



# Social Security Bulletin

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Responses to Changes in Social Security Rules

The Never-Married in Old Age: Projections and  
Concerns for the Near Future

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Measurement of the Relative Importance of  
Social Security Benefits to the Elderly

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of Consumer Finances and the Relative Importance  
of Social Security Benefits to the Elderly

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Hispanics, Social Security, and Supplemental  
Security Income

How Postsecondary Education Improves Adult  
Outcomes for SSI Children with Severe Hearing  
Impairments

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A stylized graphic of the American flag, featuring curved stripes and stars, positioned on the left side of the page.

# Social Security Bulletin

Volume 67 • Number 2 • 2007

**Social Security Administration**  
Office of Policy  
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# ANNOUNCEMENT

*New information on the elderly provides changes to two popular Office of Policy publications.*



The quartet of articles (see table of contents of this issue for a synopsis of each article) on measuring the economic well-being of the elderly provided the impetus for a number of changes to *Income of the Population 55 or Older* and *Income of the Aged Chartbook*. To provide the most recent and accurate information available, changes to the publications will include:

- Additional tables on the family income of aged persons;
- Statistics on the receipt of noncash benefits (food stamps, energy assistance, and housing assistance);
- Statistics on the Asian elderly; and
- A new section of tables on the demographics of the elderly and their spouses.

Regular publication of the new version of *Income of the Population 55 or Older* in print and online will begin with the 2006 edition. A transitional 2004 edition of this publication will be available online only. A new version of *Income of the Aged Chartbook* will begin with the 2006 edition.

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# ***Social Security Bulletin***

Volume 67 • Number 2 • 2007

## **Articles**

**1**     ***Have People Delayed Claiming Retirement Benefits? Responses to Changes in Social Security Rules***

*by Jae Song and Joyce Manchester*

Using a 1 percent sample of Social Security Administration data, this article documents and analyzes responses in the entitlement age for old-age benefits following the recent changes in Social Security rules. Both rules, the removal of the retirement earnings test (RET) for persons who are at the full retirement age (FRA) through age 69 in 2000 or later and a gradual increase in the FRA for those who reach age 62 in 2000 or later, are expected to affect the age at which people claim Social Security retirement benefits (or entitlement age) and the work behavior of older Americans.

**25**    ***The Never-Married in Old Age: Projections and Concerns for the Near Future***

*by Christopher R. Tamborini*

This article focuses on a growing yet understudied subgroup of the elderly in the United States—the never-married. The first section, based on data from the Current Population Survey and a review of the academic literature, examines the current circumstances of never-married retirees, particularly their economic and health well-being. The succeeding section uses the Modeling Income in the Near Term (MINT) model to assess the projected (1) changes in the marital status composition of the future retirement-age population; (2) demographics of future never-married retirees, and (3) economic well-being of never-married retirees. The results highlight important links between marital trends, Social Security, and retirement outcomes and offer insight into some of the characteristics of current and future never-married retirees.

***Social Security Research: A Quartet of Articles Measuring the Economic Well-Being of the Elderly***

by T. Lynn Fisher

**41     *The Impact of the Unit of Observation on the Measurement of the Relative Importance of Social Security Benefits to the Elderly***

Other publications using the same data source as *Income of the Population 55 or Older, 2004* have produced different statistics for income and the relative importance of Social Security that appear contradictory. Depending on the unit of observation and whose income is considered, the estimates of the percentage of the elderly receiving all of their income from Social Security in 2004 varies from 13 percent to 22 percent. This article explains how the choice of the unit of observation impacts measures of the relative importance of Social Security benefits for the elderly.

**47     *Estimates of Unreported Asset Income in the Survey of Consumer Finances and the Relative Importance of Social Security Benefits to the Elderly***

Through the 1990s and the early 2000s, the *Income of the Population 55 or Older* has reported a decline in the proportion of the elderly receiving asset income and the corresponding rise in the proportion receiving all of their income from Social Security. This analysis uses the Survey of Consumer Finances from 1992 to 2001 to examine financial asset holdings of the elderly and to determine if those who do not report asset income in fact might hold assets that are likely to generate income. Imputing asset income from likely income-producing holdings, the article examines the impact of probable missing asset income information upon measures of elderly income.

**55     *The Impact of Survey Choice on Measuring the Relative Importance of Social Security Benefits to the Elderly***

This article provides insight into how measures of elderly economic well-being are sensitive to the survey data source. In Social Security Administration's publication *Income of the Population 55 or Older*, data are based on the national Current Population Survey (CPS). The preciseness of the survey statistics depends upon the willingness and ability of CPS respondents to answer questions accurately. This article contrasts income statistics calculated using the CPS and the Survey of Income and Program Participation (SIPP). Administrative data for Social Security benefits and SSI are also used to evaluate the accuracy of the income estimates.

**65     *Measuring the Relative Importance of Social Security Benefits to the Elderly***

Provided is a discussion of the cumulative effects of the measurement alternatives described in the three previous articles: considering family income of persons rather than aged units, using administrative data in place of survey reported data, and switching the data source from CPS to SIPP. The current-methodology CPS statistic of 17.9 percent of beneficiary aged units receiving all of their income from Social Security in 1996 falls to a substantially smaller estimated 4.5 percent of elderly beneficiary persons based on family income when using the SIPP and Social Security administrative data.

**73**     *Hispanics, Social Security, and Supplemental Security Income*  
by Patricia P. Martin

This article uses a relatively new data source—the American Community Survey (ACS)—to document the economic and demographic characteristics of the Hispanic population in the United States. Although the article focuses on Social Security beneficiaries and Supplemental Security Income (SSI) recipients, other segments of the population are also examined. The ACS data show that the Hispanic population is significantly different from the overall population, particularly with regard to age distribution, education, and economic well-being.

**Perspectives**

**101**     *How Post Secondary Education Improves Adult Outcomes for Supplemental Security Income Children with Severe Hearing Impairments*  
by Robert R. Weathers II, Gerard Walter, Sara Schley, John Hennessey,  
Jeffrey Hemmeter, and Richard V. Burkhauser

This article uses a unique longitudinal dataset based on administrative data from the National Technical Institute for the Deaf (NTID) linked to Social Security Administration (SSA) microdata to conduct a case study of Supplemental Security Income (SSI) children who applied for postsecondary education at NTID. The authors estimate the likelihood that SSI children who apply to NTID will eventually graduate relative to other hearing impaired applicants, as well as the influence of graduation from NTID on participation in the SSI program as adults and later success in the labor market. Findings indicate that SSI children are substantially less likely to graduate from NTID than their fellow deaf students who did not participate in the SSI program as children, but that those who do graduate spend less time in the SSI adult program and have higher age-earnings profiles than those who do not graduate.

**Other**

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## ***Have People Delayed Claiming Retirement Benefits? Responses to Changes in Social Security Rules***

*by Jae Song and Joyce Manchester*

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*Jae Song is with the Division of Economic Research, Office of Research, Evaluation, and Statistics, Office of Policy, Social Security Administration. Joyce Manchester, who was also with the Social Security Administration during the preparation of this article, is currently with the Congressional Budget Office.*

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### ***Summary***

This article examines changes in the age at which people claim Social Security retirement benefits in response to two recent changes in the Social Security rules: the removal of the retirement earnings test at ages 65 to 69 in 2000 and the gradual increase in the full retirement age (FRA) for those born in 1938 or later. Data come from the 1 percent sample of Social Security administrative data for 1997–2005. Descriptive and regression analyses show that the largest effect of the change in the earnings test rule in 2000 occurs at age 65. At that age, the proportion of people who claim retirement benefits increases by about 4 percentage points among men and 2 percentage points among women. The response to the gradual increase in the FRA occurs not only among those who are close to the FRA but also among those who are close to the early retirement age.

### ***Introduction***

Recently, two major changes in Social Security rules became effective: the removal of the retirement earnings test for persons who are at the full retirement age (FRA) through age 69 in 2000 or later and a gradual increase in the FRA for those who reach age 62 in 2000 or later. The FRA is the age at which 100 percent of retirement benefits is payable. Each rule

change is expected to affect the entitlement age at which people claim Social Security retirement benefits and the work behavior of older Americans.

The effectiveness of the changes largely depends on how people adjust their age at entitlement. Eliminating the retirement earnings test is meant to encourage older people to work so that their earnings can supplement their Social Security benefits, but how the change affects the age at which older people claim Social Security benefits is less clear. One of the unwanted consequences of the change in the earnings test in 2000 is that claiming benefits at the FRA has become more attractive for those who previously claimed benefits later than the FRA. Accelerated benefit claims at the FRA with continued post-FRA employment reduce benefit amounts by forfeiting the expected long-term increase that otherwise accrues under the program's delayed retirement credit. At the same time, some analysts argue that eliminating the earnings test for those who have reached the FRA through age 69 could affect the benefit claiming ages of those who are younger than the FRA as well.<sup>1</sup> If that is true, one of the desired consequences is that those who have not attained the FRA are more likely to continue to work and not claim benefits until they reach the FRA.

Effects of raising the FRA would seem to be more straightforward at first glance. The aim of increasing the FRA is to improve the solvency of the Social Security system by providing stronger disincentives for claiming benefits early. What is not clear is how people actually respond to those disincentives. To understand the effect of the rule changes on Social Security finances and individuals' retirement wealth, we need to examine how people adjust the age at which they claim benefits in response to the rule changes.

Using a 1 percent sample of Social Security administrative data, this article documents and analyzes responses in the entitlement age for old-age benefits following the recent changes in Social Security rules.<sup>2</sup> Because the administrative data allow us to determine the exact age at entitlement for all Social Security beneficiaries, we can accurately document responses in benefit entitlement age before and after the rule changes. By doing so, we expect to learn whether people have responded to changes in Social Security rules by modifying the age at which they claim benefits, how responsive they have been, and whether the response is concentrated only around the FRA. One of the most interesting questions surrounding the gradual increase in the FRA is whether it can affect the behavior of those claiming benefits close to the early retirement age. Results here will help shed light on responses by future workers as the FRA continues to rise to age 67 and, more generally, on responses to changes in retirement incentives.

Previous studies have examined effects of the earnings test removal in 2000, but none of them has investigated simultaneously the effects of the gradual increase in the FRA on earnings and old-age benefit entitlement.<sup>3</sup> This study investigates effects of both program rule changes. We take advantage of the fact that while the change in the earnings test in 2000 affects those who are at the FRA through age 69 in 2000 or later, the gradual rise in the FRA affects those who reach age 62 in 2000 or later. Since the rule changes are specific to the calendar year and different birth years, we first identify three different groups affected by the changes.

- Those affected by the gradual increase in the FRA.
- Those affected by the removal of the earnings test in 2000.
- Those affected by both rule changes.

We then examine changes in the distribution of ages at which people claim benefits and benefit entitlement status across time and across birth cohorts. Also

investigated are changes in the percentage of persons who are entitled to benefits among those who are fully insured both before and after 2000, by holding age constant. We define a person who is entitled to benefits as one who has filed a claim for a specific type of benefit and has received an award for that benefit. Once an award is made, the person usually receives an immediate payment.

The remainder of this article

- reviews recent changes in the earnings test and FRA and discusses theoretical predictions of how people will respond to those changes,
- discusses the data and our empirical strategy,
- presents descriptive results,
- presents regression results on the impact of the rule changes on the age at benefit entitlement, and
- concludes with the key findings.

### **Recent Changes in the Retirement Earnings Test and the Full Retirement Age**

Under the retirement earnings test, Social Security benefits are reduced or withheld if earnings exceed specified threshold amounts. On April 7, 2000, major changes to the earnings test occurred when President Clinton signed into law the Senior Citizens' Freedom to Work Act of 2000. That law eliminated the earnings test in and after the month in which a person attains the FRA (which was then age 65). Persons receiving old-age benefits who have not reached the FRA remain subject to the earnings test. Social Security benefits of those who do not reach the FRA in the test year are reduced by \$1 for every \$2 earned beyond the earnings test threshold, which was \$11,520 in 2003. Those who reach the FRA during the year are subject to a more moderate test. Benefits are reduced \$1 for every \$3 earned beyond the modified threshold, which was \$30,720 in 2003.<sup>4</sup> Thus, the earnings test removal in 2000 not only eliminated the test for those who had attained ages 65–69 (more precisely, FRA to 69), but it also considerably relaxed the test for those turning the FRA (see Song and Manchester (2007) for a more detailed description of the rule change).<sup>5</sup>

In an effort to improve the solvency of the system, the 1983 Amendments to the Social Security Act gradually raised the full retirement age beginning with those born in 1938, who reach the early retirement age (age 62) in 2000. The FRA is age 65 for those born in 1937 or earlier, but it gradually increases by 2-month intervals beginning with persons born in 1938 until it

reaches age 67 for those born in 1960 or later.<sup>6</sup> Persons born in 1938 have an FRA of 65 years and 2 months, those born in 1939 at 65 and 4 months, those born in 1940 at 65 and 6 months, and so forth (see Social Security Administration 2005, Table 2.A17.1). Although the FRA is increasing, the age at which a person can start receiving reduced Social Security retirement benefits remains at age 62. For those who become entitled to benefits before the FRA, monthly benefits are reduced from the full benefit amount at the rate of 5/9 of 1 percent per month for the first 36 months before the FRA and 5/12 of 1 percent for any additional months. As a result, the gradual increase in the FRA causes a gradual increase in the permanent benefit reduction for early benefit claimants at any given age (Chart 1).<sup>7</sup>

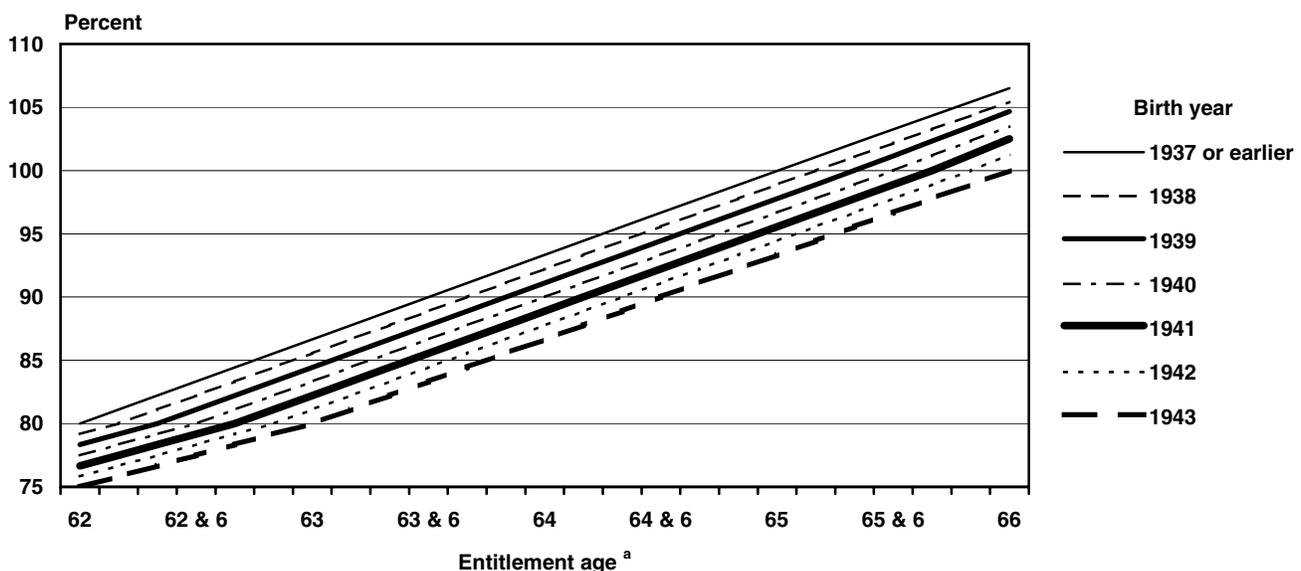
Both rule changes could affect Social Security finances as well as individuals' retirement wealth. Consider the responses of persons claiming benefits at ages below the FRA, at the FRA, and above the FRA. First, those who claim benefits at given ages earlier than the FRA would experience additional declines in benefits due to the increased FRA. Second, as pointed out in Gruber and Orszag (2003) and Song and Manchester (2007), workers may delay claiming benefits until they reach the increased FRA in order to receive

their full benefits and avoid the earnings test. To the extent that they work longer before claiming benefits, they will also pay Social Security taxes longer. On the cost side, even if lifetime benefits for those who delay claiming benefits are not affected on average, the mortality experience of those who delay claiming could affect the Social Security trust fund finances. Finally, accelerated benefit claiming among workers who have reached the FRA and no longer face the earnings test could result in more years of benefit payments with lower levels of annual benefits. Benefits could be lower because those workers would miss out on the delayed retirement credit, which is discussed in more detail later.

The overall effect of the rule changes on Social Security finances depends on the combination of workers' labor supply responses and benefit-claiming decisions. While choices regarding work participation and work hours affect Social Security revenues, responses in the age at benefit entitlement affect Social Security expenditures as well as individuals' retirement wealth.

An individual can earn a delayed retirement credit (DRC) for each month benefits are not paid beginning with the month in which he or she reaches the FRA and ending with the month before reaching age 70. For those who turned age 65 in 2000–2001, the DRC

**Chart 1.**  
Benefit amounts as a percentage of the primary insurance amount, by birth year and entitlement age



SOURCE: Social Security Administration (2005), Table 2.A17.1.

a. Entitlement age is measured in 2-month increments; the notation "62.5" = 62 years and 6 months.

is 1/2 of 1 percent for each incremental month, or 6 percent per year. The marginal (yearly) percentage increase in the DRC for birth cohorts included in the study is 0.5 percent for every other birth cohort until it reaches 8.0 percent for cohorts born in 1943 or later.<sup>8</sup> The increase in DRC does not affect benefit amounts as significantly as the two rule changes, but it might be considered to be a third change in the study period. Interaction between the FRA changes and the DRC changes could dilute the pure effect of raising the retirement age. Identifying the separate effects of these changes, however, is left for future research.

The focus of this article is on the effects of the Social Security rule changes, but swings in economic activity, ongoing trends in labor force participation among older workers, and other factors can also influence the age at which people claim retirement benefits. For example, the economy was in recession during 2001–2002, with the unemployment rate reaching 6.0 percent in 2003. This recession may have resulted in older persons encountering difficulty holding on to existing jobs or finding new jobs. As a result, delays in claiming retirement benefits shown here may be understated to some degree.

### ***Data and Analytical Strategy***

The data used in this study come from a number of 1 percent extracts of Social Security Administration data, including the Continuous Work History Sample (CWHS) 2004, Master Beneficiary Record (MBR), and Numident master file of Social Security numbers. Those administrative data extracts contain the exact month and year of entitlement for Old-Age, Survivors, and Disability Insurance (OASDI) benefits, the type of benefits (primary or auxiliary), and date of birth. Therefore, the age and month at benefit entitlement—the most important variable in this study—can be precisely derived. Further, 1 percent extracts can be easily matched across different files using identification numbers. The 1 percent samples are selected by a “stratified cluster design” based on certain serial digits of the Social Security number. They are generally considered to be random samples and contain a large number of observations that represent the general population.

The **Continuous Work History Sample** is an analytical master file for the 1 percent sample of Social Security numbers ever issued and is the base data set used for this article. The file is derived from several administrative master files, including the MBR and the Master Earnings File, to support research and

statistical analysis of the Social Security programs. The CWHS contains information on each individual’s demographic characteristics, longitudinal earnings (Social Security-covered annual earnings from 1951 to the present and total annual wages from 1978 to the present), OASDI benefit entitlement status, and death information (if any). The CWHS has both an active and an inactive file. The active file includes workers who ever reported earnings from any employment. Before 1978, the CWHS tracked only earnings covered by Social Security. However, starting in 1978, the CWHS was extended to include uncovered earnings. The inactive sample includes those who never worked in covered or uncovered employment. By combining both the active and inactive files, we can analyze the earnings and OASDI program participation of our 1 percent sample of the U.S. population with valid Social Security numbers.

The semiannual **Master Beneficiary Record** extract contains data related to the administration of the OASDI program such as application and entitlement dates, benefit amounts, payment status, type of benefits, and demographic information. An MBR record is established whenever an individual application for benefits is processed. The MBR has one record for each primary beneficiary (the worker on whose earnings the benefit entitlement exists). However, each MBR record can contain more than one beneficiary.

