

**A NEW APPROACH TO RAISING SOCIAL SECURITY'S  
EARLIEST ELIGIBILITY AGE?**

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## **Abstract**

While Social Security's Normal Retirement Age (NRA) is increasing to 67, the Earliest Eligibility Age (EEA) remains at 62. Similar plans to increase the EEA raise concerns that they would create excessive hardship on workers that are worn-out or in bad health. One simple rule to increase the EEA is to tie an increase to the number of quarters of covered earnings. Such a provision would allow those with long worklives — presumably the less educated and lower paid — to quit earlier. We provide evidence that this simple rule would not satisfy the goal of preventing undue hardship on certain workers. Thus, this paper considers an alternative policy that ties an increase in the EEA to individuals' Average Indexed Monthly Earnings (AIME). We show that allowing workers with low AIME to continue to be eligible to receive benefits at age 62 has promise as a policy to protect workers who have low earnings and are in poor health from hardship associated with an increase in the EEA.

## **I. Introduction**

Social Security's Normal Retirement Age (NRA) is currently rising from age 65 to age 67. An individual must wait until the NRA to claim full benefits; benefits claimed at an earlier age are actuarially reduced. Despite the rise in the NRA, the Earliest Eligibility Age (EEA) — the earliest age individuals can claim reduced benefits — remains at 62. A question facing policymakers is whether the EEA should be increased to 64 to match the increase in the NRA. Increasing the EEA would not alter Social Security's financial state since benefit reductions for a person with average life expectancy are actuarially fair — benefits are lowered to offset the longer claiming period. However, a rise in the EEA would protect workers from facing an increased risk of inadequate benefits if they or their spouse live beyond average life expectancy.

Raising the EEA involves making a tradeoff between ensuring retirement income adequacy and insuring workers against the prospect that they will find it difficult to work or find jobs as they age. As the NRA increases, there is a reduction in the benefits payable to a worker claiming at any age below the NRA. This reduction raises the concern that workers may myopically claim benefits too early, making it difficult for them to maintain their living standard during retirement. The prospect of future increases in Medicare premiums and out-of-pocket medical expenses imply that this problem will likely grow in importance, especially in the case of widows or widowers relying on survivors' benefits as their primary source of income.

Increasing the EEA prevents workers from putting their future standard of living at risk, but it does so at the cost of potentially causing hardship for those workers who find it difficult to work at ages younger than the NRA. Individuals who have physically demanding jobs may find work to be increasingly onerous as they age, and yet not have health problems serious enough to qualify for disability benefits. If such individuals lack adequate private pension benefits or other financial resources, then an increase in the EEA would require them to either rely on inadequate income or prolong their working lives when they would instead prefer to retire.

To avoid hurting those unable to work, some have proposed tying the EEA to the length of a worker's labor force participation. The idea of differentiation based on labor

force participation rates has an intuitive appeal and is easy to implement. Those who went to college and thus delayed entry into the workforce usually have a safer working environment, higher incomes, better health, and longer life expectancies, and thus can remain in the labor force more easily. While health status, ability to work, or even level of education are not directly observed by the Social Security Administration, information on earnings and number of quarters of covered earnings are routinely used to determine eligibility and the level of monthly benefits.

One simple proposed scheme would give workers an option of retiring at 62 and claiming unreduced benefits if they have spent at least 35 years in the labor force. Everybody else's EEA would be moved to 64. Credit years would be assigned to women to reflect the number of years spent caring for young children.

Our analysis demonstrates that policy rules that tie labor force participation to eligibility for unreduced benefits at age 62 fail to help those who are in poor health. Unhealthy workers are simply unable to obtain 35 years of labor force participation, while workers in good health satisfy the proposed test for eligibility. Healthy workers, however, tend to postpone claiming and retirement until a later age regardless of the EEA. Thus, tying the EEA to the length of a worker's labor force participation would not help many individuals who are unable to work due to poor health or an inability to find jobs in their 60s.

While the number of covered quarters is a poor measure of health status, earnings are a good predictor of health, wealth, and job prospects later in life. Our analysis shows that tying the EEA to the Average Indexed Monthly Earnings (AIME) may have some potential. Admittedly, this method is more complex (with decisions to be made concerning cutoff values for eligibility), so further research is necessary to determine the feasibility of such a rule.

This paper is organized as follows. Section II discusses the data used and provides descriptive statistics for the sample. Section III summarizes the results of bivariate probit regressions of the decisions to claim early benefits and to exit the labor force. Section IV puts forth a simple rule for raising the EEA and considers its effects, including why it does not meet our goal of protecting the most vulnerable workers. This

section then describes an alternative rule to raise the EEA based on a worker's earnings; this approach would better satisfy our main objective. Section V concludes.

## II. Data and Sample

To consider potential rules for increasing the EEA, this analysis uses the RAND public version of the Health and Retirement Study (HRS) and the SSA Administrative Data (SSAA), which contain seven waves of data (1992-2004).<sup>1</sup> The sample selection process follows that of Panis et al. (2002) and is shown in Figure 1. We begin with 10,560 individuals. We require that respondents reach the age of 63 by the 2004 wave, have the Social Security benefit type available, have quarters of covered earnings information, are not widow(er)s, do not receive care for a dependent child under the age of 16, and do not clearly misrepresent their information.<sup>2</sup> This leaves a final sample of 3,277 individuals.

Each individual in our sample is classified into one of six categories based on the claim of Social Security benefits.<sup>3</sup> These categories are determined using the “Type of benefits received from Social Security” and the “Type of supplemental (other) benefits received from Social Security” variables in the SSAA data:

- “Takers”: Individuals who receive their own Old-Age and Survivors Insurance (OASI) benefits at 62 years of age;
- “Postponers”: Individuals who are eligible for their own early OASI benefits but claim after age 62;
- “Spousal Takers”: Individuals who receive OASI spousal benefits starting at age 62;
- “Spousal Postponers”: Individuals who are eligible for early OASI spousal benefits but claim after age 62;
- “Ineligibles”: Individuals who do not qualify for OASI benefits; and

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<sup>1</sup> Specifically, we use the HRS Cohort: Respondent Earnings and Benefits data file.

<sup>2</sup> Widow(er)s become eligible for benefits at the age of 60 and are not directly affected by a higher EEA. Thus, 478 observations identified as widow(er)s were excluded.

<sup>3</sup> These categories were defined using the method of Panis et al. (2002).

- “DI claimants”: Individuals who receive Disability Insurance (DI) benefits.

Table 1 shows the distribution of claimant types by gender. With the inclusion of the 2000, 2002, and 2004 waves of data, these percentages are not statistically different from those reported by Panis et al. (2002) with two exceptions due to female takers who have dual entitlement.<sup>4</sup> Our method classifies all individuals with dual entitlement into the spousal benefits category.<sup>5</sup> Table 2 shows the breakdown in the spousal benefit category between “dual benefit” claimants and “spousal benefit only” claimants for females and for the entire sample. Most individuals classified as spousal benefit takers have dual entitlement rather than only spousal benefits. This variation in classification, rather than a difference in the composition of the two samples, appears to be the reason for the discrepancy in the proportions in these two groups.

#### *Characteristics of EEA Claimants*

Once individuals are classified into claimant categories, we can consider the descriptive characteristics of the takers compared to the postponers. In determining a rule for increasing the EEA, we begin with observing the characteristics of the individuals who claim benefits at the current EEA, 62, to gain insight on the people affected by the increase.

Table 3 contains summary statistics on the number of covered earnings quarters, health, physical job, wealth, pension coverage, and education for OASI worker claimants (based on their own work history). These summary statistics are reported by gender and claimant type (taker or postponer). The first variable of interest, number of quarters of covered earnings by age 62, shows no statistical differences between takers and postponers within each gender. As expected, there are statistical differences in the means and medians between the genders, with higher values for males than for females.

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<sup>4</sup> See Table 3.2 in Panis et al. (2002) for comparison proportions.

<sup>5</sup> “Under the dual entitlement provision, if a person is entitled to a larger Social Security benefit as a worker than as a spouse, no spouse’s benefit is payable because the person is not considered dependent on the other spouse. Similarly, if the benefit payable as a spouse exceeds the worker’s benefit for a person, then the spouse’s benefit is offset by the amount of the worker’s benefit. As a result of the dual entitlement provision, nearly 6 million beneficiaries receive reduced benefits as a spouse — meaning they receive the equivalent of their worker’s benefit or their spouse’s benefit, whichever is higher.” See U.S. Social Security Administration (2000).

The next two rows of the table show that there are substantial differences in the health of takers and postponers. Of those who report poor health at age 63, 40 percent were male takers (compared to 34 percent of the entire sample), 25 percent were male postponers (compared to 33 percent), 24 percent were female takers (compared to 19 percent), and 10 percent were female postponers (compared to 14 percent overall). Individuals who report poor health or job-limiting health are more likely to claim early benefits. The opposite is true for those reporting having a physical job, as they were less likely to be takers and more likely to be postponers. However, this finding may be misleading since having a physical job is measured at age 63. Thus, if an individual has a job (whether physical or not) at age 63, he is probably less likely to have already claimed Social Security benefits.<sup>6</sup>

Male takers have lower mean and median non-housing wealth than do male postponers, while the mean and median for females indicate that wealthier women claim benefits early. For both males and females, there is more variance in the takers' wealth than in the postponers' wealth, indicating that the group retiring later is more homogeneous with respect to wealth. The heterogeneity in wealth among those taking benefits early is suggestive that early takers are a mix of those who are financially secure enough to retire early and those who take benefits early due to poor health or economic deprivation.

As expected, claimants with defined benefit pension coverage are more likely to retire early. This finding is consistent with the type of jobs generally covered by defined benefit pensions, such as union jobs where employers frequently offer early retirement incentives or physically demanding or dangerous public jobs, such as firefighters or police officers. Defined benefit pensions also may provide the financial resources needed to finance a comfortable early retirement.

