME) below the top quartile. In two dimensions, claimers and postponers are roughly equal. First, the differential in health status between the age-62 claimers and the postponers is relatively small, likely because the truly sick and unemployable – those who convert from disability to retirement benefits at the Full Retirement Age – are not included in this sample. Second, the representation of claimers and postponers in the top quartile of wealth is quite similar. Finally, some differences work in the positive direction for early claimers relative to postponers. Early claimers are more likely to

¹⁰ The most widely used reverse mortgage currently on the market is the Home Equity Conversion Mortgage (HECM). The home value used in computing the loan amount for HECM reverse mortgages cannot exceed the Federal Housing Administration's insurance limit, which has a current maximum of \$625,000.

¹¹ The denominator at each age is the number of individuals who survive to that age.

have a DB pension and thus may be claiming early because their DB leaves them prepared or because the DB has some incentive to retire at that age.

This mixed picture of the status of claimers versus postponers motivates a deeper analysis of the early claiming group. Do the averages in Table 4 hide heterogeneity within the early claiming population? Latent class analysis (LCA) is one tool that can be used to answer this question. LCA identifies unobservable subgroups within a population and shows that those claiming at 62 fall into two quite distinct categories: a “disadvantaged” group and an “advantaged” group (see Box 1 for a description of LCA).¹² Table 5 shows the job situation, education, financial and health status, and race of the two groups by cohort. The disadvantaged group has a high percentage in physically-demanding and blue-collar jobs and a slightly higher percentage recently laid off than the advantaged group. Most of the disadvantaged group also has not attended college. In terms of their finances, few are in the top quartile of the wealth distribution, the majority does not have a DB plan, and only one third to one half have retiree health insurance. In contrast, the advantaged group has only a small percentage with physically-demanding and blue-collar jobs, the vast majority has at least some college, roughly 80 percent of the group has a DB plan, most have retiree health, and 40-60 percent are in the top quartile of the wealth distribution. Note that while health is slightly better for the advantaged versus the disadvantaged group, it is not a major differentiating factor.

¹²The post-estimation statistics produced by the LCA procedure (specifically Aikai’s Information Criterion (AIC) and the Bayesian Information Criterion (BIC)) indicate four or more classes would have provided a better fit to the data than only two classes. However, when more classes were used in the procedure the net result was to leave the advantaged group relatively intact and to divide the disadvantaged group into increasingly fine categories. As shown in Table A1, the three disadvantaged groups include: 1) a destitute group with almost no wealth or pension coverage; 2) an otherwise advantaged group but in very bad health; and 3) a typical working class group. Because the main point of an advantaged group and disadvantaged group is maintained, we chose parsimony over the information criteria mentioned above.

Box 1. Description of Latent Class Analysis

Latent class analysis (LCA) is a tool allowing researchers to identify relationships among observed categorical variables as a function of some unobserved grouping. The analysis starts with the observation that, within the population, the observed variables are not independent. For example, in the context of this paper, age-62 claimers who have a blue-collar job also tend to have less than a college education. The goal of latent class analysis is to group the observations so that within each group, or “latent class,” the observed categorical variables are locally independent. That is, being blue collar and being less educated are both explained by some unobserved third variable, for example level of economic advantage.

Conditional on an assumed number of classes, LCA outputs two sets of estimates: 1) the share of the population within each class; and 2) the conditional probabilities of having a given value for each observed variable within each class. These parameters are estimated by Maximum Likelihood Estimation (MLE), where the inputs are the observed probabilities, e.g., the share of the population that is blue-collar with no college education, the share that is white-collar with no college education, etc. The second output – the conditional probabilities – have special interpretation within LCA since they represent a measure of association between the class and the observed characteristic. That is, if one class is comprised disproportionately of non-college educated, blue-collar workers with low-earnings, then that class can be viewed as more economically disadvantaged than the other.

Overall, while the characteristics of each group vary somewhat over time, as more people reach retirement age with some college and fewer have retiree health insurance, the differential between the advantaged and disadvantaged groups remains fairly constant. Finally, the numbers at the bottom of Table 5 show the share of claimants in each group. The percentages hold steady across the three cohorts, with the disadvantaged accounting for 55 percent and the advantaged for 45 percent.