Lastly, we merged our base data set with a 1 percent extract of the **Numident file**. The Numident is a master file of assigned Social Security numbers that contains birth and death dates, place of birth, race, and sex.<sup>9</sup> Information on date of death permits us to eliminate those in the sample who died. Thus, our sample includes only those who are alive at the end of each reference year.

Investigating how changes in the rules affect age at entitlement requires a data source with precise information on age, birth month and year, and month and year of entitlement. The elimination of the retirement earnings test affects those from age 65 (or FRA) to age 69. In a given year, anyone older than age 69 or younger than the full retirement age will not be affected directly by the elimination of the retirement earnings test. However, because the FRA gradually increases by 2-month intervals, the year in which a person becomes affected by the elimination of the retirement earnings test not only depends on the year in which they were born but also on the month in which they were born. For example, someone born in November through December 1939 would reach the

FRA not in 2004 but in 2005. Yet someone born in January through October 1939 would reach the FRA in 2004. Only the year of birth, however, determines who is affected by the FRA increase.

Whereas the earnings test removal in 2000 was a relatively abrupt change in a Social Security program parameter, the gradual increase in the FRA was anticipated for many years following the enactment of the 1983 amendments. The earliest birth cohort affected by the 1983 amendments reached their FRA in 2003–2004. Thus, a forward-looking individual would have adjusted his or her labor supply over the last 20 years in order to compensate for the expected benefit reduction due to the increase in the FRA. Unlike ongoing labor supply decisions, benefit claiming can occur only after reaching the early retirement age. Thus, the standard before-and-after or difference-in-difference approach is valid in evaluating the effect of the 1983 amendment on the age at which benefits are claimed. It is worth noting, however, that larger compensating adjustments in labor supply result in smaller estimated effects on the age at benefit entitlement.

The fact that the “treatment” in this study depends on both time and age suggests a quasi-experimental study using a standard design. Thus, our analysis relies primarily on comparing benefit entitlement probabilities and entitlement hazards over the period before and after the rule changes became effective, holding age constant. Entitlement hazard refers to the probability that those who have not yet claimed benefits will do so during the specified period.

Three distinct treatment groups emerge from the rule changes (Chart 2).

- **The first treatment group is affected only by the 2000 earnings test rule change.** That group consists of those who were born in 1930–1935, 1931–1936, 1932–1937, 1933–1937, 1934–1937, 1935–1937, respectively, for 2000, 2001, 2002, 2003, 2004, and 2005.
- **The second treatment group is affected by both the increase in the FRA and the change in the earnings test in 2000.** It consists of those who were born in January 1938 through October 1938, January 1938 through August 1939, and January 1938 through June 1940, respectively, for 2003, 2004, and 2005.
- **The third treatment group, which consists of those born in 1938 or later for years prior to attainment of the FRA, is affected only by the increase in the FRA.** For example, for the

year 2000, the 1938 cohort would not be directly affected by the earnings test change because they were too young in that year.<sup>10</sup>

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## ***Descriptive Analysis***

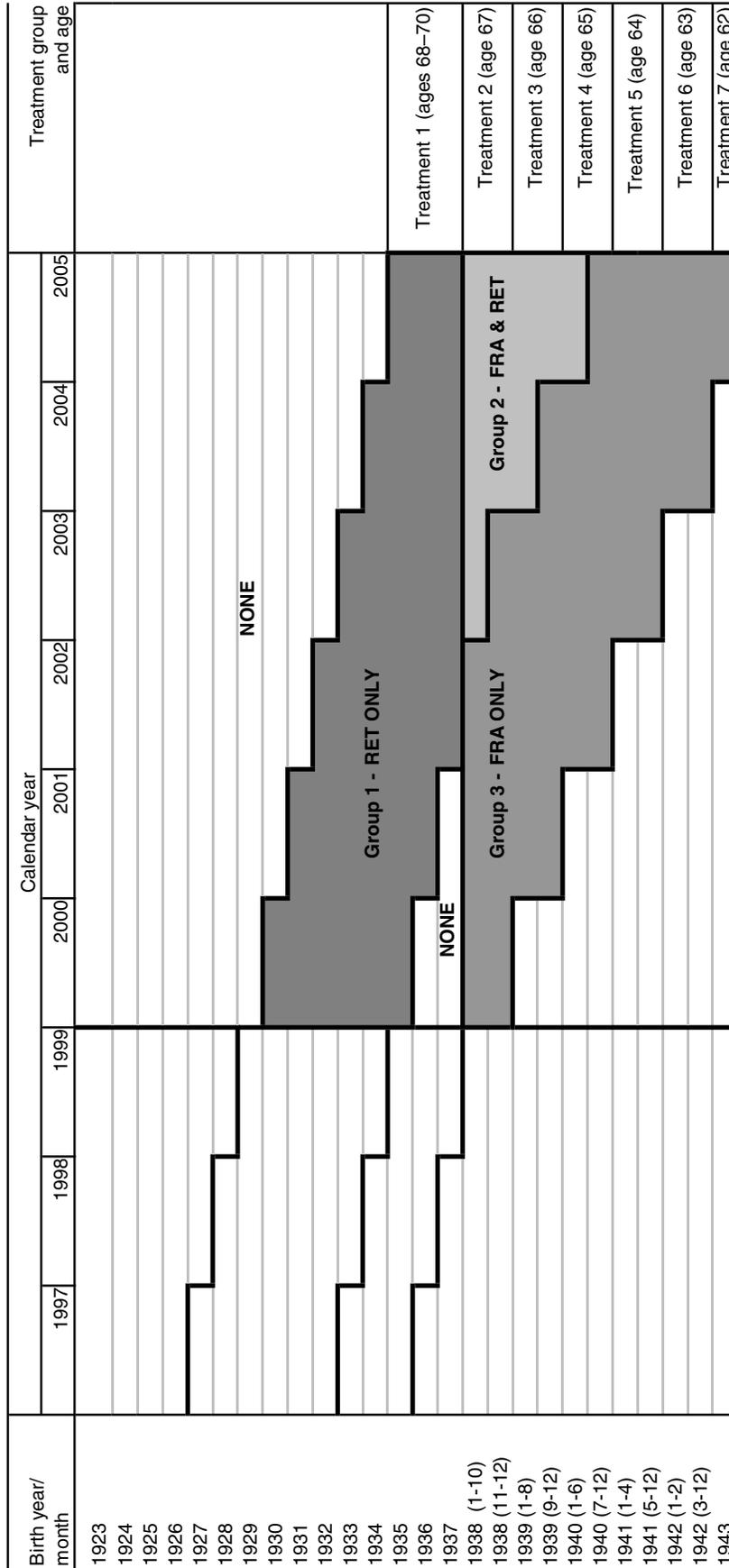
### ***An Overview of the 1 Percent Sample***

For 1997–2005, year-end counts of OASI beneficiaries and persons who are fully insured (as of age 60) give us a good overview of the 1 percent data (Table 1). In our 1 percent sample, 24,524 men and 21,797 women aged 62–64 in 2000 are fully insured.<sup>11</sup> Only 292 of the 10,374 auxiliary beneficiaries in that age group in 2000 are male. While the number of women auxiliary beneficiaries tends to drop significantly over the study period, the number of men auxiliary beneficiaries appears to remain relatively stable. Primary beneficiaries include individuals who claim benefits as dual beneficiaries—those receiving both a primary benefit and a partial spouse or survivor benefit. Although primary beneficiaries include dual beneficiaries, we note that the reduction factors for the spouse and survivor portion of benefits are different than for primary benefits and that the FRA increase for survivor benefits has a different schedule than that for primary or spouse benefits (Social Security Administration 2005, Tables 2.A21–2.A22).

Interestingly, the percentage of persons who are fully insured and become primary beneficiaries before age 65 remains relatively constant until 1999 and then gradually decreases over the rest of the study period. Because those born in 1938 reach age 62 in 2000, the gradual decrease in the percentage of primary beneficiaries probably arises in large part from delayed benefit claiming among those born in 1938 or later. Declines in the percentage of primary beneficiaries beginning in 2003 seem plausible because 2003 is the first year in which those aged 65 face the higher FRA. A part of the gradual decline, known as the spillover effect associated with the earnings test removal, may be attributed to individuals aged 62–64 who continue to work and delay claiming benefits until they reach age 65 following the removal of the earnings test. Of course, that effect is unlikely to be as large as the direct effect of the rising FRA.

Among those aged 65–70, the percentage of primary beneficiaries increases over the 2000–2002 period and then gradually declines over the rest of the study period. Responses to removal of the earnings test in 2000 and raising the FRA are evident here. The percentage of male primary beneficiaries drops

**Chart 2.  
Effect of rule changes on treatment groups, by birth year and calendar year**



SOURCE: Social Security Administration (2005, Tables 2.A17.1 and 2.A29).

NOTES: Birth year is defined in years and months for cohorts born in 1938–1942. Persons born during this period are shown in two separate groups, depending on the calendar year in which they reach the FRA. For example, those born in January–October 1938 reach the FRA in 2003, but those born in November–December 1938 reach the FRA in 2004.

The first treatment group is affected only by the 2000 earnings test rule change. That group consists of those who were born in 1930–1935, 1931–1936, 1932–1937, 1933–1937, 1934–1937, 1935–1937, respectively, for 2000, 2001, 2002, 2003, 2004, and 2005. The second treatment group is affected by both the increase in the FRA and the change in the earnings test in 2000. It consists of those who were born in January 1938 through October 1938, January 1938 through August 1939, and January 1938 through June 1940, respectively, for 2003, 2004, and 2005. The third treatment group, which consists of those born in 1938 or later for years prior to attainment of the FRA, is affected only by the increase in the FRA. For example, for the year 2000, the 1938 cohort would not be directly affected by the earnings test change because they were too young in that year.

RET = retirement earnings test; FRA = full retirement age.

**Table 1.**  
**OASI benefit entitlement status for those aged 62–70, 1997–2005**

| Type of entitlement                      | 1997      | 1998      | 1999      | 2000      | 2001      | 2002      | 2003      | 2004      | 2005      |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| <i>Aged 62–64</i>                        |           |           |           |           |           |           |           |           |           |
| Men                                      |           |           |           |           |           |           |           |           |           |
| Fully insured                            | 23,154    | 23,661    | 24,069    | 24,524    | 25,058    | 25,968    | 26,699    | 28,788    | 31,166    |
| Primary beneficiaries                    |           |           |           |           |           |           |           |           |           |
| Number                                   | 12,778    | 12,933    | 13,190    | 13,257    | 13,279    | 13,383    | 13,304    | 13,819    | 14,539    |
| As a percentage of fully insured         | 0.5519    | 0.5466    | 0.5480    | 0.5406    | 0.5299    | 0.5154    | 0.4983    | 0.4800    | 0.4665    |
| Auxiliary beneficiaries                  |           |           |           |           |           |           |           |           |           |
| Number                                   | 321       | 292       | 300       | 292       | 294       | 291       | 306       | 328       | 370       |
| As a percentage of primary beneficiaries | 0.0251    | 0.0226    | 0.0227    | 0.0220    | 0.0221    | 0.0217    | 0.0230    | 0.0237    | 0.0254    |
| Women                                    |           |           |           |           |           |           |           |           |           |
| Fully insured                            | 19,910    | 20,358    | 20,867    | 21,797    | 22,406    | 23,235    | 24,094    | 26,345    | 28,416    |
| Primary beneficiaries                    |           |           |           |           |           |           |           |           |           |
| Number                                   | 10,888    | 11,138    | 11,375    | 11,875    | 12,051    | 12,215    | 12,319    | 13,174    | 13,940    |
| As a percentage of fully insured         | 0.5469    | 0.5471    | 0.5451    | 0.5448    | 0.5378    | 0.5257    | 0.5113    | 0.5001    | 0.4906    |
| Auxiliary beneficiaries                  |           |           |           |           |           |           |           |           |           |
| Number                                   | 10,239    | 10,193    | 10,194    | 10,082    | 9,881     | 9,369     | 9,072     | 9,044     | 8,987     |
| As a percentage of primary beneficiaries | 0.9404    | 0.9152    | 0.8962    | 0.8490    | 0.8199    | 0.7670    | 0.7364    | 0.6865    | 0.6447    |
| Birth year                               | 1933–1935 | 1934–1936 | 1935–1937 | 1936–1938 | 1937–1939 | 1938–1940 | 1939–1941 | 1940–1942 | 1941–1943 |
| <i>Aged 65–70</i>                        |           |           |           |           |           |           |           |           |           |
| Men                                      |           |           |           |           |           |           |           |           |           |
| Fully insured                            | 43,660    | 43,068    | 42,876    | 43,058    | 43,172    | 43,621    | 44,592    | 45,658    | 47,274    |
| Primary beneficiaries                    |           |           |           |           |           |           |           |           |           |
| Number                                   | 41,372    | 40,660    | 40,521    | 41,739    | 41,899    | 42,321    | 42,868    | 43,376    | 44,267    |
| As a percentage of fully insured         | 0.9476    | 0.9441    | 0.9451    | 0.9694    | 0.9705    | 0.9702    | 0.9613    | 0.9500    | 0.9364    |
| Auxiliary beneficiaries                  |           |           |           |           |           |           |           |           |           |
| Number                                   | 891       | 881       | 874       | 862       | 860       | 852       | 846       | 841       | 868       |
| As a percentage of primary beneficiaries | 0.0215    | 0.0217    | 0.0216    | 0.0207    | 0.0205    | 0.0201    | 0.0197    | 0.0194    | 0.0196    |
| Women                                    |           |           |           |           |           |           |           |           |           |
| Fully insured                            | 38,126    | 38,090    | 38,231    | 38,344    | 38,427    | 38,991    | 40,044    | 41,113    | 42,634    |
| Primary beneficiaries                    |           |           |           |           |           |           |           |           |           |
| Number                                   | 31,896    | 31,928    | 32,244    | 32,933    | 33,214    | 33,771    | 34,735    | 35,499    | 36,709    |
| As a percentage of fully insured         | 0.8366    | 0.8382    | 0.8434    | 0.8589    | 0.8643    | 0.8661    | 0.8674    | 0.8634    | 0.8610    |
| Auxiliary beneficiaries                  |           |           |           |           |           |           |           |           |           |
| Number                                   | 28,606    | 28,517    | 28,365    | 28,289    | 27,730    | 27,466    | 27,069    | 26,530    | 26,091    |
| As a percentage of primary beneficiaries | 0.8969    | 0.8932    | 0.8797    | 0.8590    | 0.8349    | 0.8133    | 0.7793    | 0.7473    | 0.7108    |
| Birth year                               | 1927–1932 | 1928–1933 | 1929–1934 | 1930–1935 | 1931–1936 | 1932–1937 | 1933–1938 | 1934–1939 | 1935–1940 |

SOURCE: Authors' tabulations using active and inactive files of the Continuous Work History Sample, 2004; 1 percent Master Beneficiary Record extract based on Claim Account Number; and 1 percent Master Beneficiary Record extract based on Beneficiary Own Account Number for December 1999–2005 and June 2006.

NOTES: Dual beneficiaries are counted in both primary and auxiliary beneficiary categories.

OASI = Old-Age and Survivors Insurance.

from 96 percent to 95 percent between 2003 and 2004, followed by a decline from 95 percent to 93.6 percent between 2004 and 2005. The percentage of female primary beneficiaries also drops during both time intervals, but fairly insignificantly (less than 1 percentage point). It is notable that the drops for both men and women come at the same time that the increase in the FRA begins to affect them directly. Smaller declines for women may reflect lower responses among auxiliary beneficiaries such as spouses and widows.

Eliminating the retirement earnings test also appears to affect the share of fully insured individuals who have claimed benefits as primary beneficiaries (Table 1). Among men aged 65–70, 94.5 percent of the fully insured are primary beneficiaries in 1999. In 2000, immediately after the earnings test removal, the percentage of primary men beneficiaries rises nearly 3 percentage points to 97 percent. Female primary beneficiaries also increase more than 1 percentage point to 86 percent.

The rest of our analysis focuses exclusively on primary beneficiaries because their benefit claiming behavior has the biggest effect on household Social Security benefits. Primary-worker beneficiaries are the largest group among Old-Age and Survivors Insurance (OASI) beneficiaries; they constituted approximately 75 percent of total OASI beneficiaries in 2002 (Social Security Administration 2004). Only persons aged 62 or older can claim benefits as primary beneficiaries, so we do not include persons younger than age 62 in the analysis. In addition, we limit our sample to individuals who have accumulated enough quarters of coverage to be fully insured between the year they turn age 21 and the year they reach age 60. Our analytical samples also exclude persons who were ever beneficiaries under the Social Security Disability Insurance program and Old-Age beneficiaries who converted from the Disability Insurance program.

### ***Percentage of Primary Beneficiaries in Each Treatment Group***

Our empirical strategy is to trace both the number and the percentage of primary beneficiaries among the fully insured population from 1997–2005, by holding age constant. Data on the population that is fully insured as of age 60 can be found in Table 2 and Chart 3.

**Entitlement Probability.** For both men and women, the percentage aged 65–69 who are entitled as primary beneficiaries increases between 1999 and 2000. Over the same period, the percentage aged 62 decreases

slightly. Such results show that after the earnings test change in 2000, benefit claiming among those who had already attained the FRA accelerated at the same time that it slowed down a bit among those younger than the FRA. The slowdown is particularly apparent among those turning age 62. In 2003, when the first birth cohort that faces an increased FRA begins to reach their FRA (age 65 and 2 months), the overall percentage entitled begins to decrease, particularly among those aged 65. The decline continues in 2004 and 2005. For those who are younger than age 65, the percentage entitled decreases slightly over the period 2003–2005, suggesting that a small fraction of those younger than the FRA responded to the FRA rule change as well.

Responses to the rule changes discussed above more than likely understate the effect on persons who can choose whether to become entitled to benefits. The reason for the understatement is that the number of people who have not yet claimed benefits in each age/year group is fairly small. Nearly 90 percent of fully insured people become entitled by age 65 (Table 2).

**Entitlement Hazard.** We next focus on the percentage of those who are “newly” entitled in a given year, among those who are fully insured but not previously entitled (Table 3 and Chart 4). That measure is known as the entitlement hazard. For example, 19.7 percent of men aged 69 who were not yet entitled became entitled in 1999, whereas 41.8 percent of men aged 69 became entitled in 2000. Further, 32.3 percent of men aged 66 who were not yet entitled became entitled in 1999, whereas 65.9 percent of men aged 66 became entitled in 2000. For men and women aged 65, the entitlement hazards decline noticeably starting from 2003, when the first birth cohorts are affected by the FRA increase. The entitlement hazards for those aged 66 increase nearly 40 percentage points for both men and women in 2004, when those born in November or December 1938 reach their FRA. Results here also show that men are more responsive to the rule changes than women.

### ***Entitlement Age Distribution by Entitlement Year and Birth Year***

We next present the distribution of benefit entitlement ages by entitlement year and birth cohort. Comparing the distribution across different entitlement years and different birth cohorts provides data on the changes in claiming behavior as both rule changes become effective.