Finally, educational attainment differs between the takers and postponers. One might expect takers to be less educated in that they would have worked full-time longer, since presumably those with less education start their work lives earlier and are more likely to be in physically demanding jobs. This expectation does seem to be the case.

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<sup>6</sup> See the next section for the relationship between age of claiming benefits and age of exiting the labor force.

Generally, within each gender, low-educated individuals are more likely to be takers and highly-educated individuals are more likely to be postponers. This pattern suggests a negative correlation between claiming benefits early and education level.

Table 4 contains the same summary statistics for females who claim spousal benefits. As expected, women with dual entitlement have more covered quarters of work than do women with spousal only benefits.

For claimants with dual entitlement, takers have a lower mean but higher median non-housing wealth than postponers, while the opposite is true within the spousal only claimants. As is the case with those claiming worker benefits, the standard deviation is higher for takers than for postponers in both categories. Again this pattern indicates that the postponers are a more homogeneous group than the takers with respect to wealth.

For education level, nothing noticeable appears in comparing takers and postponers within the dual entitlement or spousal only categories. However, spousal only claimants seem more likely to have low education than dual entitlement qualifiers.<sup>7</sup>

These descriptive statistics provide some insight into the characteristics of individuals who would be affected by an increase in the EEA. There are differences in some characteristics between takers and postponers for women who are spousal claimants, but clearer differences appear in the groups who claim worker benefits. Since a goal of increasing the EEA is to increase labor force participation, this analysis concentrates on differences between workers who claim early benefits and those who postpone.

#### *Relationship between Claiming OASI Benefits and Labor Force Participation*

It is important to distinguish between claiming Social Security benefits and retiring, since these may not occur at the same time. Some workers may choose to retire before reaching the EEA, and others may continue to work while receiving benefits. From a policy standpoint, to the extent that early claimants continue to participate in the labor market, it suggests that there would be fewer individuals who would need to be protected against an increase in the EEA. The analysis in this section separately

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<sup>7</sup> One exception is that a substantial number of those with at least a college degree are spousal only postponers.

measures the exit from the labor force for each individual in the sample and compares the timing of this occurrence to the timing of claiming Social Security benefits.

About 55 percent of the sample of OASI claimants choose to claim benefits at age 62. Sixty-one percent of women claim benefits at this age compared to only 50 percent of men. A significant number of those receiving benefits at 62 do not exit the labor force at the same time — about 40 percent of men and 34 percent of women continue working (see Table 5).<sup>8</sup> Not surprisingly, fewer spousal takers, about 26 percent, remain in the labor force.<sup>9</sup> These individuals likely have weaker ties to the labor force.

For the entire sample, a better overview of these two decisions appears in Figures 2 and 3. Figure 2 shows the distribution of the ages of claiming OASI benefits and the age when exiting the labor force. Figure 3 contains these distributions by gender. Both include worker and spousal claimants.

Figure 2 shows that the decision to claim benefits is much more discrete than the decision to exit the labor force. A substantial fraction of individuals stop working before they are eligible to receive benefits, but many others continue working while receiving benefits. While 55 percent of our sample claim benefits at 62, only 44 percent exit the labor force by age 62. Although the age of exiting the labor force is more dispersed, there is also a spike at age 62, presumably influenced by the ability to claim Social Security benefits. Also note that the distribution has a normal shape, centered on the most common ages for claiming Social Security benefits, 62 to 65. This pattern indicates that a shift in the ages at which benefits can be claimed might not only shift the claiming age but also the age of exiting the labor force.

Considering these distributions separately for males and females, Figure 3 provides some insight on how an increase in the EEA may affect men and women differently. The distribution of ages of claiming benefits is tighter for women than for men. For the ages when exiting the labor force, the distribution is more dispersed for women than for men. This relative difference may imply that the rules based on the ages

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<sup>8</sup> We refer to an individual as “staying in the labor force” if we observe him working at least one quarter after receiving Social Security benefits. Note that this designation does not measure the length of time an individual remains in the labor force while claiming benefits. We refer to any claimant who did not stay in the labor force as “exiting the labor force” even though he or she may have never been in the labor force.

<sup>9</sup> This result combines the two subgroups of dual entitlement takers and spousal only takers ((74+6)/(263+43) or (80/306)).

of claiming Social Security benefits have a larger impact on men's decisions to retire than on women's decisions to retire.

While the decisions to claim Social Security benefits and to exit the labor force are not perfectly correlated, there seems to be a meaningful relationship. Assuming this relationship holds, a universal increase in the EEA would also tend to increase the average age of exiting the labor force. Thus, it seems a valid concern that raising the EEA uniformly would cause hardship for those who would find it difficult to continue working. To further identify these workers, the following section uses multivariate regression analysis to estimate the effects of observable characteristics on the decisions to claim benefits and exit the labor force.

### III. Multivariate Analysis

Using the information from the previous section on distinguishing characteristics of those who claim Social Security benefits early versus those who postpone claiming benefits, we estimate a reduced form model of the choice to claim benefits and to exit the labor force. Controlling for other factors that potentially affect these decisions, these regressions test for the effect of the length of labor force participation on these choices. We use a bivariate probit model to estimate these decisions as we have evidence that these decisions are made jointly. The model is:

$$\begin{aligned}
 y_1^* &= x_1\beta_1 + \varepsilon_1 & y_1 &= 1 \text{ if } y_1^* > 0, y_1 = 0 \text{ otherwise} \\
 y_2^* &= x_2\beta_2 + \varepsilon_2 & y_2 &= 1 \text{ if } y_2^* > 0, y_2 = 0 \text{ otherwise} \\
 E[\varepsilon_1|x_1, x_2] &= E[\varepsilon_2|x_1, x_2] = 0 \\
 Var[\varepsilon_1|x_1, x_2] &= Var[\varepsilon_2|x_1, x_2] = 1 \\
 Cov[\varepsilon_1, \varepsilon_2|x_1, x_2] &= \rho
 \end{aligned}$$

where  $y_1^*$  is the propensity to claim Social Security benefits and  $y_1=1$  means that the individual claims benefits at the age of 62 or earlier;  $y_2^*$  is the propensity to exit the labor force, and  $y_2=1$  means that an individual exits the labor force at the age of 62 or earlier. The set of explanatory variables  $x_1$  and  $x_2$  is the same ( $x_1 = x_2$ ), and includes variables discussed from Table 3.

We decompose the total non-housing wealth distribution into five percentile groups and create dummy variables for each quintile. We exclude the lowest quintile as the reference group. We create dummy variables for each of the four education groups, with the “Less than high school” group excluded. A dummy variable indicating being in poor/fair health at age 63 is also included. Finally, we include the number of quarters of covered earnings at age 63 and indicators of household private pension coverage: having both a defined benefit and defined contribution plan, a defined benefit plan only, or a defined contribution plan only.

The regression results are presented in Table 6. The coefficients on the explanatory variables are proportional to their effect on the probability of the dependent variable being equal to 1; our analysis here focuses on the direction of the effects and their statistical significance. Although the coefficient estimates are somewhat suggestive of there being a U-shaped relationship between wealth and the probability of claiming benefits at the EEA, the estimates are not statistically significant. In contrast, there is a discernable effect of wealth on the decision to exit the labor force. Individuals in the middle quintile of wealth are significantly less likely to exit the labor force by age 62 than individuals either at the bottom or the top of the wealth distribution.

Consistent with trends revealed in the descriptive statistics, higher educated males tend to stay in the labor force past the age of 62 and postpone claiming benefits. Those with at least a college degree are less likely to claim benefits at the EEA and to leave the labor force by age 62 than those with less education.

Another significant factor in these decisions is health. As expected, being in bad health at age 63 indicates a higher likelihood of claiming early benefits and of exiting the labor force at or before age 62.

We also expect the number of quarters of covered earnings to have a positive impact on claiming benefits early. However, the opposite effect appears, in that the number of covered quarters has a significant negative impact on retiring early. Those with more time in the labor force (as measured by quarters of covered earnings) are less likely to claim benefits at the EEA and to exit the labor force before age 63. This finding may indicate that if an individual retires at 62 because of bad health, it is likely that he

has frequently been in bad health and thus unable to work as consistently as a healthier individual.

Finally, these coefficients indicate that households with defined benefit pension coverage are more likely to both leave the labor force early and claim early Social Security benefits. As mentioned earlier, this finding is consistent with our hypothesis, given the prevalence of early retirement incentives for workers with defined benefit pensions.

These regressions confirm the findings from the descriptive statistics. Many explanatory variables have the expected effects on the decisions to claim benefits and to exit the labor force by age 62. However, once we control for these other factors, more years of earnings still lower the probability of claiming benefits and exiting the labor force early.

#### **IV. Proposed Policies to Raise the EEA**

Using the information on factors affecting the decisions to claim and to exit the labor force and the characteristics of early claimants, this section explores possible rules to increase the EEA. In order to devise a plan to increase the EEA non-uniformly so that unhealthy, worn-out workers could still retire at 62, we first consider a simple intuitive rule that is relatively easy to implement: conditioning the EEA on workers' covered quarters of labor force participation. Unfortunately, evidence from the previous section's regression results plus additional support show why this simple rule would not meet this goal. We then provide an alternative method that conditions the EEA on past earnings. Although this approach is less intuitive, it is more effective in targeting less healthy workers for eligibility to claim benefits early.

##### *Tying the EEA to Workers' Past Labor Force Participation*

Allowing individuals with longer work histories to collect benefits at a younger age is intuitively reasonable. Individuals engaged in physically demanding work tend to start full-time work at younger ages than the college-educated workers with comfortable jobs in office environments. Setting the EEA to a younger age for those with longer

work histories might permit workers who are most in need of retiring to do so, while encouraging others to continue working.

To be more specific, assume that individuals with 35 years of labor force participation may claim at 62 while all others would need to wait until 64. The effectiveness of this rule in allowing those in poor health to retire earlier than those in good health depends upon whether completed quarters of work at age 62 is a good proxy for poor health. However, the results from the regression analysis described above suggest that such a relationship is very unlikely. Our analysis in the previous section reveals that longer work lives are associated with a tendency to postpone retirement. Because poor health discourages labor force participation prior to age 62, the individuals with the most covered quarters at age 62 are likely to be in relatively good health.