In short, the age-62 claimers look worse than postponers in some ways and better in other ways because they are a mix of those with low education and tough labor market prospects and those with good education and ample resources to retire. The fact that the percentages in each group have remained constant over time suggests that equal proportions of the advantaged or the disadvantaged have moved toward later retirement as the incidence of early claiming has declined. The question remains, however, about the extent to which those who claimed at 62 were prepared.

Preparedness of Early Claimers

Determining the percentage of age-62 claimers who are prepared for retirement requires calculating each household's replacement rate from the HRS data and comparing that replacement rate with the appropriate target from the Georgia State RETIRE project.

As an intermediate step, Table 6 reports median post-retirement incomes for the three birth cohorts of age-62 claimers, conditional on being in receipt of each type of income. All amounts are in 2012 dollars. The denominator for the replacement rate calculation is the household's total AIME. Also shown is the income from annuitizing the household's reverse mortgage.

The median replacement rates are declining over the three cohorts. This decline reflects two developments that impact the Social Security replacement rate. The first is the increase in the FRA from 65 to 67 for individuals turning 62 in 2000.¹³ The increase in the FRA results in a larger actuarial reduction for those claiming at 62. Workers in the 1937-41 and 1942-47 cohorts were subject to this increasing reduction. The second development is the rising labor force participation of women. Years ago, when most women did not work, the wife who claimed at 65 was entitled to a benefit equal to 50 percent of her husband's. So if the retired worker had a Social Security replacement rate of 40 percent, the replacement rate for a couple was 60 percent. As women have gone to work, the couple's replacement rate has declined. If the wife's earnings are modest relative to her husband's, the decline is small. When the husband and wife have the same earnings, the couple's replacement rate drops to 40 percent. Between 1980 and 2010, a rising ratio of wife's to husband's earnings reduced the replacement rate for the average couple by three percentage points.¹⁴

These pre- and post-retirement income measures, both with and without the proceeds from a reverse mortgage, are used to calculate replacement rates for each household that claimed at 62. The calculated replacement rate for each household is then compared to the appropriate Georgia State target to determine whether or not the household is financially prepared for retirement. This comparison indicates that the percentage of all age-62 households that are unprepared has increased over time, and, although the percentage of all households claiming at

¹³ The Full Retirement Age was 65 for individuals who reached age 62 before 2000, was increased to age 66 during the period 2000-05 at a rate of two months per year as workers attained age 62 and is scheduled to increase to age 67 during the period 2017-2022, also by two months per year as workers attain age 62.

¹⁴ Munnell, Sanzenbacher, and Soto (2007).

62 has declined, the preparedness status of the early claimers reflects the overall trend (see Table 7). The percentage of households claiming at 62 that are not financially prepared rose from 60.1 percent for those born in 1931-36 to 66.4 percent for those born in 1942-47. Including the proceeds of a reverse mortgage reduces the percentage unprepared, but the pattern remains the same.¹⁵

As discussed earlier, age-62 claimers consist of two groups – those with little education and tough job prospects and those with some college education and the resources to retire. Figure 4 shows the percentage unprepared by each group for each cohort. Roughly 80 percent of the disadvantaged are unprepared compared to 40 percent of the advantaged, which is consistent with expectations. Again both percentages increase from the early to the later cohorts.

Why Are Early Claimers Unprepared?

The question is why within each group – the advantaged and the disadvantaged – some households are prepared and others are not. Among the advantaged, the intuition is that these households might have been prepared at some later date but retired earlier than expected. This earlier retirement could be due to a shock such as being laid off or experiencing some deterioration in health status (decline in self-reported health status to either fair or poor). Alternatively, households could be ill-informed as to what resources are required to maintain their pre-retirement living standard, which could be a function of education, or they did not have a DB plan to rely upon. Among the disadvantaged, the question is why some households are prepared. Some of the same factors may be at play in reverse. Education, the availability of a DB benefit, the absence of a work or health shock could all have a positive effect.