**Table 2.**  
**Number and percentage of primary beneficiaries at the end of each year, by sex and birth year**

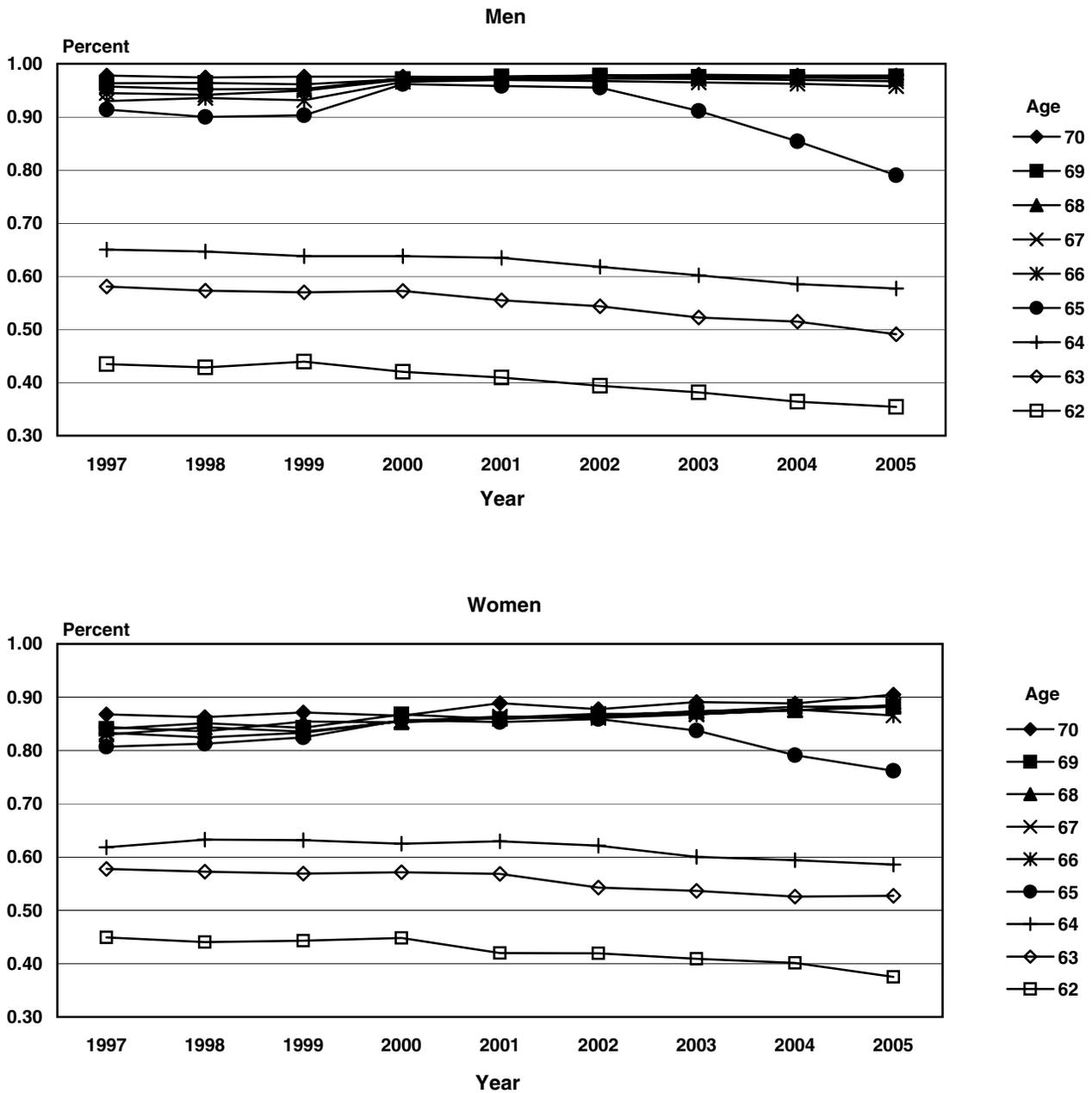
| Birth year | 1997   |        | 1998   |        | 1999   |        | 2000   |        | 2001   |        | 2002   |        | 2003   |        | 2004   |        | 2005   |        |  |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
|            | Men    | Women  |  |
| 1927       | 6,928  | 5,193  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |
| 1928       | 6,909  | 5,184  | 6,782  | 5,239  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |
| 1929       | 6,884  | 5,290  | 6,764  | 5,260  | 6,686  | 5,311  |        |        |        |        |        |        |        |        |        |        |        |        |  |
| 1930       | 7,104  | 5,495  | 7,000  | 5,468  | 6,924  | 5,427  | 6,838  | 5,489  |        |        |        |        |        |        |        |        |        |        |  |
| 1931       | 6,838  | 5,427  | 6,754  | 5,427  | 6,694  | 5,431  | 6,682  | 5,416  | 6,528  | 5,467  |        |        |        |        |        |        |        |        |  |
| 1932       | 6,709  | 5,307  | 6,773  | 5,362  | 6,777  | 5,372  | 6,806  | 5,413  | 6,695  | 5,365  | 6,537  | 5,390  |        |        |        |        |        |        |  |
| 1933       | 4,826  | 3,969  | 6,587  | 5,172  | 6,728  | 5,259  | 6,877  | 5,350  | 6,766  | 5,327  | 6,657  | 5,293  | 6,527  | 5,371  |        |        |        |        |  |
| 1934       | 4,433  | 3,874  | 4,869  | 4,211  | 6,712  | 5,444  | 7,051  | 5,582  | 6,963  | 5,563  | 6,846  | 5,515  | 6,720  | 5,489  | 6,591  | 5,503  |        |        |  |
| 1935       | 3,519  | 3,045  | 4,581  | 3,857  | 5,041  | 4,221  | 7,485  | 5,683  | 7,451  | 5,669  | 7,345  | 5,645  | 7,235  | 5,623  | 7,115  | 5,617  | 7,036  | 5,705  |  |
| 1936       |        |        | 3,483  | 3,070  | 4,581  | 3,934  | 5,065  | 4,293  | 7,496  | 5,823  | 7,448  | 5,822  | 7,365  | 5,807  | 7,256  | 5,798  | 7,196  | 5,800  |  |
| 1937       |        |        |        |        | 3,568  | 3,220  | 4,598  | 4,127  | 5,037  | 4,516  | 7,488  | 6,106  | 7,456  | 6,123  | 7,385  | 6,113  | 7,321  | 6,127  |  |
| 1938       |        |        |        |        |        |        | 3,594  | 3,455  | 4,708  | 4,349  | 5,184  | 4,723  | 7,565  | 6,322  | 7,892  | 6,565  | 7,866  | 6,596  |  |
| 1939       |        |        |        |        |        |        |        |        | 3,534  | 3,185  | 4,642  | 4,104  | 5,087  | 4,510  | 7,137  | 5,902  | 7,932  | 6,428  |  |
| 1940       |        |        |        |        |        |        |        |        |        |        | 3,557  | 3,387  | 4,664  | 4,312  | 5,164  | 4,746  | 6,916  | 6,052  |  |
| 1941       |        |        |        |        |        |        |        |        |        |        |        |        | 3,553  | 3,496  | 4,739  | 4,474  | 5,273  | 4,968  |  |
| 1942       |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 3,916  | 3,954  | 5,254  | 5,177  |  |
| 1943       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 4,012  | 3,794  |  |
| 1927       | 0.9778 | 0.8680 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |
| 1928       | 0.9636 | 0.8405 | 0.9740 | 0.8628 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |
| 1929       | 0.9574 | 0.8444 | 0.9637 | 0.8514 | 0.9758 | 0.8715 |        |        |        |        |        |        |        |        |        |        |        |        |  |
| 1930       | 0.9446 | 0.8297 | 0.9520 | 0.8360 | 0.9613 | 0.8427 | 0.9756 | 0.8652 |        |        |        |        |        |        |        |        |        |        |  |
| 1931       | 0.9301 | 0.8334 | 0.9417 | 0.8438 | 0.9526 | 0.8545 | 0.9712 | 0.8679 | 0.9746 | 0.8891 |        |        |        |        |        |        |        |        |  |
| 1932       | 0.9138 | 0.8071 | 0.9354 | 0.8244 | 0.9493 | 0.8355 | 0.9727 | 0.8527 | 0.9762 | 0.8592 | 0.9777 | 0.8774 |        |        |        |        |        |        |  |
| 1933       | 0.8503 | 0.6181 | 0.8999 | 0.8128 | 0.9313 | 0.8336 | 0.9702 | 0.8550 | 0.9745 | 0.8606 | 0.9777 | 0.8670 | 0.9794 | 0.8909 |        |        |        |        |  |
| 1934       | 0.5805 | 0.5775 | 0.6464 | 0.6326 | 0.9032 | 0.8246 | 0.9659 | 0.8556 | 0.9714 | 0.8615 | 0.9734 | 0.8644 | 0.9752 | 0.8724 | 0.9777 | 0.8883 |        |        |  |
| 1935       | 0.4346 | 0.4490 | 0.5727 | 0.5728 | 0.6377 | 0.6317 | 0.9616 | 0.8570 | 0.9698 | 0.8635 | 0.9721 | 0.8689 | 0.9738 | 0.8742 | 0.9753 | 0.8922 | 0.9778 | 0.9050 |  |
| 1936       |        |        | 0.4284 | 0.4406 | 0.5697 | 0.5690 | 0.6381 | 0.6248 | 0.9583 | 0.8536 | 0.9674 | 0.8614 | 0.9718 | 0.8684 | 0.9741 | 0.8757 | 0.9761 | 0.8829 |  |
| 1937       |        |        |        |        | 0.4392 | 0.4429 | 0.5724 | 0.5716 | 0.6347 | 0.6297 | 0.9553 | 0.8592 | 0.9648 | 0.8678 | 0.9698 | 0.8754 | 0.9721 | 0.8825 |  |
| 1938       |        |        |        |        |        |        | 0.4202 | 0.4484 | 0.5546 | 0.5686 | 0.6178 | 0.6214 | 0.9114 | 0.8376 | 0.9624 | 0.8771 | 0.9669 | 0.8853 |  |
| 1939       |        |        |        |        |        |        |        |        | 0.4094 | 0.4199 | 0.5433 | 0.5429 | 0.6017 | 0.6005 | 0.8539 | 0.7909 | 0.9575 | 0.8657 |  |
| 1940       |        |        |        |        |        |        |        |        |        |        | 0.3938 | 0.4195 | 0.5222 | 0.5368 | 0.5851 | 0.5944 | 0.7899 | 0.7620 |  |
| 1941       |        |        |        |        |        |        |        |        |        |        |        |        | 0.3816 | 0.4089 | 0.5148 | 0.5258 | 0.5770 | 0.5861 |  |
| 1942       |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 0.3640 | 0.4013 | 0.4910 | 0.5272 |  |
| 1943       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 0.3542 | 0.3749 |  |

Percentage

SOURCE: Authors' tabulations using active and inactive files of the Continuous Work History Sample, 2004; 1 percent Master Beneficiary Record extract based on Claim Account Number; and 1 percent Master Beneficiary Record extract based on Beneficiary Own Account Number for December 1999–2005 and June 2006.

NOTE: Data represent primary beneficiaries who were fully insured at age 60.

**Chart 3.**  
**Entitlement probability: Percentage entitled as primary beneficiaries, 1997–2005, by sex and age**



SOURCE: Authors' tabulations using active and inactive files of the Continuous Work History Sample, 2004; 1 percent Master Beneficiary Record extract based on Claim Account Number; and 1 percent Master Beneficiary Record extract based on Beneficiary Own Account Number for December 1999–2005 and June 2006.

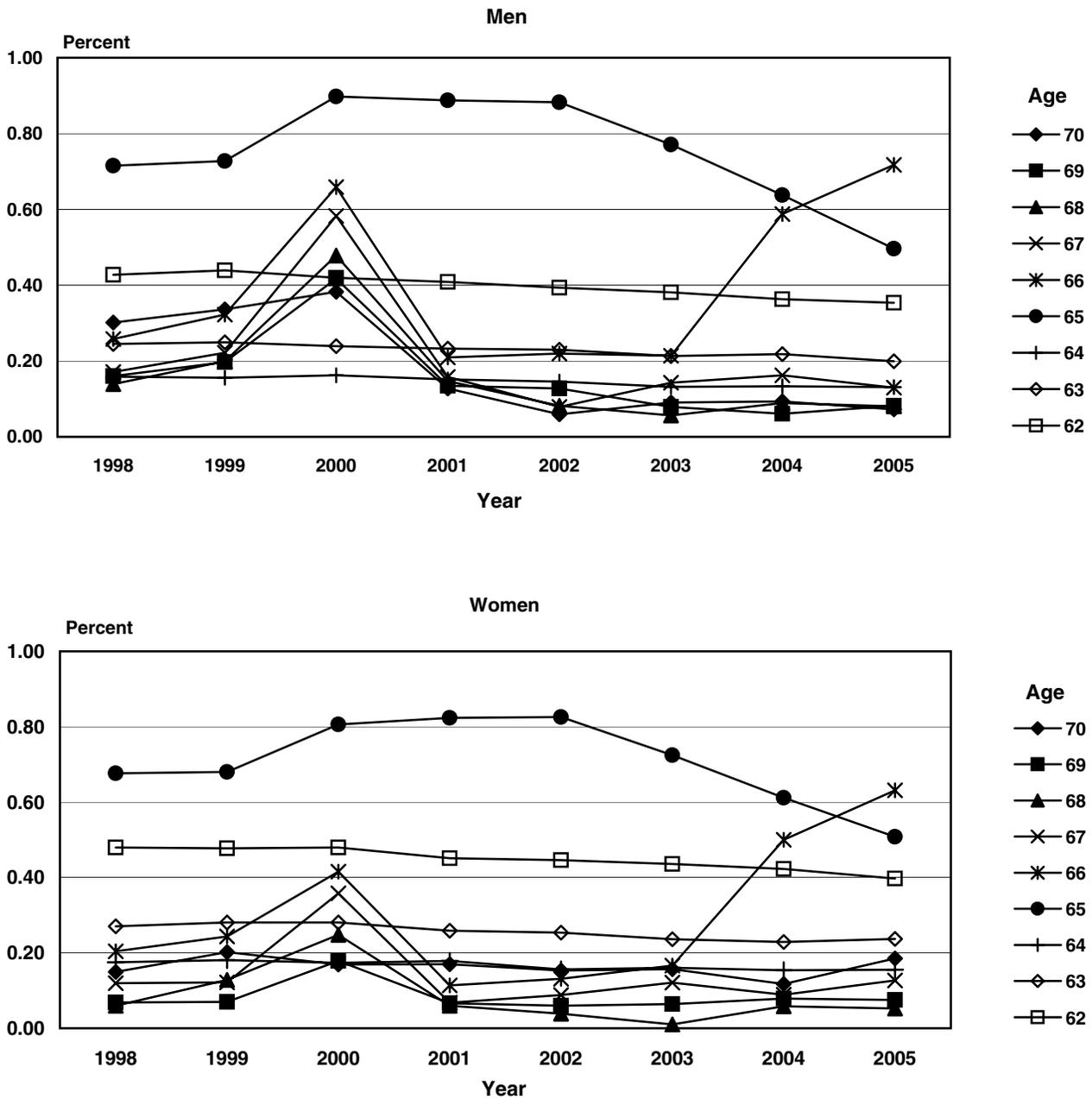
NOTE: Data represent primary beneficiaries who were fully insured at age 60.

**Table 3.**  
**Number and percentage of persons who become entitled in each year, 1998–2005, by birth year and sex**

| Birth year   | 1998   |        | 1999   |        | 2000   |        | 2001   |        | 2002   |        | 2003   |        | 2004   |        | 2005   |        |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|  | Men    | Women  |
| 1928   | 75     | 47     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 1929   | 47     | 20     | 81     | 54     |        |        |        |        |        |        |        |        |        |        |        |        |
| 1930   | 56     | 23     | 67     | 25     | 103    | 54     |        |        |        |        |        |        |        |        |        |        |
| 1931   | 83     | 47     | 79     | 43     | 132    | 51     | 23     | 39     |        |        |        |        |        |        |        |        |
| 1932   | 158    | 99     | 100    | 46     | 165    | 81     | 24     | 16     | 9      | 34     |        |        |        |        |        |        |
| 1933   | 1,806  | 1,083  | 230    | 107    | 276    | 116    | 29     | 12     | 21     | 11     | 13     | 27     |        |        |        |        |
| 1934   | 498    | 357    | 1,894  | 1,108  | 459    | 181    | 37     | 17     | 16     | 9      | 14     | 14     |        |        |        |        |
| 1935   | 1,097  | 813    | 523    | 381    | 2,515  | 1,345  | 58     | 28     | 17     | 19     | 11     | 2      |        |        |        |        |
| 1936   | 3,456  | 3,008  | 1,138  | 863    | 550    | 370    | 2,491  | 1,416  | 68     | 30     | 34     | 24     |        |        |        |        |
| 1937   |        |        | 3,546  | 3,152  | 1,073  | 912    | 511    | 401    | 2,509  | 1,478  | 69     | 39     |        |        |        |        |
| 1938   |        |        |        |        | 3,566  | 3,377  | 1,137  | 899    | 541    | 390    | 2,430  | 1,487  | 419    | 239    | 38     | 30     |
| 1939   |        |        |        |        |        |        | 3,507  | 3,105  | 1,155  | 910    | 507    | 418    | 2,111  | 1,309  | 853    | 479    |
| 1940   |        |        |        |        |        |        |        |        | 3,536  | 3,308  | 1,151  | 931    | 559    | 450    | 1,795  | 1,233  |
| 1941   |        |        |        |        |        |        |        |        |        |        | 3,530  | 3,436  | 1,232  | 978    | 577    | 498    |
| 1942   |        |        |        |        |        |        |        |        |        |        |        |        | 3,882  | 3,862  | 1,347  | 1,213  |
| 1943   |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 3,982  | 3,732  |
| <b>Percentage fully insured but not entitled at the beginning of each year</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 1928   | 0.3012 | 0.1492 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 1929   | 0.1604 | 0.0683 | 0.3361 | 0.2022 |        |        |        |        |        |        |        |        |        |        |        |        |
| 1930   | 0.1393 | 0.0599 | 0.1971 | 0.0702 | 0.3829 | 0.1688 |        |        |        |        |        |        |        |        |        |        |
| 1931   | 0.1711 | 0.1199 | 0.1990 | 0.1280 | 0.4177 | 0.1783 | 0.1278 | 0.1696 |        |        |        |        |        |        |        |        |
| 1932   | 0.2577 | 0.2041 | 0.2217 | 0.1217 | 0.4783 | 0.2477 | 0.1348 | 0.0664 | 0.0596 | 0.1532 | 0.0909 | 0.1570 |        |        |        |        |
| 1933   | 0.7152 | 0.6760 | 0.3226 | 0.2432 | 0.5823 | 0.3580 | 0.1472 | 0.0594 | 0.1273 | 0.0595 | 0.0791 | 0.0639 |        |        |        |        |
| 1934   | 0.1591 | 0.1747 | 0.7273 | 0.6798 | 0.6585 | 0.4151 | 0.1581 | 0.0680 | 0.0821 | 0.0388 | 0.0564 | 0.0103 |        |        |        |        |
| 1935   | 0.2450 | 0.2705 | 0.1561 | 0.1807 | 0.8976 | 0.8059 | 0.2094 | 0.1134 | 0.0787 | 0.0880 | 0.0564 | 0.0103 |        |        |        |        |
| 1936   | 0.4277 | 0.4794 | 0.2491 | 0.2808 | 0.1623 | 0.1732 | 0.8874 | 0.8237 | 0.2194 | 0.1310 | 0.1429 | 0.1212 |        |        |        |        |
| 1937   |        |        | 0.4389 | 0.4775 | 0.2395 | 0.2807 | 0.1513 | 0.1782 | 0.8825 | 0.8257 | 0.2136 | 0.1660 |        |        |        |        |
| 1938   |        |        |        |        | 0.4196 | 0.4795 | 0.2326 | 0.2589 | 0.1457 | 0.1563 | 0.7712 | 0.7243 |        |        |        |        |
| 1939   |        |        |        |        |        |        | 0.4086 | 0.4509 | 0.2298 | 0.2536 | 0.1318 | 0.1603 |        |        |        |        |
| 1940   |        |        |        |        |        |        |        |        | 0.3932 | 0.4462 | 0.2133 | 0.2359 |        |        |        |        |
| 1941   |        |        |        |        |        |        |        |        |        |        | 0.3813 | 0.4358 |        |        |        |        |
| 1942   |        |        |        |        |        |        |        |        |        |        |        |        | 0.2180 | 0.2290 | 0.1311 | 0.1554 |
| 1943   |        |        |        |        |        |        |        |        |        |        |        |        | 0.3631 | 0.4224 | 0.1996 | 0.2370 |
|  |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 0.3536 | 0.3976 |