We provide additional evidence that the proposed policy would not protect unhealthy workers by relating the number of quarters of covered earnings to an individual's health. Figure 4 shows the mean number of quarters of covered earnings by gender, age and health status at age 63. For both males and females, the mean number of quarters worked is generally higher for those in good health than for those in bad health. However, the difference is not obvious until about age 50. This pattern suggests that whether individuals' health problems recorded at age 63 are recent or chronic, they have a larger impact on labor force participation at older ages. Figure 5 shows the proportion of individuals reporting poor or fair health by their number of covered quarters. The category including those with less than 40 covered quarters (10 years) by the age of 62 has twice the proportion of unhealthy individuals as the group with at least 160 covered quarters (40 years).

Table 7 also shows why linking the EEA to labor force participation does not protect unhealthy, worn-out workers who cannot afford to exit the labor market. It provides information on certain characteristics for two groups: workers who satisfy the condition of having 35 years (140 quarters) of earnings and those who do not. Again, these data show that, of those reporting poor health, only 60 percent would be eligible to claim benefits at age 62, compared to 70 percent of the full sample. Workers with at least 35 years in the labor force by age 62 also tend to not be in the bottom of the wealth distribution. While 70 percent of the sample has at least 35 years of earnings, only about

46 percent of those in the lowest quintile of the wealth distribution would qualify to claim benefits at age 62 using this rule.

While long working lives may have a negative impact on health, workers who have been in poor health are unable to stay in the labor force and thus do not satisfy the rule exempting them from an increase in the EEA. Setting the EEA as a function of the number of years in the labor force would seem to adversely affect the most vulnerable group of workers: those who are in poor health and have Social Security benefits as their primary source of retirement income.<sup>10</sup>

### *Tying the Earliest Eligibility Age to AIME*

Instead of using the length of an individual's work history to try to identify vulnerable workers, perhaps a better approach would be to use their earnings history. Figure 6 shows that the earnings of individuals in poor or fair health at age 63 are lower than the earnings of healthy workers over the entire course of their lives. This finding is consistent with the hypothesis that unhealthy workers have poor job opportunities. However, it is also consistent with low earnings causing poor health. Sullivan and von Wachter (2006) show that job loss reduces life expectancy. One possible explanation is that displaced workers experience a lasting decrease in earnings and a rise in earnings instability. Unavailability of health insurance, unhealthy lifestyles due to low earnings, and stress associated with job loss and earnings instability may have a negative impact on health.

The association between poor health at age 63 and low earnings throughout much of one's working life suggests that an alternative to tying the EEA to covered quarters of labor force participation is to instead base individuals' EEA on a measure of lifetime earnings. A natural measure of lifetime earnings is Average Index Monthly Earnings

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<sup>10</sup> Other rules to non-uniformly increase the EEA were also considered. These rules were based on allowing low-educated workers the opportunity to claim benefits at 62 while raising the EEA to 64 for highly educated individuals. The main issue with this method is that the Social Security Administration (SSA) does not observe education level. Thus, we tested and found patterns of earnings histories that were correlated with education levels which would allow the SSA to estimate the target group of low-educated workers. The standard deviation, growth, peaks, and timing of wages are indicators of an individual's education. However, there are two major problems with this method. First, it is rather complicated. Second, and more importantly, it does not meet the goal of permitting unhealthy, worn-out workers to claim benefits at 62, allowing them to exit the labor force.

(AIME), which is already used by the Social Security Administration in computing benefits under current law.

The potential efficacy of using AIME as a proxy for individuals who are in poor health is supported by Figure 7, which shows the relationship between AIME and the health of 63-year-old men.<sup>11</sup> Approximately 41 percent of men whose AIME is less than half of average monthly earnings are in poor or fair health, compared to about 16 percent of workers whose AIME is greater than average earnings. Similarly, a much greater proportion of those in the low AIME group have a health condition that limits their ability to work compared to those in the high AIME group. Low-AIME men are also more likely than high-AIME men to have a wife with a work-limiting health condition, and so may need to curtail their work hours to provide spousal care. Thus, although AIME is an imperfect indicator of health, it has much greater potential than quarters of covered earnings to identify those for whom delaying retirement past age 62 is likely to result in significant hardship.

Even if they are in good health, individuals with low AIME are likely to have poorer labor market prospects as they age. Figure 8 shows that over 45 percent of men in the low-AIME group lack a high school diploma, compared with less than 20 percent in the high-AIME group. Previous research shows that low educational attainment increases older workers' risk of job displacement and reduces prospects for re-employment.<sup>12</sup> So, in addition to having a greater likelihood of poor health, low-AIME individuals are at greater risk for having difficulty securing steady employment. Early receipt of benefits may be an important part of the safety net protecting these workers from the economic consequences of late-career job loss.

One of the rationales for increasing the NRA and encouraging later retirement ages is that increases in life expectancy have increased the proportion of life spent collecting retirement benefits rather than working and paying payroll taxes. However, as Figure 9 shows, the self-perceived life expectancy of individuals in the low-AIME group is significantly less than those in the high-AIME group. So, on average, individuals in the low-AIME group would have to retire earlier than those in the high-AIME group in

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<sup>11</sup> The sample used for this figure excludes workers whose longest job was in the public sector.

<sup>12</sup> Munnell et al. (2006).

order to enjoy the same proportion of life spent in retirement. This finding suggests that fairness considerations might lead one to set a lower EEA for the low AIME group. This point would be reinforced by the observation that those in the low AIME group are more likely to be liquidity constrained and so would likely suffer financial hardship if they were to withdraw from the labor force prior to being eligible for benefits.

Thus, AIME is a powerful summary measure that can be used to separate workers into groups with substantial differences in health, educational attainment, and life expectancy. It has the potential to help identify workers who would suffer hardship if their EEA were increased. AIME also has the important practical advantage of already being collected and calculated by the Social Security Administration (SSA). In the next section, we advance and evaluate a specific proposal to link the EEA to individuals' AIME.

#### *A Specific AIME-based Policy Proposal*

Our candidate policy tying the EEA to AIME would divide workers into three groups based on their AIME at age 55. The first group would be workers whose AIME is no more than 50 percent of average (economy-wide) monthly earnings. Their EEA would remain at 62. The second group would be workers with AIME between 50 percent and 100 percent of average monthly earnings. For this group, the EEA would rise by approximately one-half month (4 percent of a year) for every one percentage point increase in their AIME as a share of average monthly earnings above 50 percent. For example, an individual with an AIME equal to 75 percent of average earnings would have an EEA of 63 years (25 percentage points x 4 percent of a year = 1 year). The third group would be workers with AIME equal to or greater than average monthly earnings. Their EEA would be 64. Figure 10 provides a graphical display of this proposed rule. The objective is to increase the EEA for most workers, while leaving it unchanged for those with the highest risk of suffering hardship due to a delay in benefit eligibility.

By providing for a gradual increase in the EEA from 62 to 64 as AIME increases, the proposed policy avoids the “cliff effect” problem found in many social programs, where eligibility changes abruptly with income or other endogenous characteristics. This

feature would help to attenuate the incentive for individuals to reduce earnings in order to qualify for earlier benefits.

An important feature of the policy reform is that the value of AIME that is used in the EEA calculations is measured at age 55 rather than at retirement. A primary reason for this approach is to allow individuals time to adjust their retirement plans. As Figure 11 shows, over half of men ages 50-55 have a financial planning horizon of less than 5 years. AIME changes very gradually with age, and individuals with longer planning horizons would be able to determine an approximate value of their EEA with little difficulty well before they turn 55. So, finalizing an individual's EEA at age 55 should provide sufficient time for individuals to adjust their retirement planning in response to their applicable EEA. In some cases, being notified of one's EEA at age 55 might also provide a useful "wake-up call" to plan for retirement.

AIME calculated at age 55 provides a convenient summary measure of individuals' lifetime earnings for use in the EEA calculations. Individual earnings' trajectories typically peak by age 55, especially for less educated workers, so AIME changes relatively little after that age. However, there are some cases where information on earnings after age 55 would be useful in evaluating whether an individual would be at risk of hardship from an increase in the EEA. For example, the development of a major health problem after age 55 might result in a drop in earnings and also place the individual at risk of experiencing hardship if eligibility for benefits is delayed to age 64. Calculating AIME at a later age would not solve this problem because the health-related drop in earnings late in one's career would have little effect on AIME. However, the problem of incorporating hardships that develop after age 55 into the EEA policy calculations warrants further research.

Our proposed policy sets the AIME threshold for increases in the EEA to 50 percent of average monthly earnings with an eye toward identifying those workers at greatest risk of suffering hardship due to an increase in the EEA. As shown in the previous section, those with AIME below 50 percent of average monthly earnings are substantially more likely to be in poor health, have relatively low life expectancy, and have trouble maintaining stable employment as they age. Figure 12 shows that the EEA would increase to 64 for close to 60 percent of male workers, while less than 20 percent

would be eligible for benefits at 62. Thus, the proposed policy satisfies the objective of increasing the EEA for most workers, while holding it steady for those at greatest risk of hardship.

Tables 8 and 9 provide further evidence that the proposed policy would be effective in protecting those at risk of being adversely affected by an increase in the EEA. In addition to being much more likely to be in poor health, individuals for whom the EEA would increase by less than one year are also much less wealthy and less likely to have private pension coverage. However, it should be acknowledged that AIME is an imperfect indicator of potential hardship. Some workers who are in poor health or who would otherwise face difficulty working beyond age 62 would experience an increase in the EEA under the proposed policy, and some who would continue to qualify for receipt of benefits at 62 would be at little risk of hardship if their EEA were increased to 64.

The proposed policy would be very effective at sheltering those whose lifetime earnings generally place them at or below the poverty line. Figure 13 shows the relationship between the poverty line, which has hovered at about 30 percent of average earnings, and the 50 percent of average wages threshold for increases in the EEA.