The model used to address this question – for the advantaged and the disadvantaged groups separately – is a simple probit in which the dependent variable takes the value one if the individual claimed at 62 and was unprepared, zero if he claimed and was prepared. The explanatory variables include some “shocks,” such as laid off or health moving to fair/poor, some “conditions” such as no college degree or no DB plan, some race variables, and dummies

¹⁵ These percentages are consistent with results for the somewhat more recent birth cohort of HRS households (aged 51-64 between 2000 and 2008) that projected 74 percent of households would fall short were they to retire at age 62 (Munnell, Orlova, and Webb, 2013). The focus of Munnell, Orlova, and Webb (2013) was on projected replacement rates of working-age households. They therefore assumed somewhat more favorable annuity rates based on long-run interest rates.

for the 1931-36 and 1937-41 cohorts. The results show that both “shocks” and “conditions” matter (see Table 8). Experiencing deterioration in self-reported health or being laid off increases the probability of being unprepared for both the advantaged and disadvantaged (although the coefficient for the laid off variable is not statistically significant for the advantaged). In terms of “conditions,” having no DB pension or lacking a college degree also increases the probability of being unprepared (although the coefficient for the college variable is not statistically significant for the disadvantaged). So the key to success among households claiming at 62 appears to be having a college degree and a DB plan and not being thrown off the path by a health or work shock.

Conclusion

Households that claim early could substantially increase their retirement incomes were they to postpone claiming, but that does not necessarily mean that they are making a mistake. Some early claimers, for example those with generous defined benefit (DB) pension plans, may already be well placed for retirement.

Both administrative data and the HRS show that the percentage of individuals and households claiming at 62 has declined over the last 20 years. Against this background of a decline in early claiming, the questions are who claims early, how prepared are they, and how do they get into trouble. In terms of the characteristics, looking at the age-62 claimers and the “postponers” – across the three cohorts – shows a mixed picture. Early claimers are less well off in some ways, but roughly equal to or even better off than postponers on other dimensions. Latent class analysis indicates that the early claimers reflect the average of two distinct groups: those with little education and poor labor force prospects (disadvantaged) and those with at least some college and enough financial resources to claim early (advantaged). The percentage of the age-62 claimers in each group has remained very steady over the three cohorts, suggesting that the disadvantaged and the advantaged have moved out of the age-62 claiming category in proportionate numbers. In terms of being prepared for retirement, a comparison of calculated household replacement rates to the relevant Georgia State target rates finds that roughly 65 percent of households claiming at 62 are not prepared, with the rate being twice as high for the disadvantaged group as for the advantaged. A simple probit regression indicates that health and

employment shocks and the absence of a DB pension and college degree increase the likelihood of being unprepared for both the disadvantaged and advantaged.

These results are discouraging. One might have thought that, with the movement to later retirement, preparedness at 62 might have increased, as the unprepared got the message and claimed later and the prepared remained. Instead, the composition of early claimers has remained unchanged so that the trend among age-62 claimers in terms of preparedness simply reflects the overall trend towards less preparedness due to declining annuity rates and lower replacement rates under Social Security as a result of the increase in the FRA and the increased labor force participation of women. The other disturbing finding is the importance of DB plans to preparedness. These plans may persist in the public sector, but are not coming back in the private sector. The challenge is whether 401(k)s can be enhanced enough to fill that gap.

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Table 1. *Derivation of HRS Sample*

Action	Men	Women	Total
1. Whole HRS sample	16,257	20,901	37,158
2. Identify household head and restrict to household-level analysis	15,937	7,436	23,373
3. Restrict to household heads born between 1931 and 1947	6,260	1,856	8,116
4. Restrict to heads who have never had SSDI	5,787	1,650	7,437
5. Restrict to heads who we actually observe at age 62	4,370	1,283	5,653
6. Restrict to heads who have an SS claim age between 62 and 70	3,600	821	4,421
7. Restrict to households with non-zero earnings	3,548	753	4,301

Source: Authors' calculations from University of Michigan, *Health and Retirement Study* (HRS) (1992-2010).