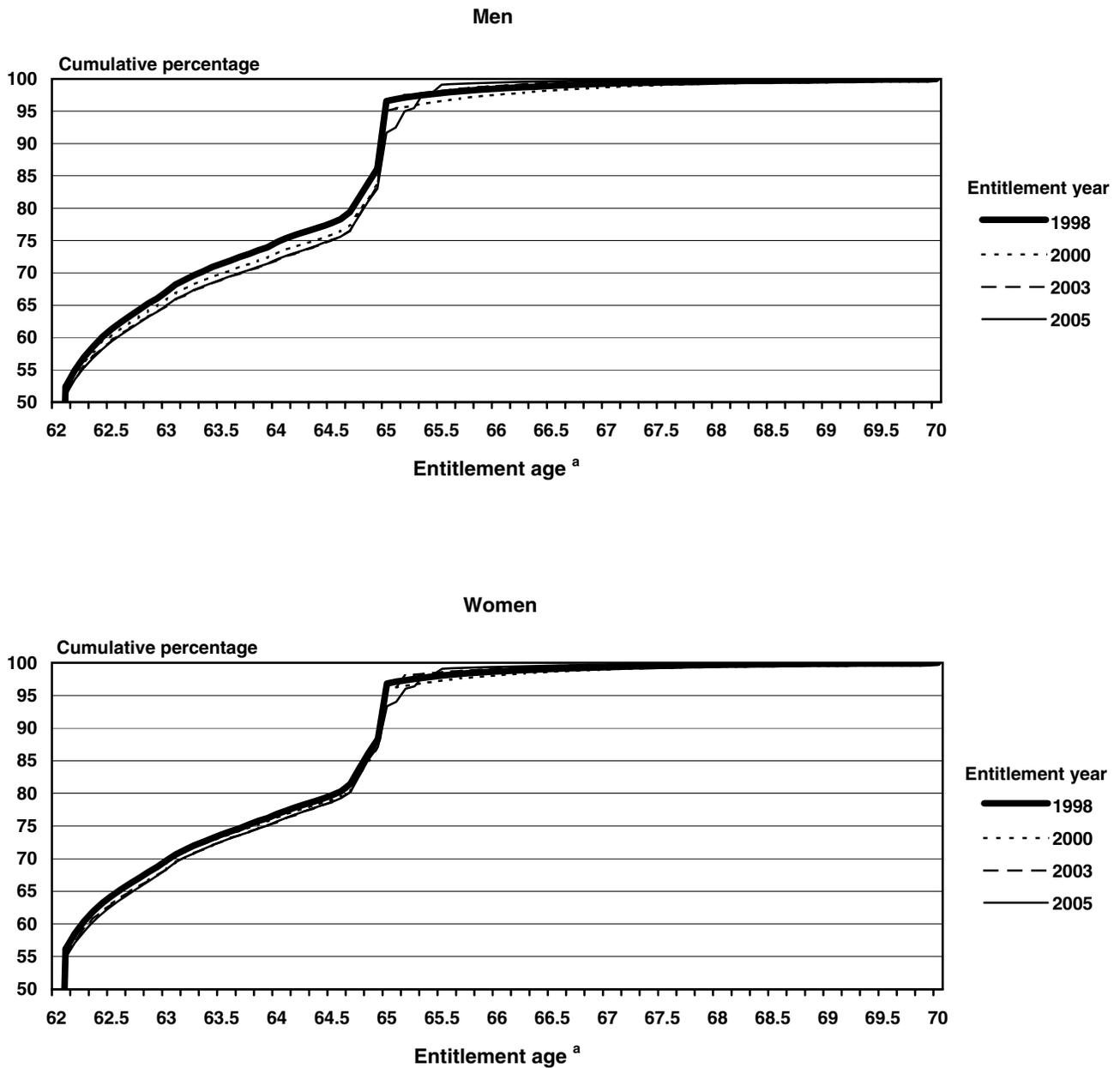
SOURCE: Authors' tabulations using active and inactive files of the Continuous Work History Sample, 2004; 1 percent Master Beneficiary Record extract based on Claim Account Number, and 1 percent Master Beneficiary Record extract based on Beneficiary Own Account Number for December 1999–2005 and June 2006.

**Chart 4.**  
**Entitlement hazard: Percentage newly entitled, 1998–2005, by sex and age**



SOURCE: Authors' tabulations using active and inactive files of the Continuous Work History Sample, 2004; 1 percent Master Beneficiary Record extract based on Claim Account Number; and 1 percent Master Beneficiary Record extract based on Beneficiary Own Account Number for December 1999–2005 and June 2006.

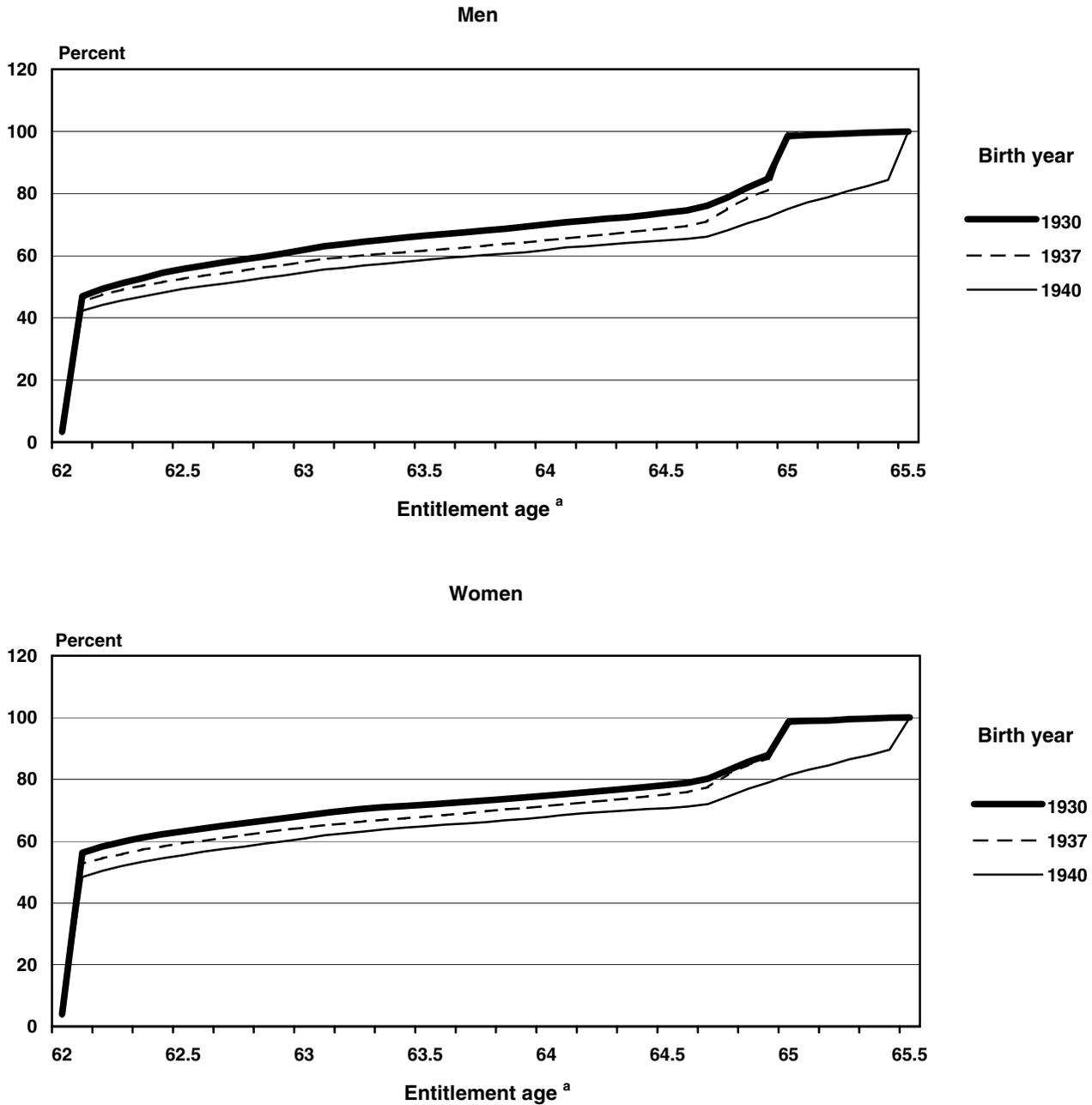
**Chart 5.**  
**Cumulative percentage distribution of entitlement age, by sex and entitlement year**



SOURCE: Authors' tabulations using active and inactive files of the Continuous Work History Sample, 2004; 1 percent Master Beneficiary Record extract based on Claim Account Number; and 1 percent Master Beneficiary Record extract based on Beneficiary Own Account Number for December 1999–2005 and June 2006.

a. Entitlement age is measured in 2-month increments; the notation "62.5" = 62 years and 6 months.

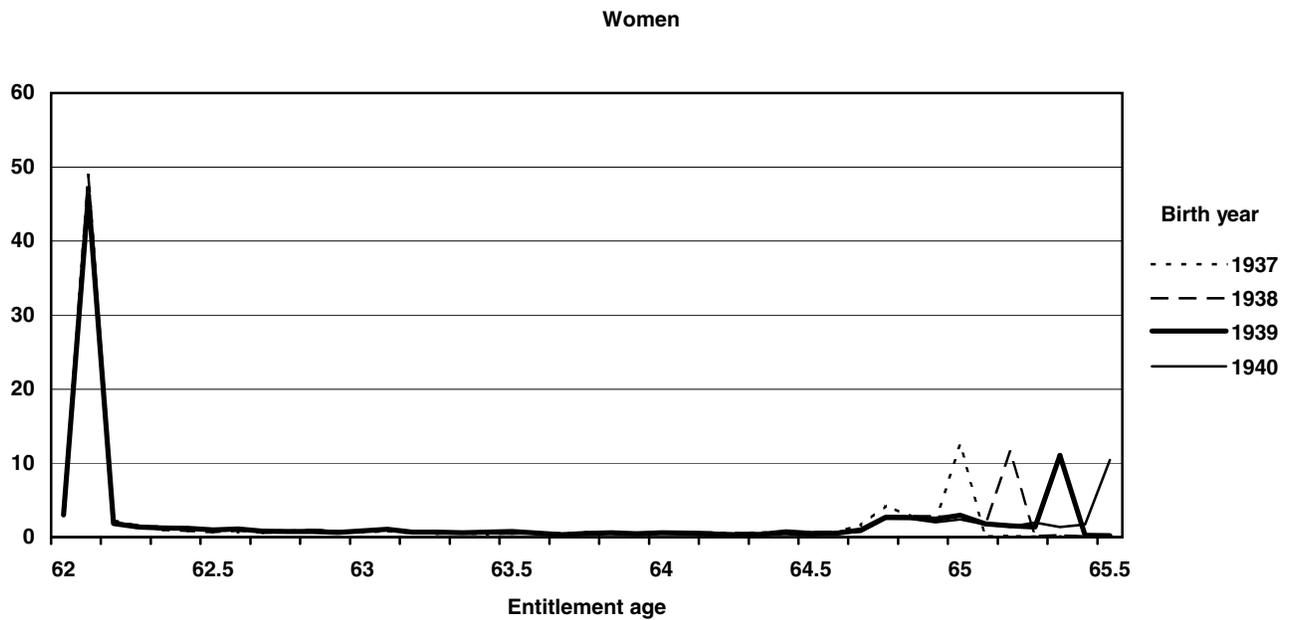
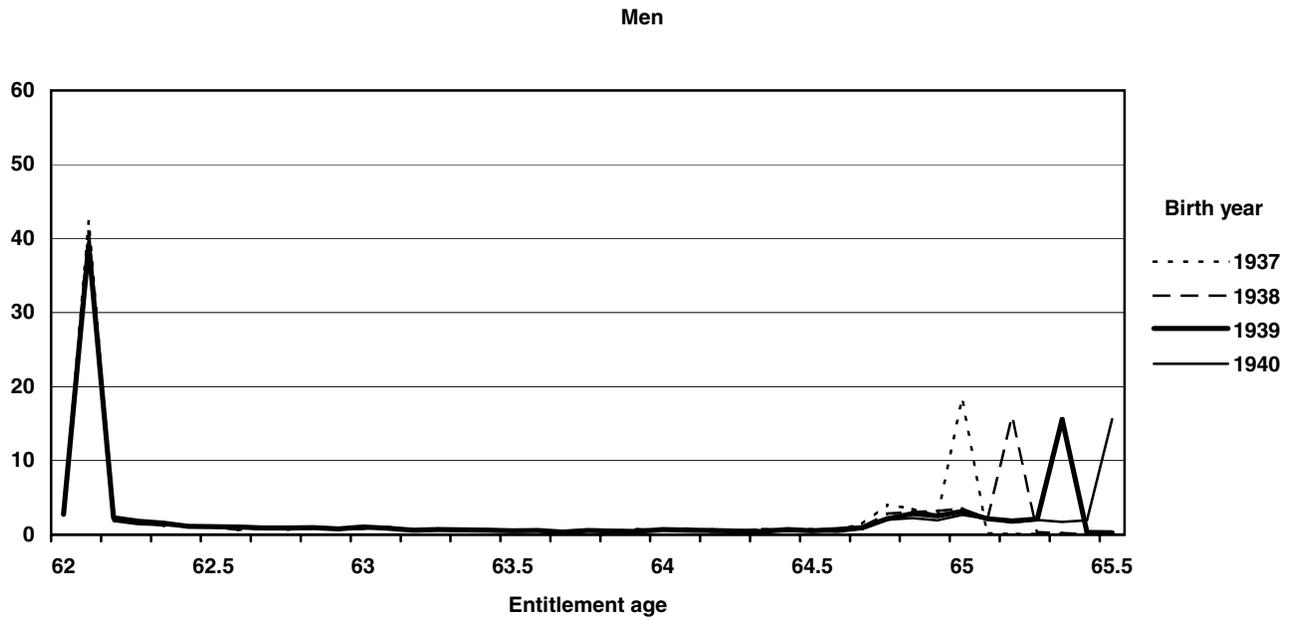
**Chart 6.**  
**Percentage distribution of fully insured men and women, by entitlement age, sex, and birth year**



SOURCE: Authors' tabulations using active and inactive files of the Continuous Work History Sample, 2004; 1 percent Master Beneficiary Record extract based on Claim Account Number; and 1 percent Master Beneficiary Record extract based on Beneficiary Own Account Number for December 1999–2005 and June 2006.

a. Entitlement age is measured in 2-month increments; the notation "62.5" = 62 years and 6 months.

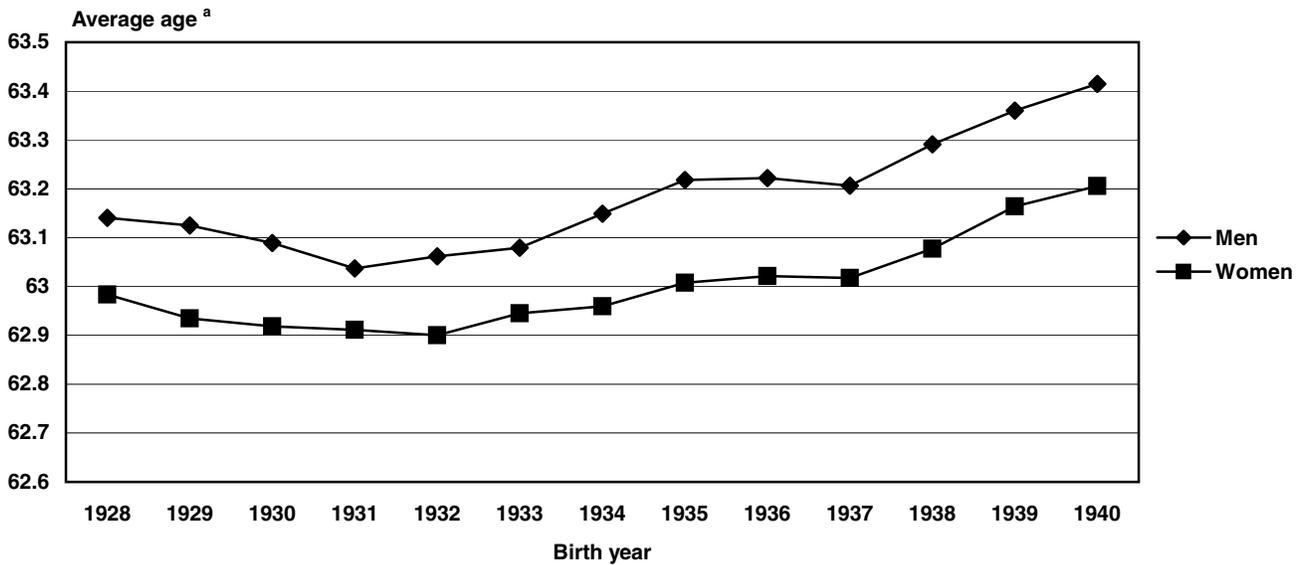
**Chart 7.**  
**Entitlement age distribution, by sex and birth year**



SOURCE: Authors' tabulations using active and inactive files of the Continuous Work History Sample, 2004; 1 percent Master Beneficiary Record extract based on Claim Account Number; and 1 percent Master Beneficiary Record extract based on Beneficiary Own Account Number for December 1999–2005 and June 2006.

a. Entitlement age is measured in 2-month increments; the notation "62.5" = 62 years and 6 months.

**Chart 8.**  
**Average age at entitlement, by sex and birth year**



SOURCE: Authors' tabulations using active and inactive files of the Continuous Work History Sample, 2004; 1 percent MBR extract based on Claim Account Number; and 1 percent MBR extract based on Beneficiary Own Account Number for December 1999–2005 and June 2006.

a. Average age at entitlement shown in years and months and measured in 1-month increments.

Cumulative distributions by year of entitlement in Chart 5 show the percentage of fully insured people who have claimed benefits as of a specific age in each year 1997–2005. Here we choose the age range from 62 to 70 because the percentage of those who become entitled by age 70 tends to be stable before and after the rule changes (Table 2). Several interesting aspects are evident. First, the distribution of males shifts more than that of females, suggesting again that males are more responsive to the rule changes than females. Second, in the years following the earnings test removal, the curves shift downward for ages 62–65. They jump up at age 65 and then exhibit a stair-step incline as the FRA rises, indicating that the removal of the earnings test somewhat affects the benefit entitlement age for those who are younger than the FRA. Third, gradual downward shifts in the curves in the segment for those at entitlement age 65 or older appear to be a result of the gradual increase in the FRA for those who are born in 1938 or later. Fourth, the curves of 2000 through 2005, particularly for those at the segment younger than the entitlement age 65, are tightly packed, perhaps reflecting both the additional benefit reduction as the FRA increases and the absence of an earnings test starting at the FRA.

Sorting out the economic effects of the benefit reductions from the signaling or institutional role of the FRA is a difficult task, but Chart 6 may offer some clues. The chart shows the proportion of men and women among the cohorts born in 1930, 1937, and 1940 who become entitled to retirement benefits at 2-month intervals between ages 62 and 65 and 6 months. The 1937 birth cohort was not affected by the change in the full retirement age. About 42 percent of men in that cohort and 59 percent of women claimed benefits at age 62, the early retirement age. That percentage dropped slightly following the increase in the FRA, to about 40 percent of men and 45 percent of women in the 1940 cohort. The percentage of people who claim benefits after age 62 and a few months before the FRA stays relatively stable at about 1 percent at each age. Benefit reductions alone affect people who retire before age 65, so the drop in the percentage who claim before age 65 largely reflects that benefit reduction.

As shown in Chart 7, more dramatic changes are evident in the entitlement age distribution. In the 1937 cohort, about 18 percent of men and 12 percent of women claimed benefits at age 65, the FRA for that cohort. As the FRA moved out by 2 months per year

for the 1938, 1939, and 1940 cohorts, the spike at the FRA moved out as well. About 16 percent of men and 10 percent of women became entitled to benefits at 65 and 6 months, the relevant FRA for the 1940 cohort. People who previously would have claimed benefits at age 65 but waited until their new, higher FRA were probably responding to a combination of the benefit reduction and the signaling aspect of the Social Security retirement age. It is also possible that the “full” retirement age in integrated private pension plans influenced the age at claiming Social Security benefits. Further investigation will help identify those two effects more clearly.

The changing distribution of entitlement ages also affects the average age at entitlement, a simple summary measure that may be useful to both researchers and policymakers. Chart 8 shows the average entitlement age for men and women by birth year, 1928–1940. For comparison purposes, we calculate the average only for those who have become entitled at ages 62 through 65 and 6 months. The average entitlement age for both men and women increased as the FRA rose, starting with those born in 1938 or later. Also suggested is that for every 2-month increase in the FRA, the average entitlement age has increased by approximately 0.65 to 1 month for men and 0.5 to 1 month for women. Increases in the average age at entitlement for those born in 1935 or later were probably caused by the influx of benefit claiming at the FRA following the removal of the earnings test.