#### *Fiscal Impact and Policy Objectives*

Increasing the EEA has very little effect on the finances of the Social Security retirement benefit program due to the actuarial adjustment made to the benefits of early claimers. The point of increasing the EEA is to promote benefit adequacy, not to shore up the system's finances. However, changes in the EEA are likely to create spillovers that affect the finances of other public programs.

If the EEA were increased for the low-AIME group rather than held constant, it would likely put upward pressure on expenditures in other programs. For example, Figure 14 shows that men in the low-AIME group are much more likely than those in the high-AIME group to have applied for Disability Insurance (DI) or Supplemental Security Income (SSI) benefits. Increasing the EEA of workers in the low-AIME group would exacerbate this pattern, leading to increased expenditures on these and other government social programs.

Holding the EEA constant for the low-AIME group protects the most vulnerable workers from the hardships associated with delays in benefit eligibility. It also reduces the fiscal externalities discussed above, but because of the actuarial reduction in benefits it does so at the cost of reducing the annual benefits accruing to this group after age 64. This outcome is ironic, because although the low-AIME group profits from a relatively high replacement rate, they have the lowest absolute level of benefits and retirement income. So, although they are arguably the group most in need of protection against inadequate retirement income, which is the whole point of increasing the EEA, they are the group that would effectively be exempt from the policy change.

It is difficult, or at least expensive, to devise policies that reconcile the objective of protecting the low-AIME group from potential hardships associated with an increase in the EEA while simultaneously protecting early claimers from erosion of benefits as the NRA increases. Applying a less than actuarially fair reduction in benefits to early claiming by members of the low-AIME group would protect benefit adequacy, but at the cost of increased program expenditures and the introduction of an economic incentive to claim benefits early. Making the benefit formula more progressive would get around the incentive for early claiming problem, but at the potential cost of an even larger increase in expenditures (unless benefits were reduced for the high-AIME group). Therefore, policymakers cannot avoid making hard choices in reforming the EEA.

## **V. Conclusion**

As the Normal Retirement Age rises to 67, some have suggested raising the Early Eligibility Age (EEA) as well. One concern about raising the EEA is that it may create excessive hardship for unhealthy or worn-out workers by forcing them to continue to work. The aim of this research is to evaluate alternative policies for a non-uniform increase in the EEA that addresses this concern.

This analysis first considers a simple rule of increasing the EEA to 64 while still allowing those with at least 35 years in the labor force to claim reduced benefits that are actuarially fair. This rule is based on the assumption that lower-educated individuals usually have more physically-demanding jobs, and thus are more likely to be worn-out or

unhealthy. This rule also assumes that these workers would begin their work lives earlier and thus would have more years in the labor force at a given age.

The HRS Social Security Administrative data provide evidence that this simple rule does not satisfy our stated goal. In fact, we find a positive correlation between good health and years in the labor force. As an explanatory variable in the decisions to claim benefits at 62 and to exit the labor force before age 63, we find that the more years a worker is in the labor force, the less likely he is to claim benefits and retire early. Thus, it appears this simple rule for applying an increase in the EEA would not allow most unhealthy or worn-out individuals the option to claim benefits at 62.

We next evaluate a policy tying an individual's EEA to a measure similar to the Average Indexed Monthly Earnings (AIME) calculated by the Social Security Administration. We provide evidence that low average lifetime wages are correlated with poor health, a work-limiting condition at age 63, and ever applying for DI or SSI. This proposed policy has the potential of raising the EEA for most workers without placing a serious hardship on workers who are worn out or in poor health.

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Table 1. *Distribution of Individuals by Claimant Type, 1992-2004, HRS*

	Males		Females		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
<u>Worker's benefits:</u>						
Takers	793	43.64	443	30.34	1,236	37.72
Postponers	771	42.43	338	23.15	1,109	33.84
<u>Spousal benefits:</u>						
Takers	4	0.22	306	20.96	310	9.46
Postponers	10	0.55	142	9.73	152	4.64
<u>Other Non-OASI:</u>						
Ineligibles	36	1.98	78	5.34	114	3.48
DI Claimants	203	11.17	153	10.48	356	10.86
<b>Total</b>	<b>1,817</b>	<b>100</b>	<b>1,460</b>	<b>100</b>	<b>3,277</b>	<b>100</b>

Sources: Authors' calculations from University of Michigan, *Health and Retirement Study* (HRS) and Social Security Administration Administrative (SSAA) data, 1992-2004.

Table 2. *Detailed Distribution by Claimant Type, 1992-2004, HRS*

	Females		Total	
	Frequency	Percent	Frequency	Percent
<u>Worker's Benefits:</u>				
Takers	443	30.34	1,236	37.72
Postponers	338	23.15	1,109	33.84
<u>Spousal benefits:</u>				
Dual Claimants Takers	219	15.00	223	6.81
Dual Claimants Postponers	79	5.41	85	2.59
Spousal Only Takers	87	5.96	87	2.65
Spousal Only Postponers	63	4.32	67	2.04
<u>Other Non-OASI:</u>				
Ineligibles	78	5.34	114	3.48
DI Claimants	153	10.48	356	10.86
<b>Total</b>	<b>1,460</b>	<b>100</b>	<b>3,277</b>	<b>100</b>

*Sources:* Authors' calculations from HRS and SSAA data.

Table 3. *Characteristics of Individuals Claiming Worker Benefits, 1992-2004, HRS*

	Men		Women	
	Takers	Postponers	Takers	Postponers
Total	793 (34%)	771 (33%)	443 (19%)	338 (14%)
<u>Covered quarters at 62:</u>				
Mean	143.5	143.9	116.4	116.8
Median	155	156	120	120
Standard deviation	34.3	36.3	35.8	35.9
Self-reported poor health	165 (40%)	104 (25%)	99 (24%)	40 (10%)
Self-reported health limitation	183 (45%)	89 (22%)	105 (26%)	30 (7%)
Physical job	123 (26%)	224 (47%)	52 (12%)	77 (16%)
<u>Non-Housing wealth:</u>				
Mean	275,689	286,391	365,064	223,616
Median	76,000	86,000	80,500	65,250
Standard deviation	792,448	738,217	2,045,737	499,198
DB only (household)	188 (44%)	92 (21%)	104 (24%)	47 (11%)
DC only (household)	72 (32%)	84 (37%)	32 (14%)	36 (16%)
Both DB and DC (household)	427 (31%)	493 (36%)	248 (18%)	213 (15%)
Less than HS	194 (38%)	181 (35%)	100 (19%)	41 (8%)
HS only	287 (36%)	214 (27%)	167 (21%)	123 (16%)
Some college	151 (31%)	143 (29%)	103 (21%)	92 (19%)
College degree	161 (29%)	233 (42%)	73 (13%)	82 (15%)

*Note:* Percentages in parentheses are row percentages.

*Sources:* Authors' calculations from HRS and SSAA data.

Table 4. *Characteristics of Individuals Claiming Spousal Benefits, Females only, 1992-2004, HRS*

	Dual Entitlement		Spousal Only	
	Takers	Postponers	Takers	Postponers
Total	219 (49%)	79 (18%)	87 (19%)	63 (14%)
<u>Covered quarters at 62:</u>				
Mean	64.3	58.1	16	14.8
Median	64	59	13	15
Standard deviation	31.8	32.6	13.2	10.5
Self-reported poor health	38 (40%)	13 (14%)	27 (28%)	17 (18%)
Self-reported health limitation	50 (46%)	9 (8%)	29 (26%)	21 (19%)
Physical job	24 (60%)	12 (30%)	-	-
<u>Non-Housing wealth:</u>				
Mean	394,372	456,891	381,069	209,226
Median	133,000	121,760	62,500	91,000
Standard deviation	1,780,017	831,319	857,030	292,541
DB only (household)	48 (48%)	15 (15%)	32 (32%)	5 (5%)
DC only (household)	24 (42%)	12 (21%)	14 (25%)	7 (12%)
Both DB and DC (household)	114 (58%)	39 (20%)	13 (7%)	32 (16%)
Less than HS	37 (36%)	11 (11%)	33 (32%)	21 (21%)
HS only	104 (54%)	35 (18%)	33 (17%)	21 (11%)
Some college	58 (58%)	16 (16%)	17 (17%)	9 (9%)
College degree	20 (38%)	17 (32%)	4 (8%)	12 (23%)

*Note:* Percentages in parentheses are row percentages.

*Sources:* Authors' calculations from HRS and SSAA data.

Table 5. *Labor Force Participation after Claiming OASI Benefits at 62, 1992-2004, HRS*

	Males		Females	
	Frequency	Percent	Frequency	Percent
<u>Worker's benefits:</u>				
Takers stay	321	40.48	150	33.86
Takers exit	472	59.52	293	66.14
<u>Spousal benefits:</u>				
Dual Entitlement Takers stay	1	-	74	28.14
Dual Entitlement Takers exit	3	-	189	71.86
Spousal Only Takers stay	-	-	6	13.95
Spousal Only Takers exit	-	-	37	86.05
<b>Total</b>	<b>797</b>		<b>749</b>	

*Sources:* Authors' calculations from HRS and SSAA data.

Table 6. *Estimation Results : Bivariate Probit (Men only), 1992-2004, HRS*

Variable	Coefficient	(Std. Err.)
<b>Equation 1 : Decision to claim early benefits</b>		
Being in 20-40% of wealth distribution	0.085	(0.119)
Being in 40-60% of wealth distribution	-0.094	(0.119)
Being in 60-80% of wealth distribution	0.026	(0.122)
Being in 80-100% of wealth distribution	0.191	(0.125)
High school graduate	0.224	(0.091)
Some college	0.058	(0.104)
College and above	-0.223	(0.104)
Self-reported poor health	0.314	(0.091)
Number of quarters covered at 63	-0.002	(0.001)
Both DB and DC	0.012	(0.105)
DB only	0.528	(0.121)
DC only	-0.074	(0.136)
Intercept	0.033	(0.164)
<b>Equation 2 : Decision to exit labor force at or before 62</b>		
Being in 20-40 % of wealth distribution	-0.114	(0.121)
Being in 40-60% of wealth distribution	-0.307	(0.123)
Being in 60-80% of wealth distribution	-0.034	(0.125)
Being in 80-100% of wealth distribution	0.197	(0.128)
High school graduate	0.12	(0.094)
Some college	0.072	(0.107)
College and above	-0.276	(0.109)
Self-reported poor health	0.399	(0.091)
Number of quarters covered at 63	-0.009	(0.001)
Both DB and DC	0.305	(0.112)
DB only	0.605	(0.125)
DC only	0.001	(0.145)
Intercept	0.708	(0.166)

Sources: Authors' calculations from HRS and SSAA data.