Table 2. *Target Replacement Rates by Income Level and Household Type*

Household type	\$20,000	\$30,000	\$40,000	\$50,000	\$60,000	\$70,000	\$80,000	\$90,000
One-earner couple; age 65 worker, age 62 spouse	94%	90%	85%	81%	78%	77%	77%	78%
One-earner couple; age 65 worker and spouse	94	90	85	81	78	77	76	76
Two-earner couple; age 65 higher earner, age 62 spouse	94	90	85	81	80	78	78	78
Single worker; age 65	88	84	83	80	79	81	82	81

Source: Palmer (2008).

Table 3. *Cumulative Percentage of Households Claiming by Age 62, by Cohort*

Claim age	1931-36	1937- 41	1942-47
62	52.1%	49.3%	47.0%
63	60.7	57.8	56.1
64	72.8	69.4	62.7
65	93.3	95.9	79.3
66	96.5	98.4	96.9
67	98.0	98.9	98.4
68	98.7	99.1	98.8
69	99.2	99.4	99.0
70	100.0	100.0	100.0

Source: Authors' calculations from HRS (1992-2010).

Table 4. *Percentage of Claimers & Postponers with Various Characteristics, by Cohort*

Characteristic	1931-36		1937-41		1942-47	
	Claimers	Postponers	Claimers	Postponers	Claimers	Postponers
<i>Claimers worse off than postponers</i>						
No college	64.5%	56.2%	59.1%	50.0%	51.9%	38.9%
Blue collar	38.1	34.6	44.0	35.4	47.3	32.9
Top quartile of AIME	19.1	23.4	21.6	30.1	22.5	41.3
<i>Claimers and postponers roughly equal</i>						
Fair or poor health	19.9	17.8	18.8	19.7	16.0	16.0
Top quartile of wealth	21.3	18.9	26.9	27.6	30.7	33.9
<i>Claimers better off than postponers</i>						
No DB plan	41.5	46.7	40.4	47.1	37.4	45.5

Source: Authors' calculations from HRS (1992-2010).

Table 5. *Distribution of Early Claimers by Latent Class Assignment and Cohort*

Characteristics	1931-36		1937-41		1942-47	
	Disadvantaged	Advantaged	Disadvantaged	Advantaged	Disadvantaged	Advantaged
<i>Job characteristics</i>						
Physical job	55.0%	7.8%	59.0%	10.4%	61.5%	11.0%
Blue collar	64.2	6.3	71.9	10.7	77.0	9.9
Laid-off	10.1	8.1	12.9	11.0	12.9	8.8
<i>Education</i>						
No college	90.8	32.1	89.0	22.3	82.9	12.9
<i>Financial status</i>						
Top quartile of wealth	4.3	42.3	3.5	55.7	8.3	59.1
No DB pension	59.6	19.1	54.6	22.8	51.2	19.9
Retiree health	50.6	80.2	52.7	79.9	33.5	52.1
<i>Health status</i>						
Fair or poor health	27.3	10.7	27.0	8.7	21.7	8.8
Work limitation	21.9	17.6	18.1	12.4	19.8	13.1
<i>Race</i>						
White	74.4	88.0	73.5	89.3	77.0	91.2
Hispanic	9.2	1.3	14.5	1.2	14.7	1.8
Percent of claimers	55.2	44.8	55.2	44.8	55.9	44.1

Source: Authors' calculations from HRS (1992-2010).

Table 6. *Median Components of Replacement Rate at 62 by Cohort*

Component	1931-1936	1937-1941	1942-1947
<i>Numerator</i>			
Positive DB annuity	\$17,880	\$17,721	\$19,957
Positive DC annuity	3,668	4,516	5,027
Positive asset annuity	5,258	4,189	3,838
Positive reverse mortgage income	4,242	4,697	6,192
Social Security income	17,022	20,859	21,114
<i>Denominator</i>			
Household annual AIME	50,241	66,206	66,507
<i>Replacement rate</i>			
Replacement rate w/out reverse mortgage	66.9%	62.2%	61.2%
Replacement rate w/ reverse mortgage	73.5	67.9	69.1

Source: Authors' calculations from HRS (1992-2010).