### ***Regression Analysis of Benefit Entitlement Status at Specific Ages***

In this study, the range of age groups affected by the law changes differs over the study period. For example, those affected only by the earnings test removal in 2000 reach ages 65–70 in 2000, but the group affected only by the earnings test removal in 2005 reaches ages 68–70 in 2005. Persons reaching age 65 and 6 months through age 67 in 2005 are affected by both the earnings test removal and the gradual increase in the FRA. Further, those affected by the gradual increase in the FRA in 2000 turn age 62 in 2000, but the affected group in 2002 reaches ages 62–64 in that year. Therefore, estimating a single regression equation based on stacked (repeated) cross-sectional data cannot clearly identify the effects of the rule changes.

Instead, we estimate the effect of rule changes on the probability of benefit entitlement at specific ages using a probit regression method. The dependent variable is binary: 1 if the person is entitled to Old-Age

benefits in the reference year; and 0 if the person is not entitled to benefits in that year. The regression equation takes a standard difference-in-difference form:

$$y_{it}^j = a + g\Delta_t + h\Delta^j + \beta\Delta_t^j + c'X_i + e_{it}^j,$$

where  $y$  is the dependent variable that equals 1 when the person is entitled in year  $t$  and 0 when the person is not entitled in year  $t$ ;  $\Delta$ s are dummy variables indicating the type of rule change affecting different age groups in different years; index  $j$  takes the value 0 or  $J$ , where  $J$  indicates the  $j$ th treatment group and 0 indicates the control group; time index  $t$  equals entitled year (2000, 2001, 2002, 2003, 2004, and 2005); and  $X$  is a vector of the individual’s characteristics, such as race and sex. Effects of the earnings test removal and the increase in the FRA are identified by the  $\beta$ s that are the coefficients on the year- and age-specific treatment dummies. Because the probability of benefit entitlement monotonically increases as age rises, one cannot estimate all  $\beta$ s with one regression. Thus, we further subdivide the affected group into 7 subgroups according to their ages (Chart 2). We then estimate the effect of the rule changes in the 7 separate regressions, using the age 71–72 group as the control group. For example, the first regression includes those who reach ages 68–70 in each reference year as treatment group 1 and those who reach ages 71–72 as the control group. Similarly, the seventh regression includes those who reach age 62 as the treatment group and those who reach ages 71–72 as the control group.

Persons aged 71–72 appear to be an excellent control group for the analysis. As previously seen in Table 2 and Chart 3, observed (cumulative) benefit entitlement rates at ages 70 or older are largely independent of the two rule changes. The rule changes affect the shape of the age distribution at entitlement between ages 62 and the FRA (or age 70), but probably not the cumulative probability of entitlement at ages 71 and 72.<sup>12</sup>

In Table 4, we report estimates of the marginal effects on the probability of entitlement of year- and age-specific treatment dummies for men and women separately. Including year- and age-specific treatment dummies rather than only age-specific treatment dummies allows us to investigate the dynamics of benefit claiming at specific ages over the 2000–2005 period.

Both the direction and the magnitude of the estimated effects accord with our expectations. For men aged 68 to 70, we estimate that benefit entitlement in 2000–2005 rises approximately 1 percentage point as a result of the earnings test removal in 2000. The effects

**Table 4.**  
**Marginal effects on benefit entitlement, by age and sex**

| Year             | Policy effect        | Men             |                | Women           |                |
|------------------|----------------------|-----------------|----------------|-----------------|----------------|
|                  |                      | Marginal effect | Standard error | Marginal effect | Standard error |
| <b>Age 68–70</b> |                      |                 |                |                 |                |
| 2000             | RET                  | 0.0112          | 0.0019         | 0.0063          | 0.0032         |
| 2001             | RET                  | 0.0137          | 0.0020         | 0.0117          | 0.0035         |
| 2002             | RET                  | 0.0138          | 0.0021         | 0.0083          | 0.0035         |
| 2003             | RET                  | 0.0112          | 0.0022         | 0.0106          | 0.0032         |
| 2004             | RET                  | 0.0093          | 0.0022         | 0.0097          | 0.0032         |
| 2005             | RET                  | 0.0066          | 0.0023         | 0.0120          | 0.0031         |
| <b>Age 67</b>    |                      |                 |                |                 |                |
| 2000             | RET                  | 0.0275          | 0.0027         | 0.0109          | 0.0035         |
| 2001             | RET                  | 0.0290          | 0.0027         | 0.0147          | 0.0037         |
| 2002             | RET                  | 0.0280          | 0.0028         | 0.0161          | 0.0038         |
| 2003             | RET                  | 0.0259          | 0.0029         | 0.0115          | 0.0040         |
| 2004             | RET                  | 0.0211          | 0.0031         | 0.0132          | 0.0038         |
| 2005             | RET & FRA (2 months) | 0.0148          | 0.0033         | 0.0165          | 0.0035         |
| <b>Age 66</b>    |                      |                 |                |                 |                |
| 2000             | RET                  | 0.0320          | 0.0024         | 0.0144          | 0.0034         |
| 2001             | RET                  | 0.0358          | 0.0023         | 0.0191          | 0.0034         |
| 2002             | RET                  | 0.0322          | 0.0025         | 0.0145          | 0.0037         |
| 2003             | RET                  | 0.0268          | 0.0028         | 0.0143          | 0.0039         |
| 2004             | RET & FRA (2 months) | 0.0221          | 0.0030         | 0.0175          | 0.0038         |
| 2005             | RET & FRA (4 months) | 0.0145          | 0.0033         | 0.0070          | 0.0039         |
| <b>Age 65</b>    |                      |                 |                |                 |                |
| 2000             | RET                  | 0.0460          | 0.0022         | 0.0239          | 0.0032         |
| 2001             | RET                  | 0.0436          | 0.0023         | 0.0216          | 0.0034         |
| 2002             | RET                  | 0.0391          | 0.0025         | 0.0218          | 0.0034         |
| 2003             | RET & FRA (2 months) | -0.0032         | 0.0040         | 0.0045          | 0.0041         |
| 2004             | RET & FRA (4 months) | -0.0593         | 0.0055         | -0.0291         | 0.0053         |
| 2005             | RET & FRA (6 months) | -0.1251         | 0.0069         | -0.0544         | 0.0059         |

(Continued)

are a bit larger for those who are aged 66, but they are still less than 3 percentage points for men and less than 2 percentage points for women. In 2005, estimated effects are smaller for men and women aged 66 and 67, suggesting that the FRA rule change offsets the effect from the earnings test rule change. For those age 65 in 2000–2002, the change in the earnings test rule increases benefit entitlement by slightly more than 3 percentage points for men and by slightly more than 2 percentage points for women. The FRA becomes the dominant rule change in 2004 and 2005, however, as the estimated marginal effect for those aged 65 turns negative and as large as 12.5 percentage points for men and 5.4 percentage points for women in 2005.

Estimated policy effects for persons aged 64 in 2000–2001 and those aged 63 in 2000 are small and, for the most part, statistically insignificant. Such

results are plausible because those age groups are not affected directly by the two rule changes (see Chart 2). Yet estimated effects are all negative and quite large for persons aged 62–64 in other years. A 4-month increase in the FRA results in declines in benefit entitlement rates for men of 1.7, 2.4, and 3.7 percentage points at ages 62, 63, and 64, respectively. For women the declines are 1.5, 2.2, and 2.7 percentage points at ages 62, 63, and 64, respectively. Following the 6-month increase in the FRA, rates for men decline by 3.3, 4.4, and 5.2 percentage points at ages 62, 63, and 64, respectively, and 2.1, 3.3, and 3.5 percentage points for women at those same ages. Those estimates suggest that a relatively large response occurs at age 62 and relatively small but incremental responses at ages 63 and 64.

**Table 4.**  
**Continued**

| Year          | Policy effect   | Men             |                | Women           |                |
|---------------|-----------------|-----------------|----------------|-----------------|----------------|
|               |                 | Marginal effect | Standard error | Marginal effect | Standard error |
| <b>Age 64</b> |                 |                 |                |                 |                |
| 2000          | None            | -0.0039         | 0.0043         | -0.0023         | 0.0043         |
| 2001          | None            | -0.0060         | 0.0045         | 0.0001          | 0.0044         |
| 2002          | FRA (2 months)  | -0.0207         | 0.0048         | -0.0089         | 0.0046         |
| 2003          | FRA (4 months)  | -0.0372         | 0.0052         | -0.0265         | 0.0050         |
| 2004          | FRA (6 months)  | -0.0524         | 0.0055         | -0.0346         | 0.0054         |
| 2005          | FRA (8 months)  | -0.0636         | 0.0058         | -0.0458         | 0.0057         |
| <b>Age 63</b> |                 |                 |                |                 |                |
| 2000          | None            | -0.0017         | 0.0045         | -0.0017         | 0.0044         |
| 2001          | FRA (2 months)  | -0.0120         | 0.0049         | -0.0033         | 0.0046         |
| 2002          | FRA (4 months)  | -0.0239         | 0.0051         | -0.0222         | 0.0051         |
| 2003          | FRA (6 months)  | -0.0443         | 0.0055         | -0.0328         | 0.0053         |
| 2004          | FRA (8 months)  | -0.0540         | 0.0057         | -0.0449         | 0.0055         |
| 2005          | FRA (10 months) | -0.0771         | 0.0060         | -0.0503         | 0.0057         |
| <b>Age 62</b> |                 |                 |                |                 |                |
| 2000          | FRA (2 months)  | -0.0098         | 0.0051         | 0.0016          | 0.0048         |
| 2001          | FRA (4 months)  | -0.0168         | 0.0055         | -0.0149         | 0.0054         |
| 2002          | FRA (6 months)  | -0.0334         | 0.0058         | -0.0209         | 0.0055         |
| 2003          | FRA (8 months)  | -0.0502         | 0.0061         | -0.0360         | 0.0058         |
| 2004          | FRA (10 months) | -0.0697         | 0.0063         | -0.0466         | 0.0058         |
| 2005          | FRA (12 months) | -0.0850         | 0.0065         | -0.0726         | 0.0063         |

SOURCE: Authors' tabulations using active and inactive files of the Continuous Work History Sample, 2004; 1 percent Master Beneficiary Record extract based on Claim Account Number; and 1 percent Master Beneficiary Record extract based on Beneficiary Own Account Number for December 1999–2005 and June 2006.

NOTES: The dependent variable is binary: 1 if entitled by the end of each year; 0 if not entitled by the end of each year. The sample includes those who are fully insured at age 60.

RET = retirement earnings test; FRA = full retirement age.

Following the gradual increase in the FRA, policy-makers have asked whether people who are younger than the FRA would change their behavior. Our results show that the largest response occurs among those who are at the early retirement age of 62. Additional small but statistically significant responses are detected at ages 63 and 64 as well.

Estimates reported in Table 5 show how the two rule changes have affected the benefit entitlement hazard. As seen in Chart 4, among those who have reached the FRA a dramatic increase in the entitlement hazard occurs right after the earnings test rule change. The estimated marginal effects in 2000 for those aged 66 or older range from 18 (ages 68–70) to 29 (age 65) percentage points for men and 10 (ages 68–70) to 22 (age 65) percentage points for women. In the succeeding years the marginal effects are small and insignificant except for those at age 65. As expected,

the entitlement hazard also increases significantly for those aged 66, rising 19 and 33 percentage points for men in 2004 and 2005, respectively, and 14 and 26 percentage points for women. Persons born in November–December 1938 reach the FRA (65 years and 2 months) in 2004, and those born in September–December 1939 reach the FRA (65 and 4 months) in 2005.

Effects of the earnings test removal in 2000 are reflected in estimates of the entitlement hazard for those aged 65 in 2000–2002. Estimated marginal effects in 2000–2002 are approximately 26 percent to 29 percent for men and 21 percent to 24 percent for women. Starting in 2003, that age group is affected not only by the earnings test removal but also by the gradual increase in the FRA. The estimated marginal effect at age 65 is small and statistically insignificant in 2003 but negative and statistically significant in

**Table 5.**  
**Marginal effects on benefit entitlement hazard, by age and sex**

| Year             | Policy effect        | Men             |                | Women           |                |
|------------------|----------------------|-----------------|----------------|-----------------|----------------|
|                  |                      | Marginal effect | Standard error | Marginal effect | Standard error |
| <b>Age 68–70</b> |                      |                 |                |                 |                |
| 2000             | RET                  | 0.1791          | 0.0393         | 0.0985          | 0.0301         |
| 2001             | RET                  | -0.0262         | 0.0146         | -0.0008         | 0.0160         |
| 2002             | RET                  | -0.0409         | 0.0126         | 0.0000          | 0.0171         |
| 2003             | RET                  | -0.0592         | 0.0082         | -0.0235         | 0.0120         |
| 2004             | RET                  | -0.0627         | 0.0072         | -0.0262         | 0.0112         |
| 2005             | RET                  | -0.0622         | 0.0075         | -0.0137         | 0.0140         |
| <b>Age 67</b>    |                      |                 |                |                 |                |
| 2000             | RET                  | 0.2987          | 0.0506         | 0.1893          | 0.0448         |
| 2001             | RET                  | -0.0082         | 0.0173         | -0.0203         | 0.0113         |
| 2002             | RET                  | -0.0366         | 0.0114         | -0.0055         | 0.0160         |
| 2003             | RET                  | -0.0229         | 0.0138         | -0.0021         | 0.0163         |
| 2004             | RET                  | -0.0253         | 0.0128         | -0.0235         | 0.0104         |
| 2005             | RET & FRA (2 months) | -0.0339         | 0.0108         | -0.0055         | 0.0148         |
| <b>Age 66</b>    |                      |                 |                |                 |                |
| 2000             | RET                  | 0.3715          | 0.0524         | 0.1708          | 0.0446         |
| 2001             | RET                  | -0.0357         | 0.0282         | -0.0486         | 0.0152         |
| 2002             | RET                  | -0.0159         | 0.0318         | -0.0326         | 0.0195         |
| 2003             | RET                  | -0.0494         | 0.0254         | -0.0328         | 0.0186         |
| 2004             | RET & FRA (2 months) | 0.1897          | 0.0450         | 0.1428          | 0.0400         |
| 2005             | RET & FRA (4 months) | 0.3254          | 0.0478         | 0.2605          | 0.0465         |
| <b>Age 65</b>    |                      |                 |                |                 |                |
| 2000             | RET                  | 0.2871          | 0.0331         | 0.2248          | 0.0474         |
| 2001             | RET                  | 0.2455          | 0.0346         | 0.2112          | 0.0453         |
| 2002             | RET                  | 0.2577          | 0.0354         | 0.2381          | 0.0464         |
| 2003             | RET & FRA (2 months) | 0.0560          | 0.0453         | 0.0460          | 0.0482         |
| 2004             | RET & FRA (4 months) | -0.1415         | 0.0464         | -0.1178         | 0.0441         |
| 2005             | RET & FRA (6 months) | -0.2676         | 0.0446         | -0.1981         | 0.0413         |

(Continued)

both 2004 and 2005, indicating that the effects of the gradual increase in the FRA dominate in those years. Estimated marginal effects in 2000–2003 are relatively small for those younger than age 65. However, the marginal effects for those aged 62–64 in 2004 and 2005 are negative, relatively large, and statistically significant.

We can easily derive elasticity estimates of interest from the estimates reported in Table 4. If all else remains constant, we know the percentage change in benefit amounts for all age/year groups affected by the gradual increase in the FRA. We can calculate the elasticity of benefit entitlement probability with respect to benefit amounts using our estimates on percentage changes in benefit entitlement probability by age/year group. The derived elasticity at age 64 ranges from

1.3 to 1.7 for men and from 0.7 to 1.1 for women. At age 62 it ranges from 0.8 to 1.3 for men and 0.7 to 1.2 for women. The larger elasticity at age 64 than at age 62 is plausible because the estimated effects at age 64 cumulate the effects at ages 62, 63, and 64.

### **Concluding Remarks**

This article investigates benefit-claiming behavior among fully insured males and females following the removal of the retirement earnings test in 2000 and the gradual increase in the full retirement age for persons who turn age 65 starting in 2003. Although results presented in this article are based on fairly rudimentary before-and-after analysis and reduced form difference-in-difference analysis, we find that significant responses occur in the age at entitlement around the

**Table 5.**  
**Continued**

| Year          | Policy effect   | Men             |                | Women           |                |
|---------------|-----------------|-----------------|----------------|-----------------|----------------|
|               |                 | Marginal effect | Standard error | Marginal effect | Standard error |
| <b>Age 64</b> |                 |                 |                |                 |                |
| 2000          | None            | 0.0421          | 0.0292         | 0.0339          | 0.0293         |
| 2001          | None            | 0.0086          | 0.0240         | 0.0144          | 0.0254         |
| 2002          | FRA (2 months)  | 0.0169          | 0.0260         | 0.0095          | 0.0260         |
| 2003          | FRA (4 months)  | -0.0242         | 0.0205         | -0.0168         | 0.0221         |
| 2004          | FRA (6 months)  | -0.0412         | 0.0183         | -0.0406         | 0.0190         |
| 2005          | FRA (8 months)  | -0.0359         | 0.0194         | -0.0323         | 0.0205         |
| <b>Age 63</b> |                 |                 |                |                 |                |
| 2000          | None            | 0.0431          | 0.0366         | 0.0559          | 0.0386         |
| 2001          | FRA (2 months)  | 0.0058          | 0.0315         | 0.0046          | 0.0325         |
| 2002          | FRA (4 months)  | 0.0211          | 0.0344         | 0.0181          | 0.0352         |
| 2003          | FRA (6 months)  | -0.0337         | 0.0287         | -0.0377         | 0.0294         |
| 2004          | FRA (8 months)  | -0.0558         | 0.0262         | -0.0690         | 0.0261         |
| 2005          | FRA (10 months) | -0.0607         | 0.0267         | -0.0531         | 0.0284         |
| <b>Age 62</b> |                 |                 |                |                 |                |
| 2000          | FRA (2 months)  | 0.0522          | 0.0468         | 0.0692          | 0.0481         |
| 2001          | FRA (4 months)  | 0.0020          | 0.0425         | 0.0009          | 0.0439         |
| 2002          | FRA (6 months)  | 0.0116          | 0.0451         | 0.0214          | 0.0468         |
| 2003          | FRA (8 months)  | -0.0545         | 0.0409         | -0.0462         | 0.0431         |
| 2004          | FRA (10 months) | -0.1087         | 0.0377         | -0.0986         | 0.0405         |
| 2005          | FRA (12 months) | -0.1033         | 0.0389         | -0.1066         | 0.0411         |

SOURCE: Authors' tabulations using active and inactive files of the Continuous Work History Sample, 2004; 1 percent Master Beneficiary Record extract based on Claim Account Number<sup>1</sup> and 1 percent Master Beneficiary Record extract based on Beneficiary Own Account Number for December 1999–2005 and June 2006.

NOTES: The dependent variable is binary: 1 if entitled by the end of each year; 0 if not entitled by the end of each year. The sample includes those who are fully insured at age 60.

RET = retirement earnings test; FRA = full retirement age.

time that those rule changes come into effect. Several key findings stand out.

- First, the largest effect of the earnings test rule change in 2000 occurs at age 65. At that age, the rate of benefit entitlement increases by more than 5 percentage points among men and 3 percentage points among women.
- Second, the removal of the earnings test significantly increases the benefit entitlement hazard by more than 20 percent for those turning the FRA.
- Finally, the response to the gradual increase in the FRA occurs not only among those who are close to the FRA but also among those who are close to their early retirement age.

## Notes

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<sup>1</sup> See Vroman (1985), Packard (1990), and Gruber and Orszag (2003).

<sup>2</sup> A number of studies have analyzed how incentives generated by Social Security program rules have affected labor supply and earnings by exploring the earnings test rule changes. Friedberg investigated three changes in earnings test rules in 1978, 1983, and 1990. Results reported in Gruber and Orszag (2003) for 1973–1998 and in Haider and Loughran (2006) for 1975–2003 are identified by all changes, including gradual increases in the test threshold in each year. Baker and Benjamin (1999) and Disney and Tanner (2002) examined the elimination of a similar earnings test in Canada and the United Kingdom. Song and Manchester (2007) examined the 2000 earnings test change using Social Security administrative data. See Krueger and Meyer (2002) for reviews of and references to other related studies.