Table 7: *Number of Males Who Claim at Age 62 with Certain Characteristics, by Eligibility to Claim at Age 62 According to the 140 Quarters Rule, 1992-2004, HRS*

	Eligible		Not Eligible	
Number of individuals	554	(69.86%)	239	(30.14%)
Self-reported poor health	99	(60.00%)	66	(40.00%)
Self-reported health limitation	103	(56.28%)	80	(43.72%)
Continue working (under present rule)	264	(82.24%)	57	(17.76%)
In 0-20% of wealth distribution	51	(45.95%)	60	(54.05%)
In 20-40% of wealth distribution	107	(66.05%)	55	(33.95%)
In 40-60% of wealth distribution	129	(77.71%)	37	(22.29%)
In 60-80% of wealth distribution	118	(69.82%)	51	(30.18%)
In 80-100% of wealth distribution	149	(80.54%)	36	(19.46%)
DB only (household)	122	(64.89%)	66	(35.11%)
DC only (household)	53	(73.61%)	19	(26.39%)
Both DB and DC (household)	332	(77.75%)	95	(22.25%)
Less than high school	117	(60.31%)	77	(39.69%)
High school graduate	228	(79.44%)	59	(20.56%)
Some college	101	(66.89%)	50	(33.11%)
College and above	108	(67.08%)	53	(32.92%)

*Note:* Percentages in parentheses are row percentages.

*Sources:* Authors' calculations from HRS and SSAA data.

Table 8. *Work-related and Financial Characteristics by the Ratio of AIME to Average Wages for Male Workers, 1992-2004, HRS*

Characteristics	Ratio		
	0-0.5	0.5-1.0	1+
Age in Wave 1	56	57	57
Number of covered quarters by age 55	64	120	138
Tenure on the longest job in Wave 1	17	18	23
Lost job by Wave 1	0.24	0.28	0.26
Lost job by Wave 7	0.42	0.41	0.39
Longest job is in manufacturing sector	0.35	0.51	0.48
Non-housing wealth (excluding DB pension), Median	6,000	25,000	125,000
Household has private pension	0.58	0.75	0.95
Number of observations	263	405	935

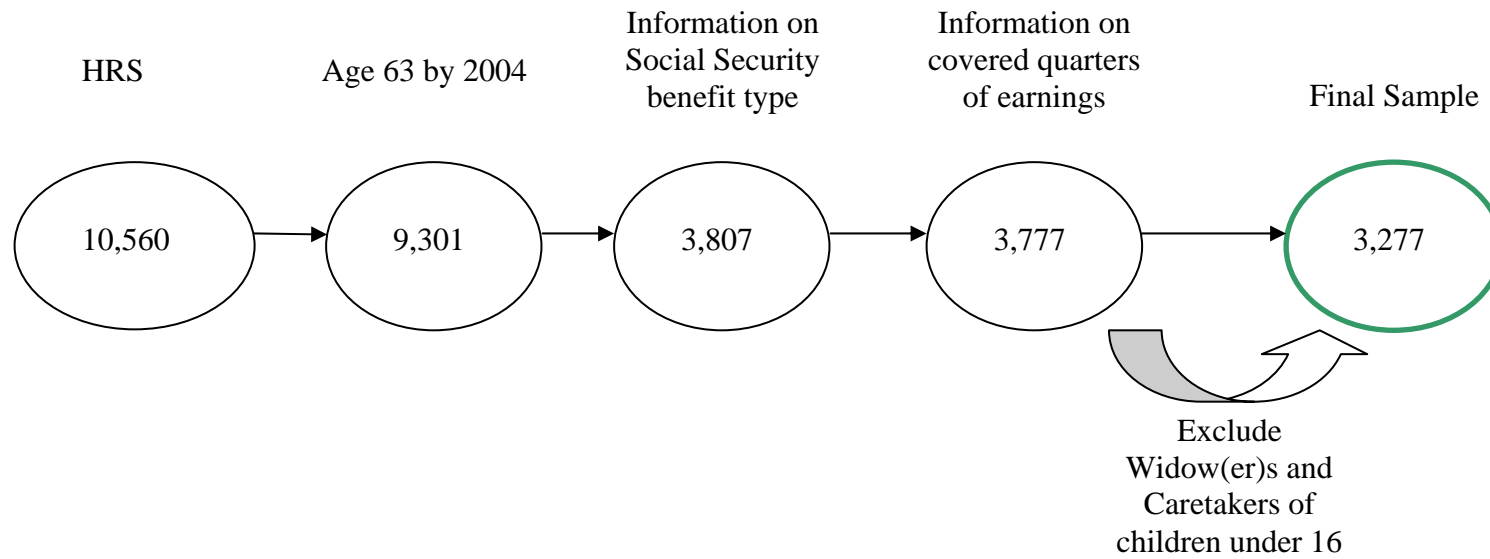
Sources: Authors' calculations from HRS and SSAA data.

Table 9. *Characteristics of Affected versus Unaffected Male Workers Claiming Benefits before Age 64, 1992-2004, HRS*

Characteristics	Unaffected or affected by less than a year	Affected by more than 1 year
Age in Wave 1	56	56
Less than high school	0.4	0.21
High school	0.27	0.39
Some college	0.17	0.18
College +	0.16	0.21
Poor health at age 63	0.32	0.15
Work limiting health cond. by age 63	0.26	0.19
Spouse has work limiting health cond. by age 63	0.24	0.17
Probability of living till age 75, Median	60	70
Non-housing wealth (excluding DB pension), Median	18,000	110,000
Ever applied for SSI/DI	0.21	0.07
Ratio	0.65	1.28
Tenure on the longest job	17	23
Number of covered quarters by age 55	104	138
Number of observations	323	645

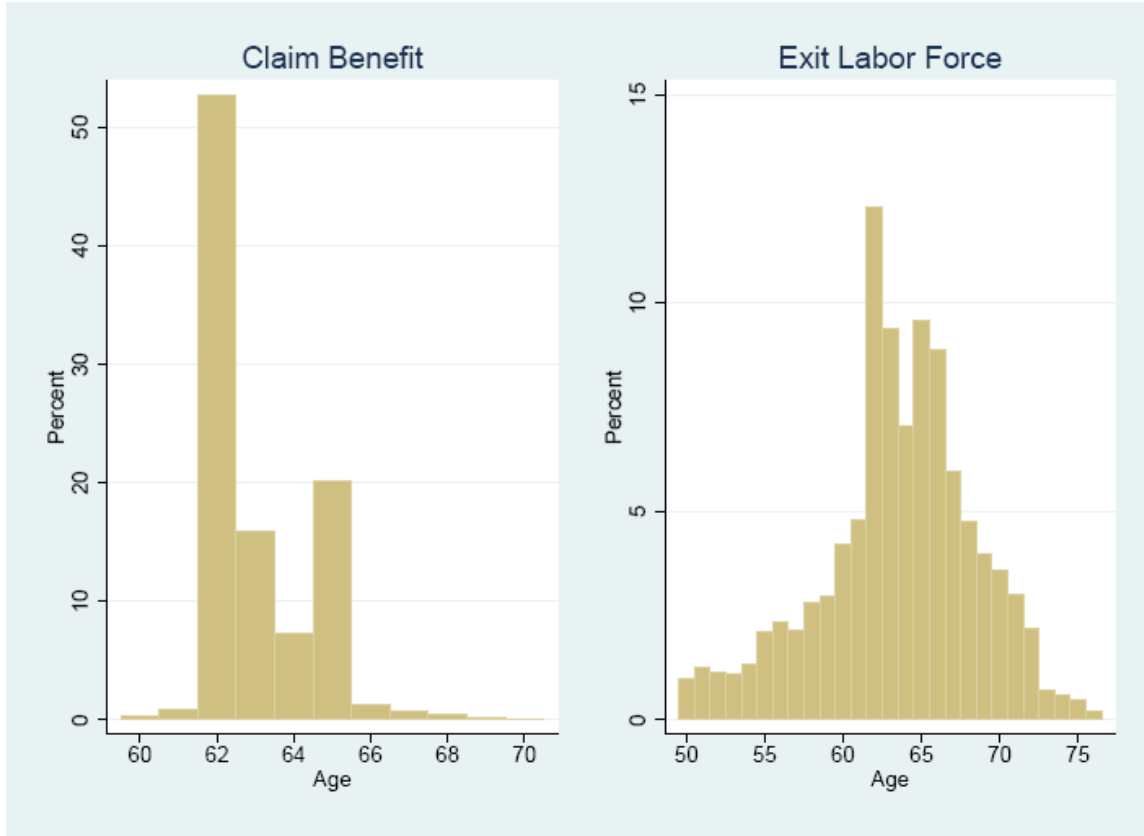
*Sources:* Authors' calculations from HRS and SSAA data.

Figure 1. *Sample Selection*



Source: Authors' illustration.