Table 7. *Household Retirement Preparedness at 62 by Cohort*

Measures of unpreparedness	1931-1936	1937-1941	1942-1947
Claiming Social Security	53.0%	49.5%	47.0%
Unprepared to retire	62.6	68.1	68.3
Unprepared to retire w/ reverse mortgage	56.4	61.1	59.8
Unprepared to retire & claiming	60.1	65.2	66.4
Unprepared to retire & claiming w/ reverse mortgage	53.9	58.0	56.3

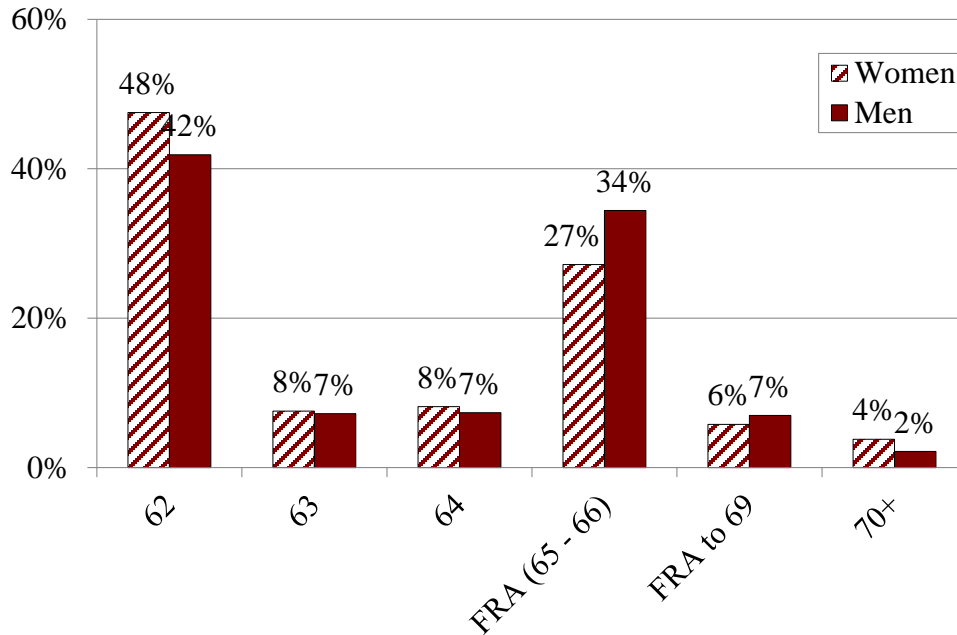
Source: Authors' calculations from HRS (1992-2010).

Table 8. *Marginal Effect of Being Unprepared by Latent Class Assignment*

Variables	Advantaged	Disadvantaged
<i>Shocks prior to claiming</i>		
Laid-off	0.06 (0.066)	0.09** (0.037)
Health shock	0.14** (0.068)	0.06** (0.027)
<i>Conditions at age 62</i>		
No DB pension	0.31*** (0.044)	0.23*** (0.029)
Spouse has worker benefit	0.15*** (0.043)	0.11*** (0.027)
<i>Demographics</i>		
Married couple	0.02 (0.058)	0.03 (0.038)
No college degree	0.09** (0.04)	0.23 (0.164)
White	-0.11* (0.063)	-0.05* (0.03)
Hispanic	-0.07 (0.152)	0.08** (0.031)
Cohort 1	-0.08* (0.048)	-0.08** (0.035)
Cohort 2	-0.08 (0.049)	0.01 (0.035)
Observations	944	1,149
R-squared	0.07	0.13