<sup>3</sup> Examples of past studies on the removal of the earnings test in 2000 include Song (2006), Song and Manchester (2007), Haider and Loughran (2006), and Tran (2004). Duggan, Singleton, and Song (2005) studied the effects of the gradual increase in the FRA using the 1 percent Social Security administrative data, but that study focused on the effect on the rolls of the Social Security Disability Insurance program. Mastrobuoni (2006b) examines the labor supply effects of the 1983 Social Security Amendments. The budgetary impact of the earnings test removal in 2000 has been examined in Mastrobuoni (2006a).

<sup>4</sup> See Social Security Administration (2005, Table 2.A29) for a brief history of changes in the retirement earnings test.

<sup>5</sup> Note that the more moderate version of the test applied in the year a person turned age 65 even before the 2000 legislation. However, the 2000 legislation completely eliminated the test beginning with the month in which a person turns age 65 (or FRA).

<sup>6</sup> The FRA remains at 66 for those who were born from 1942 to 1954; it then gradually increases by 2 months per year starting with those who were born in 1955 until it reaches 67.

<sup>7</sup> For example, a person born in 1937 (or earlier) who claims benefits at age 62 receives 80 percent of the PIA, but a person born in 1943 who claims benefits at age 62 receives 75 percent of the PIA (see Chart 1). Thus, the increase in the FRA can be seen as reductions in benefit amounts (given all else constant) that depend on the year of birth.

<sup>8</sup> See Social Security Administration (2005, Table 2.A20) for historical DRC values.

<sup>9</sup> For further discussion of SSA administrative files, see Panis and others (2000).

<sup>10</sup> We note, however, they may be indirectly affected (for example, if the repeal of the earnings test at the FRA affected their benefit-claiming decisions before the FRA).

<sup>11</sup> Throughout the rest of this article, we define age to be reference year minus year of birth. Persons who are fully insured have enough quarters of coverage to be eligible for old-age benefits as primary beneficiaries.

<sup>12</sup> We have tried two alternative control groups: those who are not fully insured and auxiliary beneficiaries. Those results tend to overestimate effects for older age groups and underestimate effects for younger age groups.

## References

- Baker, Michael, and Dwayne Benjamin. 1999. How do retirement tests affect the labour supply of older men? *Journal of Public Economics* 71(1): 27–52.
- Disney, Richard, and Sarah Tanner. 2002. The labour supply effect of the abolition of the earnings rule for older workers in the United Kingdom. *Economic Journal* 112(478): c136–c152.
- Duggan, Mark, Perry Singleton, and Jae G. Song. 2007. Aching to retire? The rise in the full retirement age and its impact on the Social Security disability rolls. *Journal of Public Economics* 91(7–8): 1327–1350.
- Friedberg, Leora. 2000. The labor supply effects of the Social Security earnings test. *Review of Economics and Statistics* 82(1): 48–63.
- Gruber, J., and P. Orszag. 2003. Does the earnings test affect labor supply and benefit receipt? *National Tax Journal* 56: 755–773.
- Haider, S.J., and D.S. Loughran, 2006. Do the elderly respond to taxes on earnings? Evidence from the Social Security retirement earnings test. Working Paper. Available at <http://www.msu.edu/~haider/Research/haiderloughran-july06.pdf>.
- Krueger, A.B., and B.D. Meyer. 2002. Labor supply effects of social insurance. In *Handbook of public economics*, vol. 4., ed. A. Auerbach and M. Feldstein, 1–34. Amsterdam: North-Holland.
- Mastrobuoni, Giovanni. 2006a. The Social Security earnings test removal: Money saved or money spent by the trust fund? Collegio Carlo Alberto Working Paper No. 25. Available at <http://www.carloalberto.org/files/no.25.pdf>.
- . 2006b. Labor supply effects of the recent Social Security benefit cuts: Empirical estimates using cohort discontinuities. Collegio Carlo Alberto Working Paper No. 33. Available at <http://www.carloalberto.org/files/no.33.pdf>.
- Packard, Michael D. 1990. The earnings test and the short-run work response to its elimination. *Social Security Bulletin* 53(9): 2–16.
- Panis, Constantijn, Ronald Euler, Cynthia Grant, Melissa Bradley, Christine E. Peterson, Randall Hirscher, and Paul Stinberg. 2000. *SSA Program Data User's Manual*, Baltimore, MD: Social Security Administration.
- Social Security Administration. 2005. *Annual Statistical Supplement to the Social Security Bulletin, 2004*. Washington, DC: Office of Policy.

- . 2004. *Annual Statistical Supplement to the Social Security Bulletin, 2003*. Washington, DC: Office of Policy.
- Song, Jae G. 2006. Evaluating the initial impact of the elimination of the retirement earnings test. *Social Security Bulletin* 65(1): 1–15.
- Song, Jae G., and Joyce Manchester. 2007. New evidence on earnings and benefit claims following changes in the retirement earnings test in 2000. *Journal of Public Economics* 91(3–4): 669–700.
- Tran, Bac V. 2004. The impact of the repeal of the retirement earnings test on the labor supply of older workers. Unpublished manuscript, College Park, MD: Department of Economics, University of Maryland. Available at <http://www.glue.umd.edu/~btran/paper.pdf>.
- Vroman, Wayne. 1985. Some economic effects of the Social Security retirement earnings test. In *Research in labor economics*, ed. Ronald Ehrenberg, 31–89. Greenwich, CT: JAI Press.



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## ***The Never-Married in Old Age: Projections and Concerns for the Near Future***

*by Christopher R. Tamborini*

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### ***Summary and Introduction***

Understanding how marital patterns affect the Social Security program and its beneficiaries has become an important policy and academic focus. Over the past several decades, a convergence of economic, demographic, and social changes has given rise to dramatic changes in marital trends in the United States. Divorce rates surged in the 1960s and 1970s, the age of first marriage has risen, and the number of persons never marrying has increased (Ruggles 1997; Goldstein 1999; Goldstein and Kenney 2001; Kreider 2005; Harrington Meyer, Wolf, and Himes 2006). Evidence also indicates that the remarriage rate has decreased, and dissolution of second marriages has risen (Cherlin 1992; Norton and Miller 1992). Put together, these trends suggest that a rising share of unmarried people will be entering retirement age in the near future.<sup>1</sup>

A growing body of economic, sociological, and demographic research has highlighted an association between marital status and adult well-being. A moderate-to-strong relationship has been found between marital status and an individual's economic resources (Waite and Gallagher 2000; Wilmoth and Koso 2002) as well as health profile (Schoenborn 2004). However, a comparatively small amount of the literature has focused specifically on the elderly population and differences among the

unmarried elderly—individuals who have never married or are divorced or widowed—are even less examined. Among the unmarried, women who are widowed (Morgan 1992; Weaver 2002) or divorced (Weaver 1997; Butrica and Iams 2000) have received the majority of attention, while the never-married are often overlooked.

This article focuses on a growing yet understudied subgroup of the elderly in the United States: the never-married, meaning persons who have never been legally married or whose marriages ended in annulment. Its purpose is to assess how never-married persons fare during retirement—at present and as the large baby-boom generation retires.

Although never-married retirees are not typical Social Security beneficiaries, they are by no means an insignificant population. In 2003, about 4 percent of Americans aged 65 or older, or 1.4 million individuals, had never married (He and others 2005, Table 6.1). Moreover, the share of retirement-age persons who have never married is projected to increase as the baby-boom cohort reaches retirement age (Easterlin, Schaeffer, and Macunovich 1993, 508–509; Butrica and Iams 2000, Table 1; Harrington Meyer, Wolf, and Himes 2004). The Urban Institute's DYNASIM3 model, for example, predicts that never-married persons will increase to around 6 percent of the retire-

ment-age population by 2040 (Favreault and Smith 2004).

The projected growth of never-married retirees raises a number of important issues for retirement policy. Because Social Security spousal and survivor benefits are determined by marital history, changes in marital trends can have important implications for Social Security program costs and distributional outcomes among its beneficiaries.<sup>2</sup> A rise in the share of persons entering retirement as never-married would, for example, contribute to a decline in individuals eligible to receive auxiliary benefits and, correspondingly, a rise in beneficiaries receiving only retired-worker benefits (see, for example, Harrington Meyer, Wolf, and Himes 2006). Another issue relates to the economic well-being of retirees. Although Social Security reform plans have given great attention to widows because of their greater likelihood of economic insecurity in old age (Weaver 2002), the never-married may also tend to experience a heightened risk of economic hardship in retirement.

The first section of the article, based on data from the Current Population Survey and a review of the academic literature, examines the current circumstances of never-married retirees, particularly characteristics of their economic and health well-being. The next section shifts focus to the near future. Using the Social Security Administration's (SSA's) Modeling Income in the Near Term (MINT) model, demographic and economic projections of the population aged 62 or older are assessed for the years 2020, 2030, 2040, 2050, and 2060. These data are exceptionally useful for analyzing and projecting changes in the marital status composition of the population at retirement age, the demographics of future never-married retirees, and economic well-being (poverty rate, income distribution, and welfare ratio) of never-married retirees.

The results highlight important links between marital trends, Social Security, and retirement outcomes. Although the never-married represent an economically diverse group, poverty among the elderly who have never married is particularly high—more than twice the national average in 2004, four times higher than that of married persons, and greater than the poverty rates of the divorced and widowed. In addition, a review of existing studies suggests that never-married persons are more likely to have health risks during retirement that are greater than those of married persons and the national average. MINT projections indicate important changes in the marital composition of future retirees marked by a rising proportion

of never-married persons entering retirement age. Future never-married retirees, according to MINT, are expected to have the highest elderly poverty rate among marital groups.

Finally, this study calls attention to heterogeneity among the never-married elderly. At least two very different population segments exist among the never-married: one with greater than average economic resources and educational attainment and another with little economic resources and educational attainment. Thus, it may be important to look at the never-married in greater detail.

### ***Marital Status and Retirement Risks, with Emphasis on the Never-Married***

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Family structure shapes retirement experience. Research suggests that unmarried older adults are generally at a disadvantage compared with married persons, in terms of economic security but also in health areas (Lillard and Panis 1996; Wilmoth and Koso 2002; Keith 2003). In “Does Marriage Matter?” sociologist Linda Waite (1995) dubs this the marriage “advantage,” which intends to underscore the multiple benefits of marriage for adult well-being. Along this line, existing evidence indicates that marital status can influence retirement timing (Morgan 1992; Gustman and Steinmeier 2000; Pienta and Hayward 2002), the economic resources available to older adults (Butrica and Iams 2000), as well as their health condition (Lillard and Panis 1996). Marital history also determines eligibility for Social Security benefits for spouses and survivors, which can represent an important source of retirement income, especially for widowed women.

With that said, our understanding of the links between marital status and retirement outcomes remains limited. Much of the research is based on samples of the working-age population. Studies that do focus on older adults tend to lump the unmarried (widowed, divorced, and never-married) into a single category.<sup>3</sup> Evaluating the unmarried as a whole can obscure important differences between the widowed, divorced, and never-married. Important exceptions include work on widowed and divorced women (Morgan 1992; Butrica and Iams 2000; Weaver 2002).

Although frequently overlooked in policy and academic discussions, never-married retirees make up a noteworthy share of the U.S. retirement-age population (Table 1). According to U.S. census figures in 2000, around 4 percent of men and women aged 65

**Table 1.**  
**Percentage distribution of adults in the United States aged 45 or older, 2000, by age, sex,**  
**and marital status (in percent unless otherwise noted)**

| Sex and age             | Total      |         | Now-married <sup>a</sup> | Never-married | Divorced | Separated <sup>b</sup> | Widowed |
|-------------------------|------------|---------|--------------------------|---------------|----------|------------------------|---------|
|                         | Number     | Percent |                          |               |          |                        |         |
| Total 45 or older       | 96,728,811 | 100.0   | 64.6                     | 6.3           | 12.6     | 2.0                    | 14.5    |
| <b>Aged 45–64</b>       |            |         |                          |               |          |                        |         |
| Men, 45–64              | 29,994,964 | 100.0   | 74.1                     | 8.1           | 13.9     | 2.2                    | 1.7     |
| 45–54                   | 18,425,577 | 100.0   | 72.2                     | 9.7           | 14.7     | 2.4                    | 1.0     |
| 55–64                   | 11,569,387 | 100.0   | 77.0                     | 5.6           | 12.6     | 1.9                    | 2.8     |
| Women, 45–64            | 31,754,875 | 100.0   | 66.1                     | 6.8           | 17.3     | 2.8                    | 7.0     |
| 45–54                   | 19,153,032 | 100.0   | 67.1                     | 8.0           | 18.0     | 3.1                    | 3.7     |
| 55–64                   | 12,601,843 | 100.0   | 64.5                     | 5.0           | 16.3     | 2.3                    | 11.9    |
| <b>Aged 65 or older</b> |            |         |                          |               |          |                        |         |
| Men, 65 or older        | 14,382,370 | 100.0   | 73.8                     | 4.4           | 6.7      | 1.2                    | 13.9    |
| 65–74                   | 8,355,575  | 100.0   | 77.4                     | 4.6           | 8.3      | 1.4                    | 8.3     |
| 75–84                   | 4,823,419  | 100.0   | 71.9                     | 4.1           | 4.9      | 0.9                    | 18.2    |
| 85 or older             | 1,203,376  | 100.0   | 56.3                     | 4.3           | 3.3      | 0.8                    | 35.3    |
| Women, 65 or older      | 20,596,602 | 100.0   | 41.9                     | 4.3           | 7.5      | 1.0                    | 45.3    |
| 65–74                   | 10,145,574 | 100.0   | 53.7                     | 4.1           | 10.1     | 1.3                    | 30.8    |
| 75–84                   | 7,493,843  | 100.0   | 34.8                     | 4.3           | 5.8      | 0.7                    | 54.6    |
| 85 or older             | 2,957,185  | 100.0   | 19.4                     | 5.2           | 3.3      | 0.5                    | 71.6    |

SOURCE: Author's calculations using U.S. Census Bureau 2000 data, presented in Kreider and Simmons (2003), Table 1.

a. Includes spouses present and absent.

b. Includes people who were not living with their spouse because of marital discord.

or older had never married. Meanwhile, the share of never-married men and women among the 45–64 age group was roughly double (8.1 percent and 6.8 percent, respectively). Although these figures are important, they do not tell us how never-married persons fare in retirement. To begin addressing this issue, empirical evidence about the never-married is assessed across two dimensions of well-being: economic and health. Doing so provides a more complete portrait of the never-married than is typically presented in the literature.

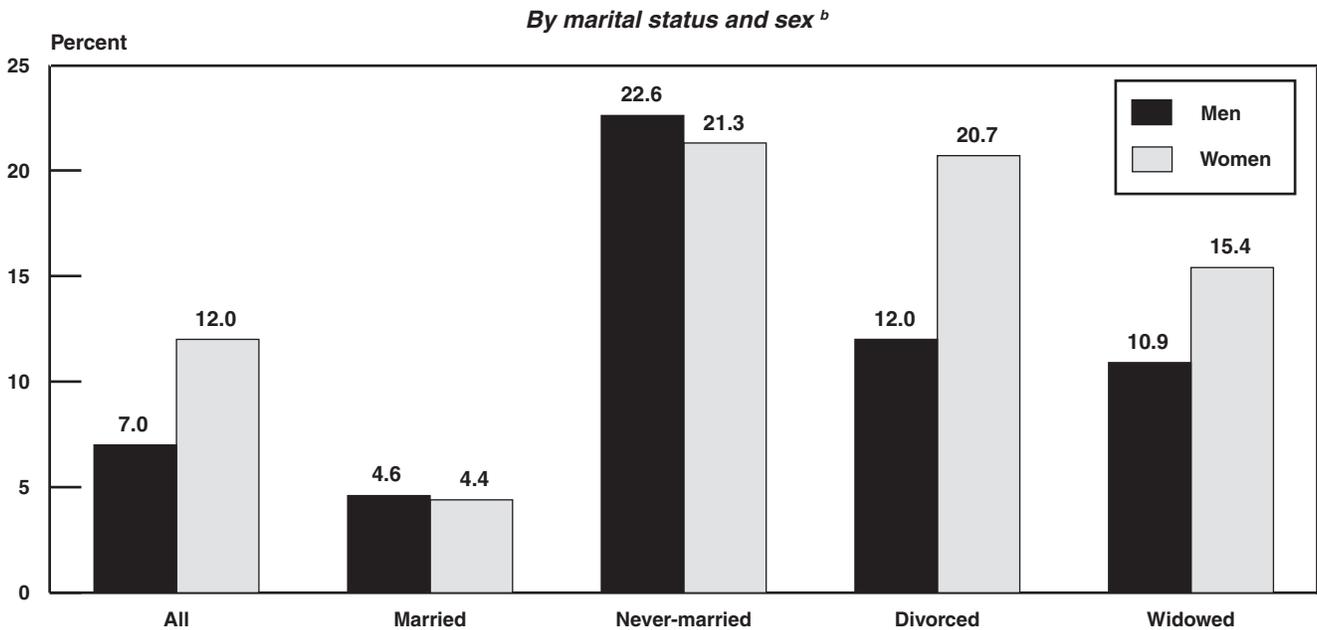
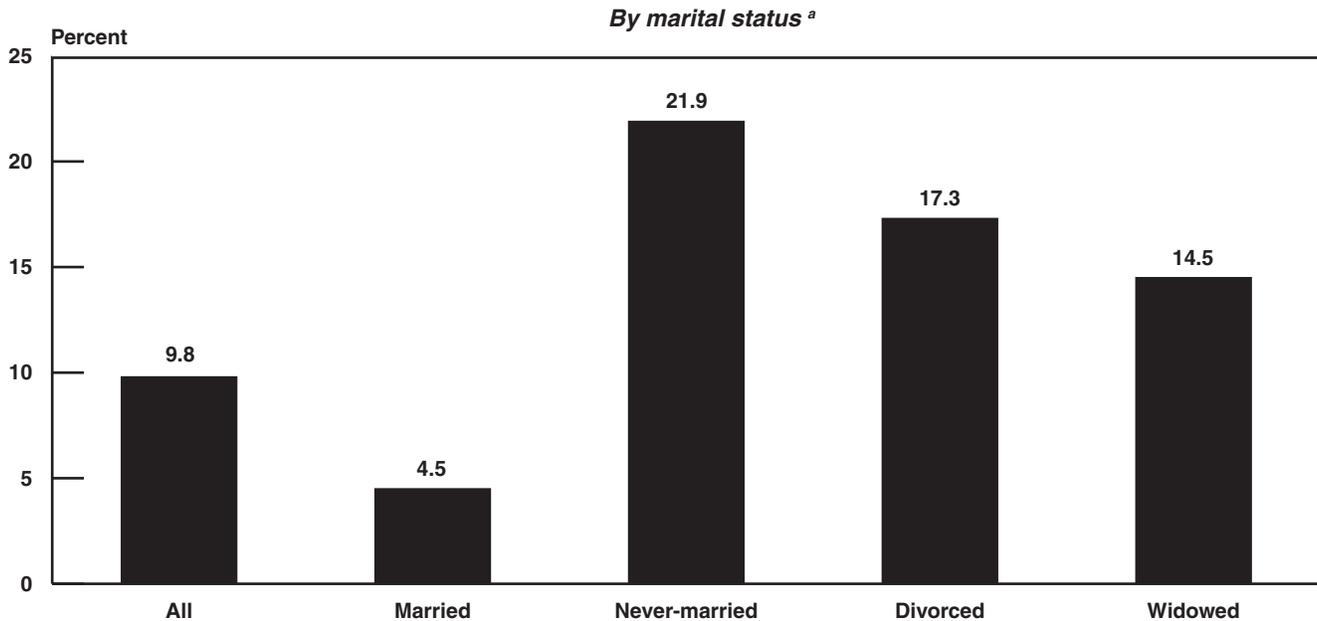
### **The Economic Dimension**

**Poverty.** Research suggests that unmarried persons are more likely to face prospects of lower income in retirement than married individuals. One telling measure of an association between marital status and economic outcomes in old age is the incidence of elderly poverty by marital group. Notably, the never-married have the largest share of persons aged 65 or older in poverty (21.9 percent) compared with 4.5 percent of married persons, 14.5 percent of widowed persons, 17.3 percent of divorced persons, and 9.8 percent

overall (Chart 1). That is to say, the elderly poverty rate among the never-married is more than four times the married rate, more than double the national average, and greater than the rates of other unmarried groups. To assess statistical differences across marital categories, a test of differences based on the square root of the sum of the squares of the standard errors was calculated. For the poverty measure, results show a statistically significant difference (at the 0.05 level) between the poverty rate of the never-married aged 65 or older and that of all other marital groups.<sup>4</sup>

Elderly poverty rates differ not only across marital subgroups but also by sex (Chart 1).<sup>5</sup> Particularly striking, the poverty rate for elderly never-married women was more than four times that of their elderly married counterparts as of 2004 (21.3 percent and 4.4 percent, respectively); and among elderly unmarried women, a larger share of never-married women experienced poverty (21.3 percent) compared with the shares of divorced (20.7 percent) and widowed (15.4 percent). Tests indicate statistically significant differences (at the 0.05 level) between never-married, widowed, and

**Chart 1.**  
**Percentage of persons aged 65 or older below the poverty line, by marital status and sex, 2004**



SOURCE: Author's calculations using data from Social Security Administration (2006b, Table 8.1). Data are based on the U.S. Census Bureau's Current Population Survey, March Supplement.