Figure 2. Age Distribution for Worker and Spousal Claimants, 1992-2004, HRS



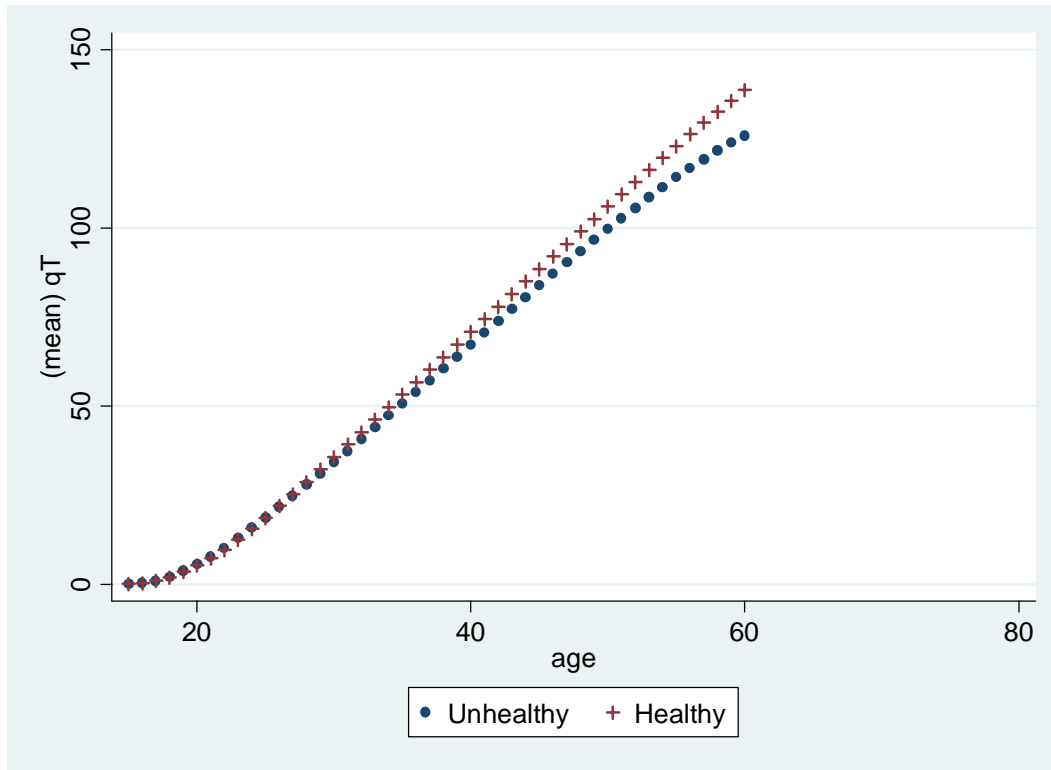
Sources: Authors' calculations from HRS and SSAA data.

Figure 3. Age Distribution for Worker and Spousal Claimants, by Gender, 1992-2004, HRS



Sources: Authors' calculations from HRS and SSAA data.

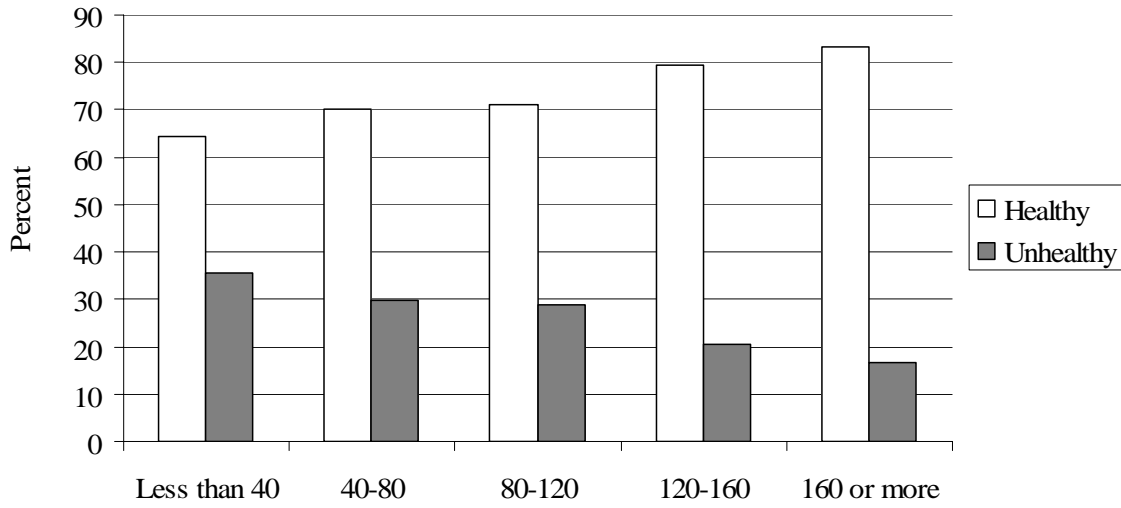
Figure 4. *Number of Accumulated Quarters by Age and Health Status at Age 63, 1992-2004, HRS*



*Note:* “Healthy” refers to individuals reporting good, very good, or excellent health. “Unhealthy” refers to individuals reporting fair or poor health.

*Sources:* Authors’ calculations from HRS and SSAA data.

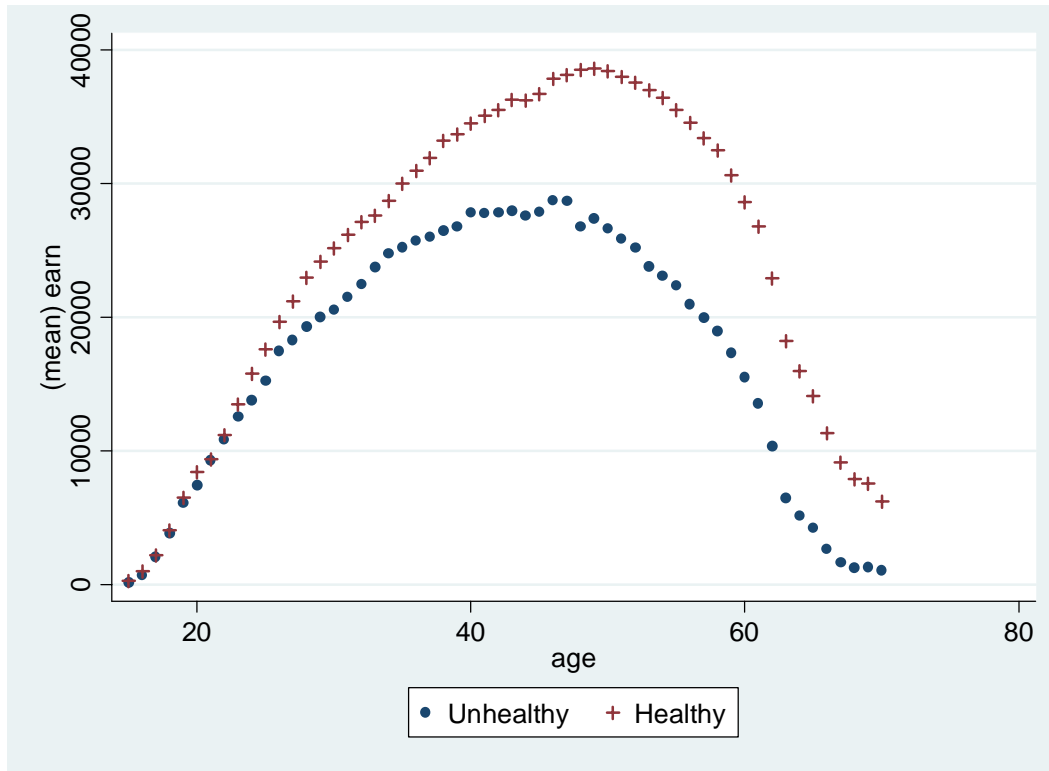
Figure 5. *Proportion of Unhealthy Individuals by Number of Covered Quarters, 1992-2004, HRS*



*Note:* “Healthy” refers to individuals reporting good, very good, or excellent health. “Unhealthy” refers to individuals reporting fair or poor health.

*Sources:* Authors’ calculations from HRS and SSAA data.

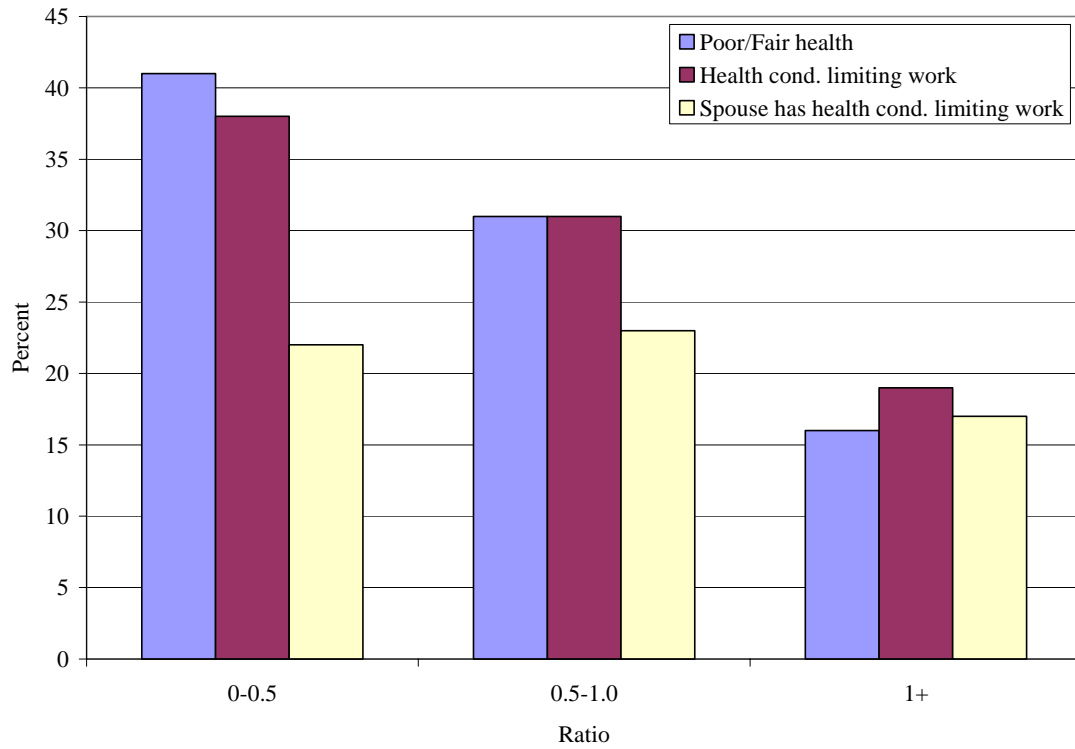
Figure 6. Covered Earnings by Health Status at Age 63, 1992-2004, HRS



Note: “Healthy” refers to individuals reporting good, very good, or excellent health. “Unhealthy” refers to individuals reporting fair or poor health.