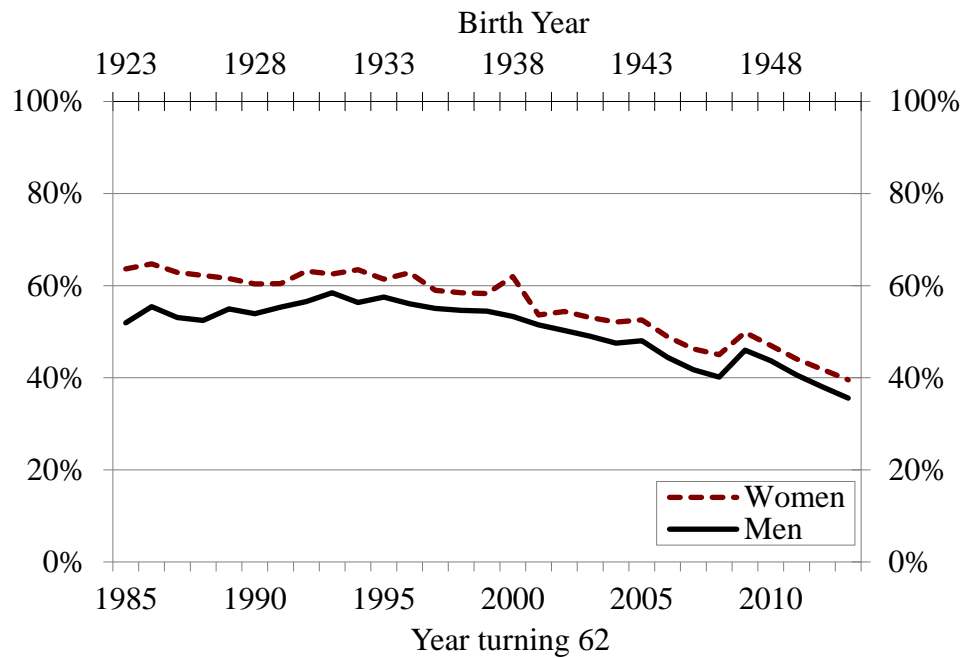
Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.
 Source: Authors' calculations from HRS (1992-2010)

Figure 1. *Distribution of Retired-Worker Claimants by Age, 2013*



Source: Authors' calculations from U.S. Social Security Administration (2015a).

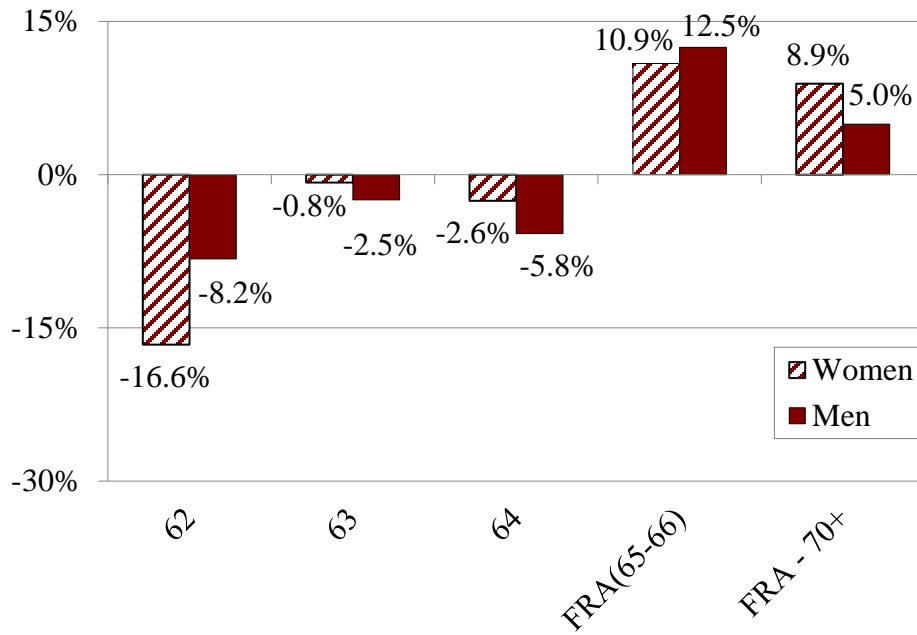
Figure 2. *Percentage of Retired-Worker Claimants Who Were Age 62 by Birth Year, Cohorts Born 1923-1951*



Note: 1985 corresponds to the cohort born in 1923, which turned 62 in 1985.