NOTES: Poverty rates are based on total income of the family—sum of total money income of all persons related by blood, marriage, or adoption and residing together—compared with official poverty thresholds of elderly families in 2004. Total money income includes all income regularly received by the family before any deductions, including wages, Social Security, Supplemental Security Income, public assistance, interest, dividends, rent, royalties, and veterans' payments. Calculations do not include nonmoney income transfers, such as food stamps, health benefits, or subsidized housing. Income refers to receipts for calendar year 2004, whereas marital status refers to the date of the survey.

Persons who are separated or married but living apart are included in "All" but are not shown separately.

- a. Population totals (in thousands) are 35,213 (All), 19,278 (Married), 1,460 (Never-married), 2,777 (Divorced), and 10,682 (Widowed).
- b. Population totals (in thousands) for men are 15,151 (All), 10,858 (Married), 670 (Never-married), 1,070 (Divorced), and 2,069 (Widowed). For women, the totals are 20,063 (All), 8,420 (Married), 790 (Never-married), 1,707 (Divorced), and 8,613 (Widowed).

married women on the poverty measure but no significant difference between never-married and divorced women. For elderly men, the never-married had the highest prevalence of poverty, at 22.6 percent—far higher than that of their married (4.6 percent) and unmarried counterparts (divorced men, 12 percent, and widowed men, 10.9 percent). These differences are statistically significant at the 0.05 level. Thus, it is not just unmarried women who are at risk of old-age poverty but also never-married men.

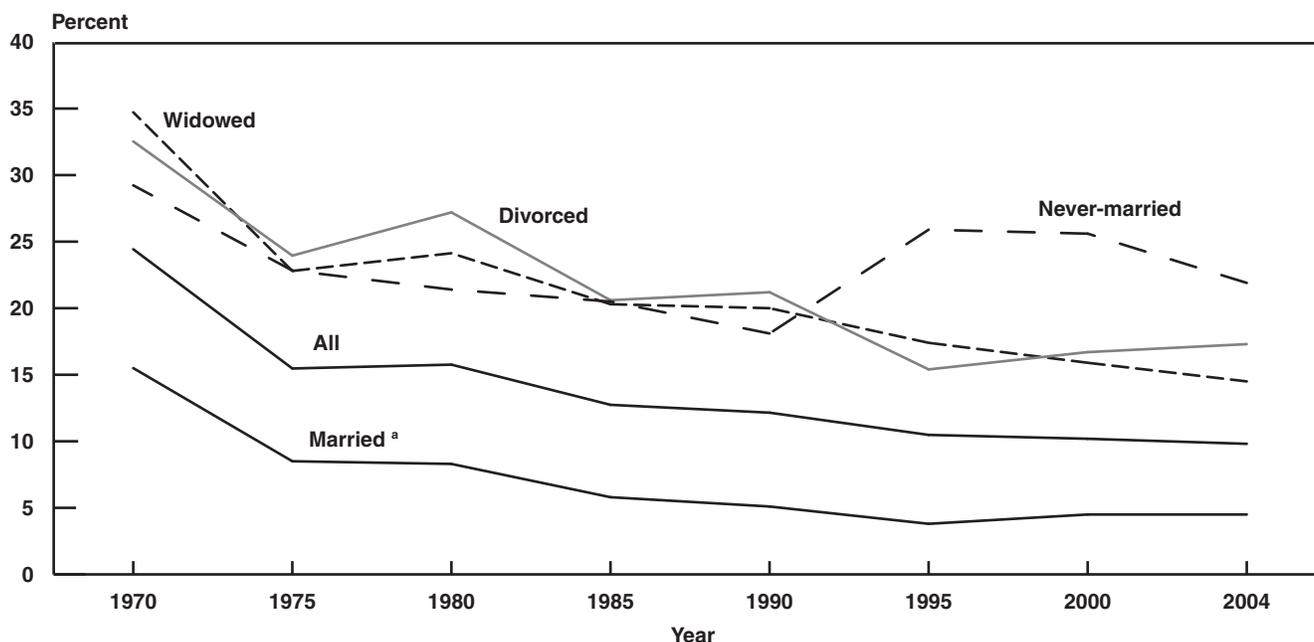
To evaluate the historical evolution of elderly poverty across marital groups, tabulations were compiled using various years of the U.S. Census Bureau's Current Population Survey, March Supplements. The results show that the overall poverty rate of the elderly fell quite dramatically from 1970 to 2004 (Chart 2). Part of this decline can be attributed to general increases in Social Security benefits during the 1970s, along with other changes in the program. Underlying the dramatic drop in poverty among widow(er)s in the 1970s, for example, was legislation that augmented the survivor benefit rate from 82.5 percent of a deceased spouse's primary insurance amount to 100 percent (Martin and Weaver 2005, 8). Another example is the rule concerning the length of marriage, which in 1977

reduced the number of years required for receipt of benefits for divorced spouses and divorced survivors from 20 years to 10 years.

At the same time, the data show that the degree of decline of elderly poverty between 1970 and 2004 differs by marital group, with the never-married rate decreasing less dramatically than those of other marital groups. For married individuals aged 65 or older, poverty decreased considerably between 1970 and 2004 (from 15.5 percent to 4.5 percent) and also fell sharply among divorced persons and widow(er)s.<sup>6</sup> The never-married elderly also witnessed a reduction in poverty during this period, but it was much less compared with that of the other groups (from 29.2 percent in 1970 to 21.9 percent in 2004). In fact, in the early 1990s, their poverty rate actually rose, which led to a change in relative poverty rates for widowed and divorced persons.

Several factors might explain the concentration of elderly poverty among unmarried groups, especially the never-married. One relates to disparities in lifetime earnings between the married and unmarried (Seigel 1993; Waite 1995; Smock, Manning, and Gupta 1999; Wilmoth and Koso 2002). Another issue pointed out by research is that marriage tends to promote econo-

**Chart 2.**  
**Poverty rates of persons aged 65 or older, by marital status, 1970–2004**



SOURCE: U.S. Census Bureau, Current Population Survey, March Supplement (1971, 1976, 1981, 1986, 1991, 1996, 2001, 2005).

a. Does not include persons who are married but living apart from their spouse.

mies of scale in household production such that the married are able to pool resources and share costs of household goods and services, lowering the overall cost of such items if secured individually. Economic models of the family also note the gains of marriage from the specialization of spouses and the division of household labor, whereby each spouse is able to focus on separate skills related to the market or domestic sectors, resulting in more efficiency (Becker 1981; Waite 1995, 493).

The institutional factors associated with marriage may also help explain poverty rates among elderly unmarried groups such as the never-married. One factor to consider is Social Security auxiliary benefits, which represent an important source of retirement income for divorced or widowed women with low lifetime earnings or intermittent employment.<sup>7</sup> Pension entitlement may be another aspect, and, not surprisingly, individuals who never married would not have access to spousal pension income during retirement. In this sense, never-married women may experience an economic disadvantage, insofar as women are either less likely to have pensions than men or more likely to have smaller pensions as a result of lower lifetime earnings (Hardy and Shuey 2000). Without access to the pension income of a spouse, never-married women may then have a greater reliance on Social Security retired-worker benefits for income support.

**Economic resources.** Although the analysis thus far has called attention to the poverty rate among never-married elderly individuals, they are not an economically homogeneous group. Table 2 indicates two distinct segments of the never-married population—one with very little economic resources and one with higher income. Thirty percent of never-married men have annual total money income below \$10,000, but 16.5 percent have an annual income that equals or exceeds \$40,000 (the corresponding percentages for never-married women are 34.9 percent and 11.3 percent).

Compared with other unmarried groups, the never-married share some similarities and exhibit some important variations on selected measures of economic welfare. The income distribution of never-married women, for example, is very similar to that of divorced women but less similar when compared with that of widowed women (the never-married have a higher incidence of both low- and high-income persons). Widowed and divorced men are decidedly less likely to have low income (that is, less than \$10,000) than

never-married men (19.1 percent and 20.2 percent, respectively, compared with 30.4 percent).

In terms of income sources at retirement age, the data again reveal similarities and differences among unmarried subgroups. The vast majority of unmarried persons aged 65 or older (75 percent to 91 percent), both men and women, reported income from a Social Security benefit. Another important source of income for the elderly was a pension or annuity, which around 25 percent of never-married men and women reported receiving. Among unmarried women, the never-married had the highest share (26 percent) with a private pension or annuity. By contrast, among unmarried men, widowers (32 percent) had the greatest proportion receiving pension income and never-married the lowest (25 percent). Also noteworthy is the comparatively high share of never-married men and women receiving Supplemental Security Income (10 percent and 9 percent, respectively).

Breakouts on annual Social Security benefits further illustrate diverse outcomes among the never-married elderly. On this point, the data suggest a relative concentration of never-married men and women with low annual Social Security benefits (less than \$4,999). At the same time, the median annual Social Security benefit for never-married women is higher than that for divorced women (widows have the highest median benefit among the three unmarried groups). Never-married men have a lower median benefit than their counterparts in the widowed and divorced groups.

### ***The Health Dimension***

The relationship between marital status and health has attracted the increasing attention of researchers (Ross, Mirowsky, and Goldstein 1990; Lillard and Panis 1996; Murphy, Glaser, and Grundy 1997; Schone and Weinick 1998; Barrett and Lynch 1999; Brown 2000; Simon 2002; Schoenborn 2004; Brown, Roebuck Bulanda, and Lee 2005; Elwert and Christakis 2006). According to research, married persons have, on average, healthier profiles than the unmarried, be they divorced, widowed, or never-married. Research has also found that married individuals live longer than unmarried persons and that never-married men have especially higher mortality rates (Goldman, Korenman, and Weinstein 1995; Lillard and Waite 1995; Rogers, Hummer, and Nam 2000; Waite and Gallagher 2000).<sup>8</sup>

Recent evidence from the National Health Interview Survey (NHIS) highlights the interplay between marital status and health in old age.<sup>9</sup> Table 3, based

**Table 2.**  
**Selected measures of economic welfare for married couples and nonmarried persons aged 65 or older,**  
**by marital group and sex, 2004 (in percent unless otherwise noted)**

| Measure   | Married<br>couples <sup>a</sup> | Never-married |        | Divorced |        | Widowed |        |
|---|---------------------------------|---------------|--------|----------|--------|---------|--------|
|   |                                 | Men           | Women  | Men      | Women  | Men     | Women  |
| Distribution by total money income <sup>b</sup> |                                 |               |        |          |        |         |        |
| Less than \$10,000                              | 4.0                             | 30.4          | 34.9   | 20.2     | 33.4   | 19.1    | 28.9   |
| \$10,000–19,999                                 | 15.3                            | 32.9          | 31.9   | 30.5     | 30.8   | 37.1    | 46.8   |
| \$20,000–39,999                                 | 38.4                            | 20.2          | 21.9   | 28.9     | 22.8   | 26.9    | 18.9   |
| \$40,000 or more                                | 42.2                            | 16.5          | 11.3   | 20.3     | 12.6   | 16.9    | 5.5    |
| Median total money income (dollars)             | 34,900                          | 15,000        | 14,400 | 19,979   | 14,335 | 18,013  | 13,003 |
| Percentage with income from specified source    |                                 |               |        |          |        |         |        |
| Retirement benefits                             | 93                              | 87            | 80     | 89       | 90     | 93      | 93     |
| Social Security <sup>c</sup>                    | 90                              | 83            | 75     | 87       | 89     | 89      | 91     |
| Benefits other than Social Security             | 51                              | 34            | 39     | 38       | 32     | 45      | 32     |
| Other public pensions                           | 18                              | 10            | 13     | 11       | 12     | 15      | 11     |
| Railroad retirement                             | 1                               | 1             | 0      | 0        | 0      | 1       | 1      |
| Government employee pensions                    | 18                              | 9             | 13     | 11       | 12     | 13      | 10     |
| Military  | 2                               | 3             | 0      | 2        | 1      | 2       | 1      |
| Federal   | 6                               | 2             | 3      | 2        | 3      | 5       | 3      |
| State or local                                  | 11                              | 5             | 9      | 6        | 9      | 7       | 6      |
| Private pensions or annuities                   | 36                              | 25            | 26     | 27       | 20     | 32      | 23     |
| Earnings <sup>d</sup>                           | 37                              | 19            | 20     | 26       | 27     | 13      | 10     |
| Income from assets                              | 67                              | 49            | 46     | 48       | 46     | 50      | 47     |
| Interest  | 64                              | 45            | 43     | 44       | 43     | 46      | 43     |
| Other income from assets                        | 35                              | 19            | 21     | 20       | 17     | 21      | 19     |
| Dividends                                       | 29                              | 15            | 17     | 14       | 13     | 17      | 14     |
| Rent or royalties                               | 12                              | 10            | 5      | 8        | 5      | 7       | 6      |
| Estates or trusts                               | 0                               | 0             | 0      | 0        | 0      | 0       | 1      |
| Public assistance                               |                                 |               |        |          |        |         |        |
| Supplemental Security Income                    | 2                               | 10            | 9      | 4        | 8      | 3       | 5      |
| Other   | 2                               | 10            | 9      | 4        | 8      | 3       | 5      |
| Veterans' benefits                              | 5                               | 7             | 0      | 6        | 1      | 6       | 3      |
| Annual Social Security benefit                  |                                 |               |        |          |        |         |        |
| Less than \$2,500                               | 1.3                             | 3.9           | 4.5    | 1.6      | 1.8    | 1.3     | 1.9    |
| \$2,500–4,999                                   | 1.8                             | 8.4           | 8.0    | 3.6      | 6.0    | 4.6     | 5.0    |
| \$5,000–9,999                                   | 8.2                             | 38.9          | 39.7   | 27.0     | 52.6   | 22.6    | 34.0   |
| \$10,000–14,999                                 | 18.3                            | 37.4          | 39.5   | 49.8     | 30.9   | 47.0    | 45.5   |
| \$15,000 or more                                | 70.5                            | 11.3          | 8.4    | 18.0     | 8.8    | 24.4    | 13.5   |
| Median annual Social Security benefit (dollars) | 18,679                          | 9,799         | 9,799  | 11,712   | 9,199  | 12,000  | 10,800 |

SOURCE: Author's tabulations based on *Income of the Population 55 or Older, 2004*, Tables 1.1, 1.9, 3.1, 3.7, 5A.2, and 5A.5.

- The age of a married couple is the age of the husband if he is 65 or older; if the husband is younger than 55 and the wife is aged 65 or older, the age of the married couple is the age of the wife.
- Total money income refers to the sum of all income received by the married couple or nonmarried person. Income sources can include any source that is regularly received such as wages, salaries, self-employment income, Social Security, Supplemental Security Income, public assistance, interest, dividends, rent royalties, pensions, and so on. Columns may not add to exactly 100 because of rounding.
- Includes retired-worker benefits, dependents' or survivors' benefits, disability benefits, transitionally insured benefits, and special age-72 benefits.
- Includes wages, salaries, and self-employment income.

**Table 3.**  
**Percentage aged 65 or older with selected health characteristics, by marital status, 1999–2002**

| Characteristic                   | All <sup>a</sup> |                | Married |                | Never-married |                | Divorced or separated |                | Widowed |                |
|----------------------------------|------------------|----------------|---------|----------------|---------------|----------------|-----------------------|----------------|---------|----------------|
|                                  | Percent          | Standard error | Percent | Standard error | Percent       | Standard error | Percent               | Standard error | Percent | Standard error |
| Limitation in <sup>b</sup> —     |                  |                |         |                |               |                |                       |                |         |                |
| Any activity <sup>c</sup>        | 35.7             | 0.44           | 28.9    | 0.53           | 40.8          | 1.73           | 41.3                  | 1.09           | 45.6    | 0.61           |
| Work activity <sup>d</sup>       | 24.7             | 0.39           | 19.9    | 0.48           | 29.6          | 1.64           | 32.4                  | 1.06           | 30.7    | 0.56           |
| ADL or IADL <sup>e</sup>         | 12.9             | 0.27           | 7.6     | 0.29           | 16.0          | 1.25           | 14.1                  | 0.79           | 21.5    | 0.51           |
| Physically inactive <sup>f</sup> | 53.1             | 0.48           | 47.7    | 0.61           | 58.3          | 1.70           | 54.1                  | 1.12           | 61.4    | 0.61           |
| Current smoker <sup>g</sup>      | 9.9              | 0.22           | 8.3     | 0.29           | 10.2          | 1.01           | 19.1                  | 0.91           | 10.0    | 0.36           |
| Overweight or obese <sup>h</sup> | 57.1             | 0.38           | 60.3    | 0.54           | 52.2          | 1.74           | 57.6                  | 1.11           | 51.8    | 0.57           |

SOURCE: National Health Interview Survey 1999–2002, reported in Schoenborn (2004), Tables 3 and 7.

- a. Includes persons "living with a partner" but not married.
- b. The Centers for Disease Control and Prevention recommends interpreting this measure of work limitation with caution because many persons aged 65 or older have left the workforce (Schoenborn 2004, 5).
- c. Limitation in any activity is based on a series of questions concerning limitations in a person's ability to engage in a variety of activities because of a physical, mental, or emotional problem, including work and school activities, activities because of a physical, mental, or emotional problem, including work and school activities, activities of daily living, instrumental activities of daily living, walking, remembering, or any other unspecified life activities.
- d. Limitation in work activity is based on the questions "Does a physical, mental, or emotional problem NOW keep you from working at a job or business?" and for persons not kept from working, "Are you (or any family members) limited in the kind or amount of work they can do because of a physical, mental, or emotional problem?"
- e. ADL represents activities of daily living. Results are based on the question "Because of a physical, mental, or emotional problem, does (person) need the help of other persons in personal care needs, such as bathing, dressing, or getting around inside the home?" IADL represents instrumental activities of daily living, such as everyday household chores, doing necessary business, shopping, or getting around for other purposes.
- f. "Physically inactive" refers to adults who engaged in no light, moderate, or vigorous leisure-time physical activity, including those who said they were unable to do such activities.
- g. "Current smoker" is a person who had ever smoked 100 cigarettes and was smoking as of the date of the interview.
- h. "Overweight or obese" is body mass index (BMI) greater than or equal to 25.

on NHIS data reported in Schoenborn (2004), shows important differences in health status, limitations, and health-risk behaviors between married and unmarried persons aged 65 or older.<sup>10</sup> Across marital groups, widow(er)s were most likely to have reported an activity limitation (46 percent), followed by the never-married (41 percent), divorced (41 percent), and the married (29 percent).<sup>11</sup> The never-married had significantly higher proportions reporting restrictions on daily activities (16 percent) and being physically inactive (58 percent) compared with the respective proportions of the married and the national average, but lower proportions than those of the widowed (21.5 percent and 61.4 percent, respectively). The divorced and separated and never-married elderly had similarities on many of the health measures, a notable exception being smoking. The divorced reported a significantly higher rate of current smokers (19 percent)

than their widowed and never-married counterparts as well as the married.<sup>12</sup>

Various arguments have been advanced to explain an association between marital status and health. One relates to *marriage protection*, which views marriage as having a protective economic, social, or psychological effect on health (Waite 1995; Rogers, Hummer, and Nam 2000). Umberson (1987), for example, argues that marriage may promote the kinds of social regulation that buffer negative health inputs, such as smoking and drinking. Using the 1987 National Medical Expenditure Survey, Schone and Weinick (1998) found that married persons of retirement age engage in less risky health behaviors than do their unmarried counterparts (see also Waite [1995, 487], for data on all-age population).<sup>13</sup>

Alternatively, the association between marital status and health may reflect *marriage selection* bias. This

argument suggests that the protective health effects of marriage are a consequence of the selection into marriage of people who are already healthy—that is, healthy people are more likely than less healthy people to marry and stay married (Goldman 1993). Although there is still much debate on the causal direction and processes mediating the effects of marital status on health (Goldman, Korenman, and Weinstein 1995), the marital status composition of the elderly is likely to influence the health and care costs of the aged.