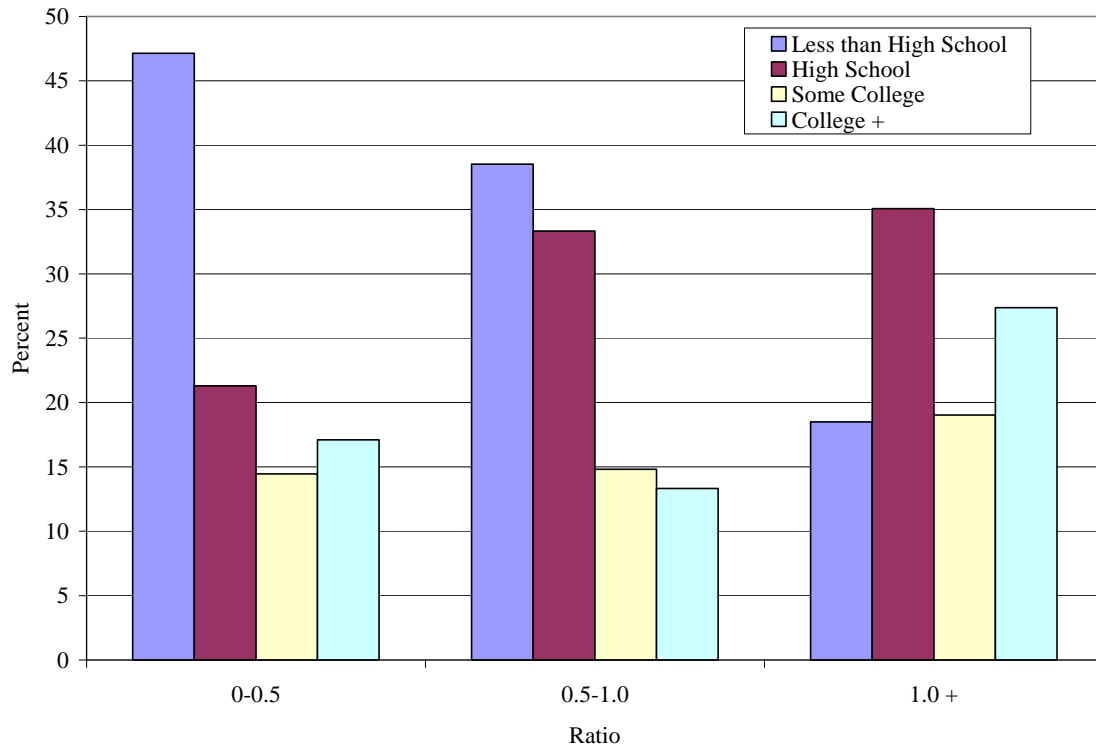
Sources: Authors’ calculations from HRS and SSAA data.

Figure 7. *Health-related Obstacles to Work at Age 63 by the Ratio of AIME to Average Wage for Male Workers, 1992-2004, HRS*



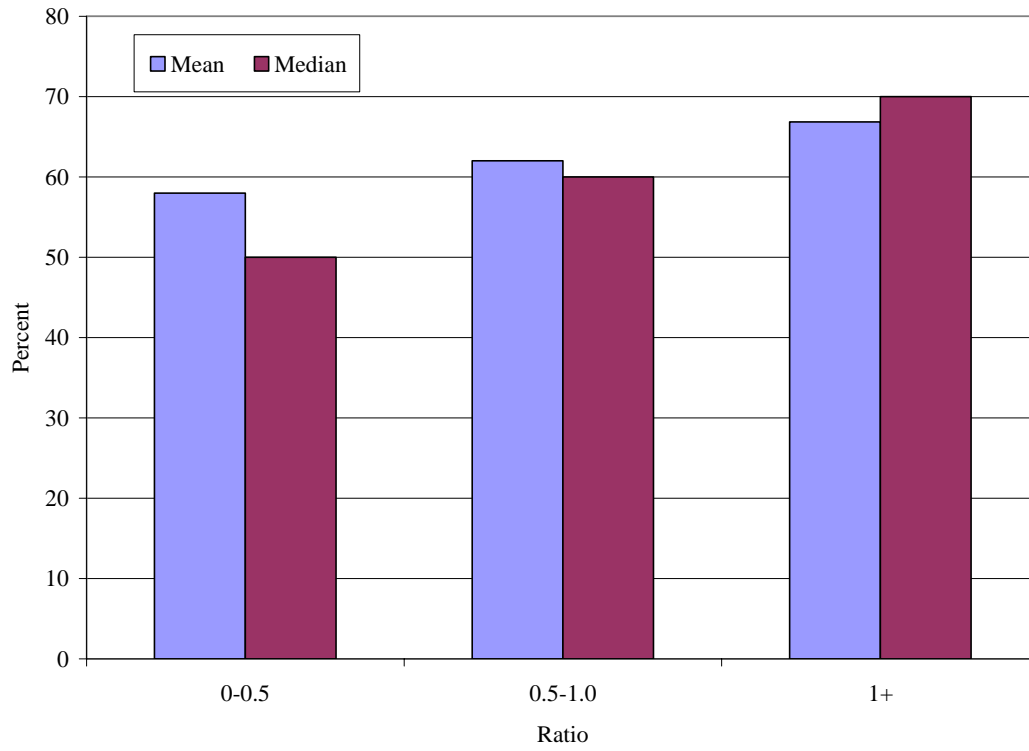
Sources: Authors' calculations from HRS and SSAA data.

Figure 8. *Educational Attainment by the Ratio of AIME to Average Wage for Male Workers, 1992-2004, HRS*



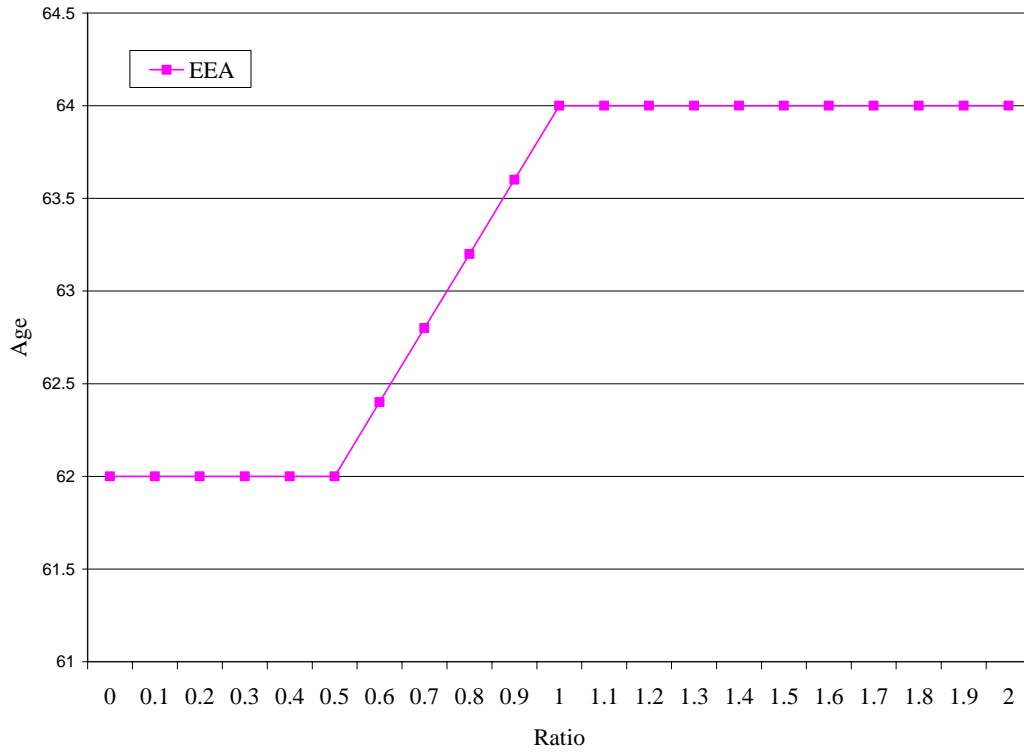
Sources: Authors' calculations from HRS and SSAA data.

Figure 9. *Self-reported Probability of Living Past Age 75 by the Ratio of AIME to Average Wage for Male Workers, 1992-2004, HRS*



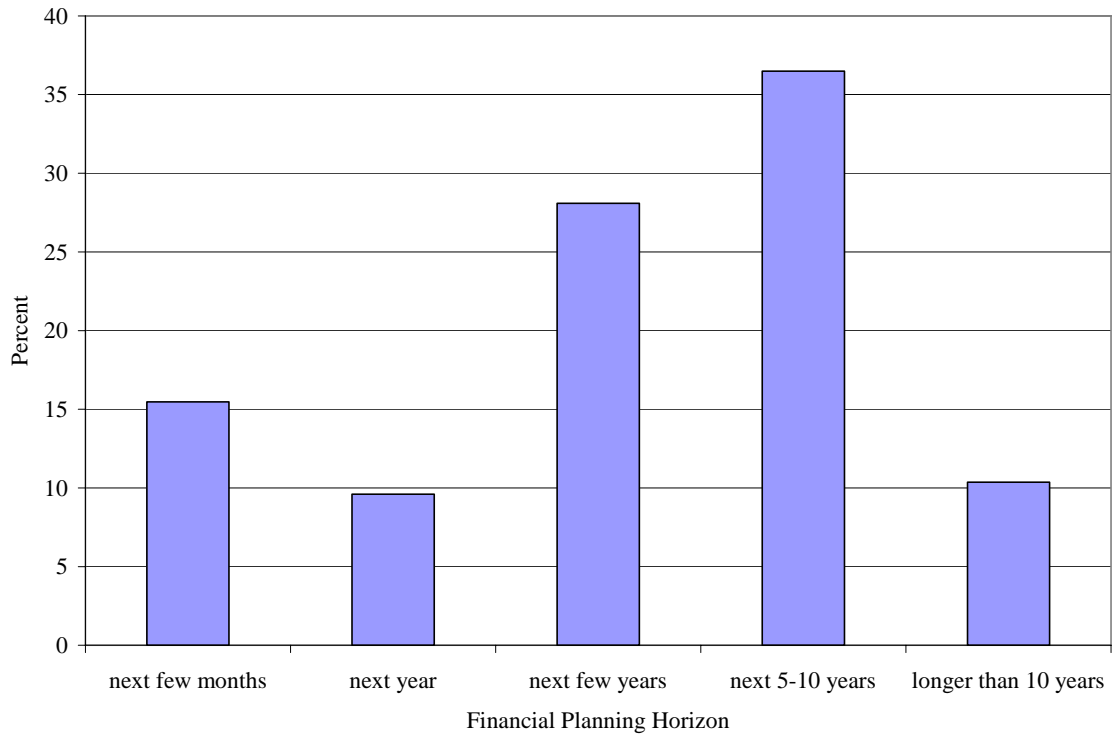
Sources: Authors' calculations from HRS and SSAA data.