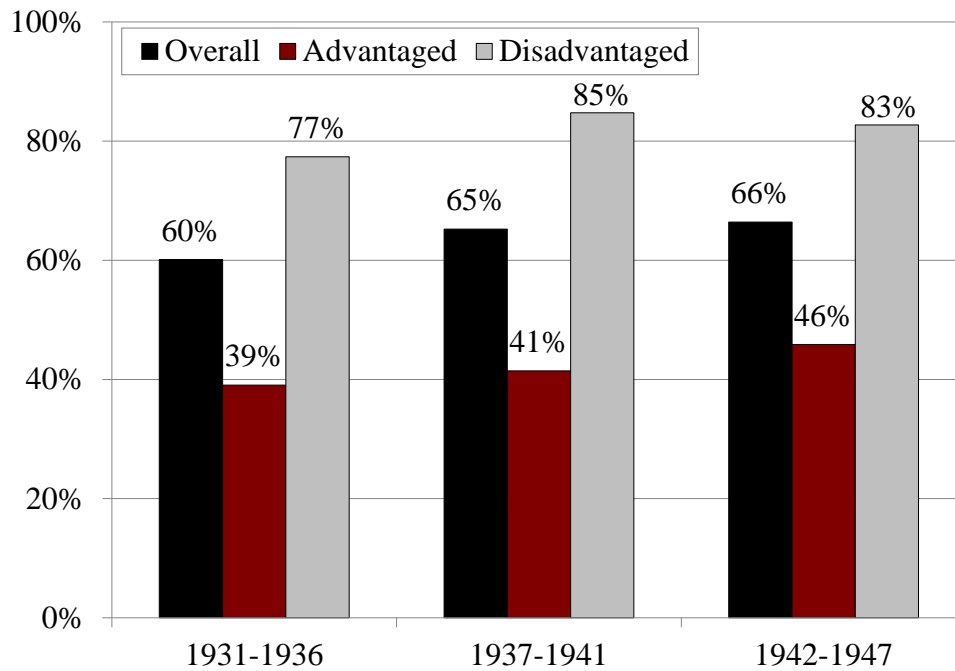
Source: Authors' calculations from U.S. Social Security Administration (2015a and 2015b).

Figure 3. *Percentage-Point Change in Claiming by Age between Cohorts Turning 62 in 1985 and 2010*



Source: Authors' calculations from U.S. Social Security Administration (2015a, 2015b).

Figure 4. *Percentage Claiming at 62 and Unprepared by Cohort and Latent Class Assignment*



Source: Authors' calculations from the HRS (1992-2010).

Appendix

Table A1. *Distribution of Early Claimers by Alternative Latent Class Assignment & Cohort*

Characteristics	1931-36				1937-41				1942-47			
	Group 1	Group 2	Group 3	Group 4	Group 1	Group 2	Group 3	Group 4	Group 1	Group 2	Group 3	Group 4
<i>Job characteristics</i>												
Physical job	64.3%	7.2%	52.9%	20.0%	67.5%	9.4%	50.7%	21.7%	63.0%	8.3%	63.2%	25.0%
Blue collar	90.9	1.2	56.1	10.5	91.2	1.7	67.8	15.0	97.3	0.7	62.8	32.3
Laid-off	9.7	9.8	10.2	2.3	12.7	12.0	12.7	8.1	13.8	11.0	9.7	6.1
<i>Education</i>												
No college	85.2	37.8	89.9	63.2	83.5	25.0	90.4	51.6	74.8	14.4	84.9	45.5
<i>Financial status</i>												
Top quartile of wealth	12.3	41.5	0.0	8.4	13.5	52.6	0.0	22.6	21.6	60.3	0.0	18.2
No DB pension	21.7	21.6	96.6	51.6	16.9	25.3	98.2	50.0	13.8	21.2	91.4	39.4
Retiree health	80.9	73.6	1.3	48.4	73.8	68.8	0.6	40.3	50.9	43.8	2.2	24.2
<i>Health status</i>												
Fair or poor health	17.3	7.1	29.0	63.2	19.8	9.4	26.1	41.9	9.5	8.2	31.2	30.3
Work limitation	12.3	9.4	19.5	91.6	12.2	5.0	14.8	83.3	15.8	4.9	11.8	84.8
<i>Race</i>												
White	80.5	88.5	71.0	67.4	79.7	88.6	72.3	66.1	83.6	91.1	69.9	84.8
Hispanic	4.0	2.1	16.5	0.0	6.8	1.3	26.5	3.2	7.8	1.4	23.7	6.1
Percent of claimers	26.5	41.7	22.8	9.1	30.7	39.8	21.5	8.0	29.9	37.6	24.0	8.5

Source: Authors' calculations from HRS (1992-2010).

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