Figure 10. *Proposed Rule: Earliest Eligibility Age (EEA) as a Function of Ratio of AIME to Average Wage in the Economy at Age 55*



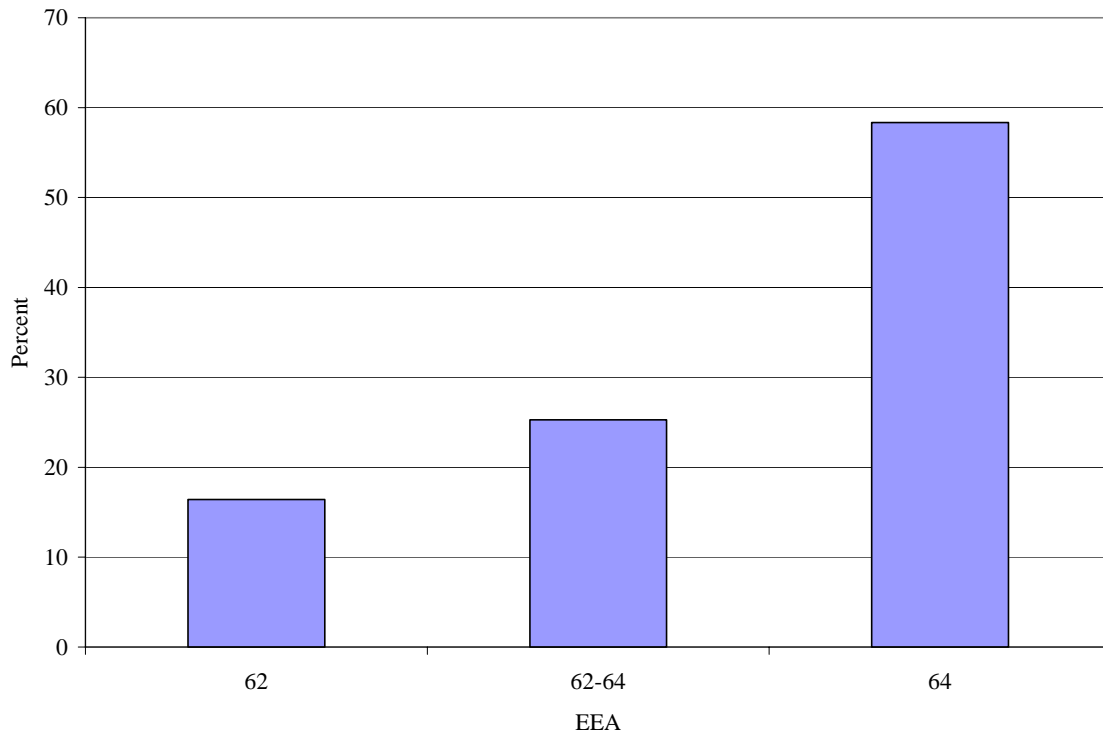
Source: Authors' illustration.

Figure 11. *Financial Planning Horizon for Male Workers Age 50-55, 1992, HRS*



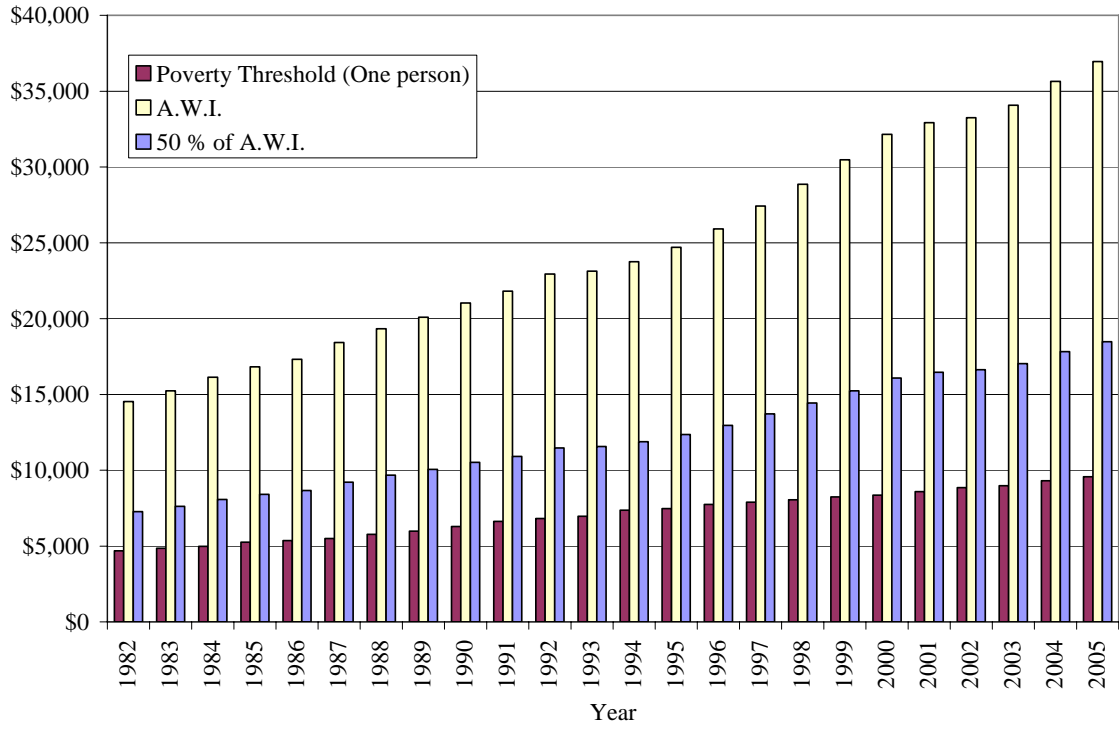
Source: Authors' calculations from HRS.

Figure 12. *Percent of Male Workers with EEA at Different Ages under Proposed Policy Rule, 1992-2004, HRS*



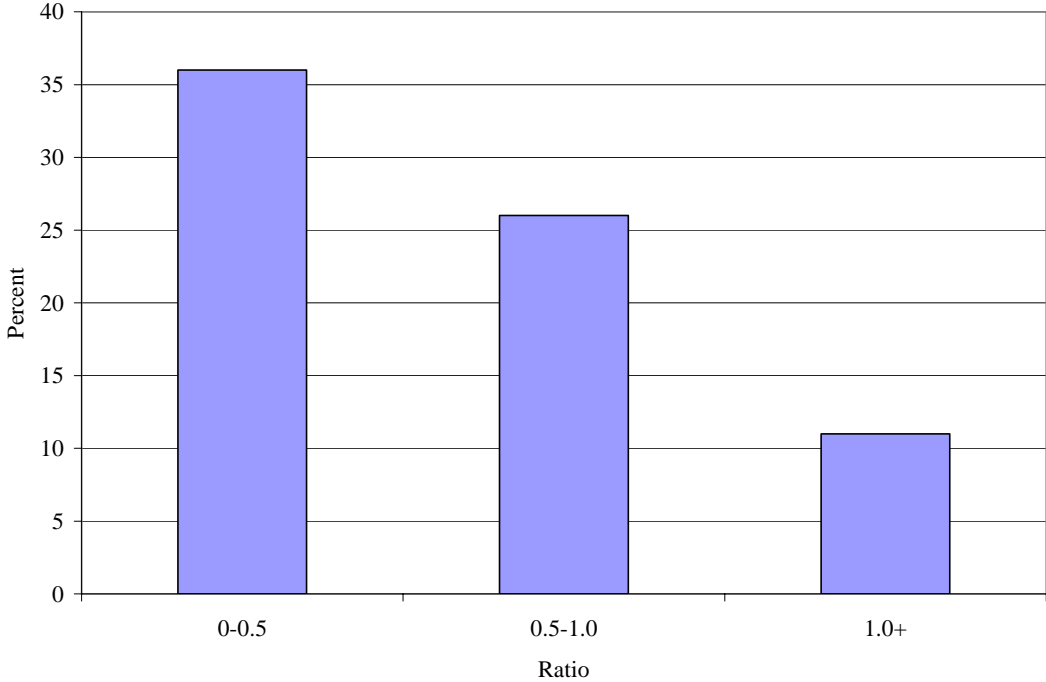
Sources: Authors' calculations from HRS and SSAA data.

Figure 13. *Poverty Threshold and Average Wage Index, 1982-2007*



Sources: U.S. Census Bureau (2007) and U.S. Social Security Administration (2007).

Figure 14. *Percentage of Males Who Ever Applied for SSDI or SSI by the Ratio of AIME to Average Wage in the Economy, 1992-2004, HRS*



Sources: Authors' calculations from HRS and SSAA data.

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