### ***Never-Married Retirees in the Future***

To assess trends among the never-married elderly in the near future, this section turns to projection data. Analysis is based on SSA's Modeling Income in the Near Term (MINT) model. Developed by SSA's Office of Research, Evaluation, and Statistics with assistance from the Brookings Institution, the RAND Corporation, and the Urban Institute, MINT is a powerful tool for analyzing the expected economic and demographic characteristics of future retirement populations.

For birth cohorts from 1926 to 1972, MINT uses respondents to the 1990–1993 and 1996 panels of the Survey of Income and Program Participation (SIPP).<sup>14</sup> Observed data and statistically estimated parameters are then used to project wealth, income (for example, total family income and Social Security benefits), and demographic outcomes (for example, marital status and mortality) into the future.

Recently, MINT has been extended beyond its original “near term” structure to include later birth cohorts, namely, the 1973–2017 cohorts. Because these cohorts would not have reached their mid-20s by the time the SIPP panels were fielded, the Urban Institute developed special procedures to project their future circumstances. In essence, MINT respondents from the late baby-boom cohorts (1960–1964) are selected to represent these later cohorts. The selected respondents are designed to match the later cohorts on observed or projected characteristics.<sup>15</sup> A detailed discussion of the MINT-extended design is beyond the scope of this article (for a fuller discussion, see Butrica and others 2001; Toder and others 2002; Smith, Cashin, and Favreault 2005, Chapter 5), but it is important to keep in mind the greater uncertainty associated with the projections for the later cohorts. Results presented here for retirees in 2020–2030 are more reliable than those for retirees in 2040–2060.

The categories of marriage, divorce, and widowhood in MINT are based on survey responses in the SIPP panels and statistical models developed to

predict such events. Gender-specific, continuous time hazard models predict marriage formation, divorce, and remarriage (Panis and Lillard 1999). Explanatory variables include age, education, race and ethnicity, years unmarried, whether widowed, and the calendar year after 1980 to control for time trends in marriage. Statistical models and other techniques are used for mortality projections that underlie, among other things, projections of widowhood. Characteristics of current, former, and future spouses are also estimated by MINT. Individuals married at the time of the SIPP panels and projected to remain married are matched to their spouse in the survey. Characteristics of former and future spouses are imputed by MINT and then statistically assigned to a MINT observation with similar characteristics using the “nearest neighbor” method. MINT projections of income sources in retirement involve careful modeling of their determinants, most notably earnings over the lifetime. Toder and others (2002, II-10) discuss MINT's projections of earnings over the life cycle and note the ability of those projections to capture important labor market changes, such as the increased participation of women in the labor force.

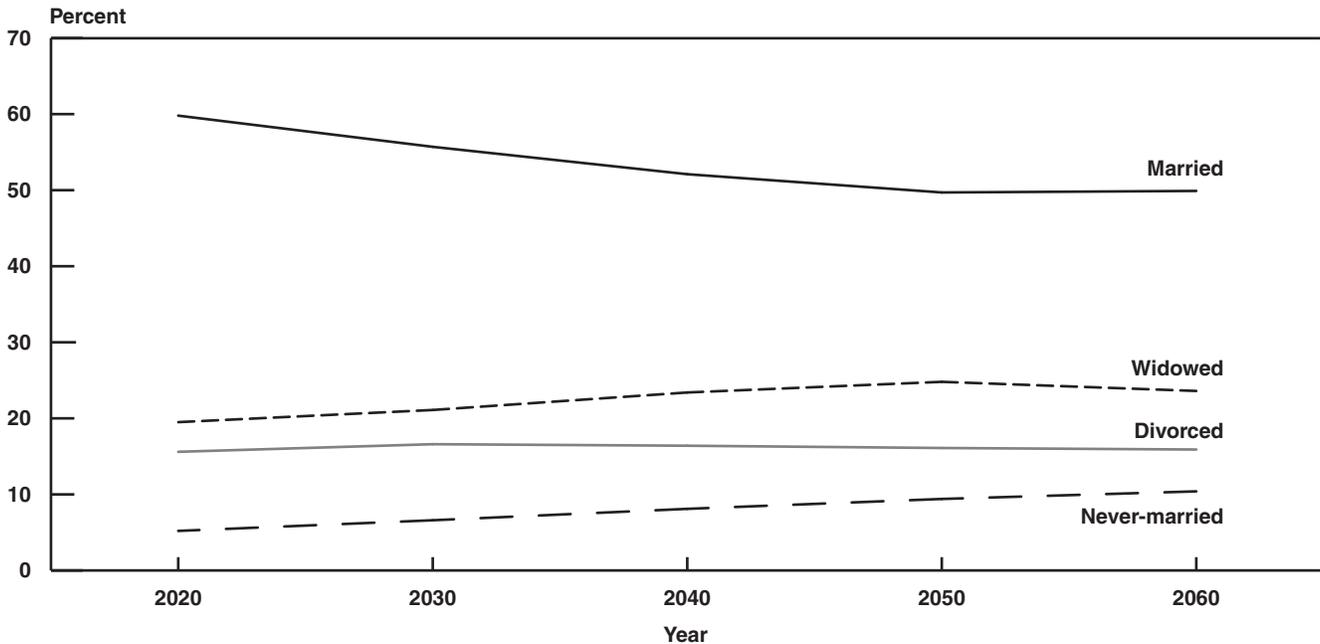
Projections in this article are restricted to persons aged 62 or older for 2020, 2030, 2040, 2050, and 2060. Analysis is organized around three particular issues:

- the projected marital status composition of future retiree populations,
- the projected demographics of the never-married group therein, and
- the projected economic well-being (for example, poverty rates, income distribution, and welfare ratios) of never-married retirees in relation to other marital groups.

### ***Projected Marital Composition and Demographics***

Consistent with demographic trends showing increases in never-married persons among younger cohorts, MINT projects a shift in the marital status composition of future retirees. This change is marked by an increasing proportion of unmarried persons aged 62 or older, namely, the never-married: 4 percent in 2020, 7 percent in 2030, and 10 percent in 2060 (Chart 3).<sup>16</sup> Put another way, in future years a smaller proportion of retirees will be in a currently married status compared with the proportion today. The share of widowed retirees is projected to increase but more slowly than

**Chart 3.**  
**Projected distribution of retirement-age persons (aged 62 or older), by marital status, 2020–2060**



SOURCE: Author's calculations using data from Modeling Income in the Near Term (MINT).

that of the never-married. Meanwhile, the proportion of divorced persons is expected to remain fairly constant, reflecting the leveling out of divorce rates over time. This picture is consistent with other models that project the marital composition of the retirement-age population in future years (see, for example, Favreault and Smith 2004).

Demographic projections offer a sharper picture of future never-married retirees (Table 4). With respect to age structure, never-married retirees are more likely to be in the youngest age group (62–69) than in the overall retirement-age population (aged 62 or older). The difference is greatest in 2020, when 59.4 percent of never-married retirees are projected to be in the youngest age group compared with 46.1 percent from the overall group. Over time, however, the difference narrows. Also notable, MINT estimates that women will account for a slightly larger proportion of future never-married retirees than of the retirement-age population (“All” in Table 4)—60 percent and 57 percent, respectively—in 2020. This pattern is expected to hold through 2060.

MINT also estimates future marital status by race and ethnicity. Results show that while the majority of future never-married retirees are expected to be white, a sizable percentage are expected to be black—21 per-

cent of the never-married population aged 62 or older in 2020 but only 9 percent of the entire population of the same age group. By 2060, the share of blacks among the never-married is expected to increase to 27 percent but to only 11.5 percent among the overall retirement-age population.<sup>17</sup> Additionally, MINT projects a rise in the share of Hispanics among the never-married and the retirement-age population as a whole because of the dramatic growth in the Hispanic population in the United States.

MINT estimates of educational attainment are also of interest. Overall, MINT projects an increasingly well-educated retirement-age population (for example, baby boomers are more likely to be college graduates and less likely to be high school dropouts than are current retirees). The diverse nature of the never-married population is evident in terms of their educational attainment as future retirees. One segment will be college educated—according to MINT, 35 percent of the never-married population aged 62 or older will have a college degree in 2020 compared with 28 percent among the general retirement-age population. This college-educated segment will be in contrast, however, to a segment of never-married high school dropouts (14 percent of the never-married in 2020 compared with 12 percent overall). Since education tends to be highly correlated with lifetime earnings, never-married

**Table 4.**  
**Projected demographic characteristics of the never-married and the total retirement-age population aged 62 or older, 2020–2060 (in percent)**

| Characteristic                         | 2020          |      | 2030          |      | 2040          |      | 2050          |      | 2060          |      |
|--|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
|  | Never-married | All  |
| <b>Age</b>                             |               |      |               |      |               |      |               |      |               |      |
| 62–69                                  | 59.4          | 46.1 | 49.0          | 37.4 | 41.3          | 31.5 | 38.3          | 32.6 | 37.6          | 33.9 |
| 70–79                                  | 29.2          | 35.5 | 36.5          | 38.5 | 37.1          | 35.8 | 33.5          | 31.2 | 32.5          | 32.6 |
| 80–89                                  | 9.8           | 14.9 | 11.9          | 18.7 | 17.5          | 23.8 | 20.3          | 23.5 | 19.3          | 20.2 |
| 90 or older                            | 1.6           | 3.4  | 2.7           | 5.4  | 4.2           | 8.9  | 8.0           | 12.7 | 10.6          | 13.3 |
| <b>Sex</b>                             |               |      |               |      |               |      |               |      |               |      |
| Male                                   | 39.8          | 43.1 | 40.4          | 41.5 | 38.4          | 40.4 | 35.5          | 40.0 | 36.2          | 40.4 |
| Female                                 | 60.2          | 56.9 | 59.6          | 58.5 | 61.6          | 59.6 | 64.5          | 60.0 | 63.8          | 59.6 |
| <b>Race and ethnicity <sup>a</sup></b> |               |      |               |      |               |      |               |      |               |      |
| Non-Hispanic                           |               |      |               |      |               |      |               |      |               |      |
| White                                  | 66.9          | 77.6 | 61.4          | 74.1 | 57.6          | 69.7 | 52.9          | 66.9 | 48.7          | 63.4 |
| Black                                  | 21.3          | 8.8  | 23.0          | 9.2  | 23.4          | 9.8  | 26.7          | 11.0 | 27.1          | 11.5 |
| Hispanic                               | 9.0           | 7.9  | 11.1          | 10.0 | 13.5          | 13.3 | 13.9          | 15.3 | 16.4          | 17.5 |
| Asian-American                         | 2.8           | 5.6  | 4.3           | 6.7  | 5.5           | 7.3  | 6.5           | 6.9  | 7.9           | 7.6  |
| <b>Education</b>                       |               |      |               |      |               |      |               |      |               |      |
| Less than high school                  | 13.8          | 12.0 | 10.8          | 10.4 | 9.4           | 9.7  | 9.8           | 9.4  | 8.3           | 9.0  |
| High school                            | 51.0          | 60.0 | 54.6          | 60.3 | 54.9          | 59.3 | 56.5          | 57.6 | 57.7          | 56.2 |
| College graduate                       | 35.2          | 28.0 | 34.6          | 29.4 | 35.7          | 31.0 | 33.7          | 33.0 | 34.0          | 34.8 |

SOURCE: Author's calculations using data from Modeling Income in the Near Term (MINT).

NOTE: The never-married samples are relatively small compared with the "All" category (those aged 62 or older), but in no case are they below 2,734 observations in MINT.

a. Race and ethnicity are based on self-identification for which respondents could select only one race category (rather than multiple categories).

retirees without a high school degree will probably represent some of the persons most likely to experience economic difficulties in retirement in the near future (the proportions of the never-married and general retiree populations without a high school degree are projected to decline from 2020 to 2060).

### **Projected Economic Well-Being**

This section examines the projected economic situation of never-married retirees using several measures: poverty rate, income distribution, and welfare ratio.

**Poverty Rates.** A decline in elderly poverty rates between 2020 and 2060 can be observed in Table 5, for the overall retirement-age population and for the marital groups. A major contribution to the decrease in elderly poverty rates in future years is the assumption that wage growth will exceed price growth, which results in greater retirement income for future retirees because Social Security benefits are indexed to wages (and because a constant saving rate produces higher real savings). This result is consistent with other research suggesting that baby boomers, as well

as younger cohorts, will experience greater absolute economic security in retirement than current retirees.

**Table 5.**  
**Projected poverty rate of retirees aged 62 or older, by marital status, 2020–2060 (in percent)**

| Marital status | 2020 | 2030 | 2040 | 2050 | 2060 |
|----------------|------|------|------|------|------|
| All            | 5.1  | 4.5  | 4.0  | 2.7  | 1.8  |
| Married        | 3.1  | 2.9  | 2.4  | 1.4  | 1.0  |
| Never-married  | 13.4 | 11.5 | 10.3 | 8.5  | 6.5  |
| Divorced       | 7.4  | 5.6  | 5.0  | 3.2  | 2.4  |
| Widowed        | 7.1  | 5.6  | 4.4  | 2.6  | 1.1  |

SOURCE: Author's calculations using data from Modeling Income in the Near Term (MINT), assuming current law and scheduled Social Security benefits.

NOTE: The poverty threshold used for each person is based on family size and elderly status and is indexed to price growth. Household income used to determine poverty status includes earnings, private pension income, income received from annuitizing assets, Social Security benefits, Supplemental Security Income benefits, and income from any nonspouse coresident.

However, the magnitude of elderly poverty is expected to continue to vary across marital groups in future years. MINT projects that the never-married will have the highest poverty rate of all other marital groups between 2020 and 2060. By 2040, the poverty rate among the never-married (10.3 percent) is projected to be about three-quarters of their rate (13.4 percent) in 2020, which approximates the percentage decline experienced by all persons aged 62 or older. Between 2040 and 2060, however, elderly poverty declines less quickly for the never-married (the rate for the never-married in 2060 is 63 percent of their 2040 rate, compared with 45 percent for all persons). This result is surprising in that the never-married, over time, are becoming a less “select” group (that is, a greater percentage of the overall population) and might be expected to have trends that mimic the broader population. Because projections for years beyond 2040 are less reliable, these latter results should be viewed with caution.

**Income Distribution and Welfare Ratios.** Measures of income distribution and welfare ratios offer further insight (Table 6). With respect to income composition, MINT projects that a relatively high share of never-married retirees will be in the lowest income quintile and that the share will increase (from around 31 percent in 2020 to 35 percent in 2060). At the same time, a substantial segment of the never-married is expected to reach the highest income distribution cutoffs (37 percent will reach the two highest income quintiles in 2020). This high-income segment of the never-married is projected, however, to decrease slightly over time.

As a final point of analysis, a welfare ratio measure was calculated for each marital group. A welfare ratio expresses the ratio of family income to household needs (set to the appropriate U.S. poverty thresholds for the elderly aged 65 or older). It is a good gauge of economic well-being because it adjusts for household size, accounts for the different needs of families, and uses the entire income distribution of the population of interest. Moreover, unlike per capita income measures, a welfare ratio uses poverty thresholds, which helps account for economies of scale by assuming that those who are married need 1.26 times more income (rather than 2 times) to live equally as well as a nonmarried person.

The data in Table 6 show that the projected median welfare ratio of the never-married will be below the national median and below that of married persons as well as that of the divorced and widowed from 2020

**Table 6.**  
**Projected measures of economic welfare for retirees aged 62 or older, by income quintile and marital status, 2020–2060**

|   | 2020 | 2030 | 2040 | 2050 | 2060 |
|---|------|------|------|------|------|
| <i>Percentage distribution of the never-married aged 62 or older, by income quintile<sup>a</sup></i>                                  |      |      |      |      |      |
| Lowest  | 30.8 | 31.2 | 31.1 | 34.0 | 35.4 |
| Second lowest   | 16.1 | 15.7 | 19.6 | 19.6 | 19.7 |
| Middle  | 16.5 | 16.6 | 15.3 | 15.0 | 14.8 |
| Second highest  | 17.4 | 18.6 | 17.1 | 17.6 | 15.8 |
| Highest   | 19.4 | 17.9 | 17.1 | 14.9 | 14.4 |
| <i>Median welfare ratio of all aged 62 or older, by marital status<sup>b</sup></i>  |      |      |      |      |      |
| All   | 4.9  | 5.2  | 5.1  | 5.8  | 6.5  |
| Married   | 5.9  | 6.2  | 5.6  | 6.6  | 7.3  |
| Never-married   | 3.3  | 3.7  | 3.7  | 3.9  | 4.2  |
| Divorced  | 3.7  | 4.0  | 4.2  | 4.9  | 5.5  |
| Widowed   | 3.6  | 4.2  | 4.5  | 5.2  | 6.2  |
| <i>Ratio of median welfare of all aged 62 or older who are divorced, widowed, or married to that of the never-married<sup>c</sup></i> |      |      |      |      |      |
| All   | 1.48 | 1.41 | 1.38 | 1.49 | 1.55 |
| Married   | 1.79 | 1.68 | 1.51 | 1.69 | 1.74 |
| Never-married   | ...  | ...  | ...  | ...  | ...  |
| Divorced  | 1.12 | 1.08 | 1.14 | 1.26 | 1.31 |
| Widowed   | 1.09 | 1.14 | 1.22 | 1.33 | 1.48 |

SOURCE: Author's calculations using data from Modeling Income in the Near Term, assuming current law and scheduled Social Security benefits.

NOTE: ... = not applicable.

- a. The income quintile cutoffs are based on all persons aged 62 or older in MINT for each analyzed year.
- b. The welfare ratio refers to the ratio of family income to U.S. poverty thresholds for the elderly. Family income used to compute a welfare ratio includes earnings, pension income, income received from annuitizing assets, Social Security benefits, Supplemental Security Income benefits, plus income from any nonspouse coresident. Imputed rent is not included in the family income measure used to determine welfare ratios.
- c. For example, the median welfare ratio of divorced to that of the never-married is 1.12.

through 2060. For example, the median family income for never-married persons aged 62 or older in 2020 is estimated to be 3.3 times the poverty threshold. By contrast, the median family income will be 5.9 times the poverty threshold for married individuals and 4.9 times the threshold for the overall median. Calculating the welfare ratio for the never-married as a

ratio of other marital groups suggests that the never-married will have, on average, proportionally less income in retirement than other marital groups. For example, expressed in relation to the never-married, the projected welfare ratio for the divorced is 1.12 in 2020—that is, 12 percent higher than that of the never-married. Likewise, MINT projects the median welfare ratio of widows to be 9 percent higher than that of the never-married in 2020 and the married a striking 79 percent higher than that of the never-married. This pattern is predicted to hold and in some cases increase through 2060, assuming that scheduled benefits are in place according to current law.

## Discussion

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It is important that policymakers have wide-ranging information about groups with a greater likelihood of economic insecurity at retirement. This article sheds light on one group of concern, the never-married. An important finding is that the vast majority of elderly Americans, regardless of marital status, live above the poverty line. In the future, the share of elderly Americans in poverty is projected to continue to decline, in part because of the increasing real value of Social Security benefits. This article demonstrates, though, that never-married elderly Americans are relatively more likely to experience economic and health difficulties, including poverty, than other marital groups.

This article also offers insight into the circumstances of future never-married retirees. MINT projects that the proportion of retirees who have never-married will rise between 2020 and 2060, suggesting that more persons retiring in the future will receive only a retired-worker benefit. Another finding is that a sizable percentage of future never-married retirees will be black, largely because of differences in the marriage rates of white and black Americans. A further issue to consider is the projected growth of the Hispanic population over the next 40 years, among the never-married and among the elderly population as a whole.

According to MINT, elderly poverty is projected to decline across all marital subgroups; however, the never-married will continue to experience a higher incidence of economic insecurity at retirement age compared with other marital groups. The never-married are expected to have both the highest poverty rate and the lowest median welfare ratio among marital groups between 2020 and 2060.<sup>18</sup> Moreover, the share of never-married elderly located at the lower end of the income distribution is projected to be relatively sizable in 2020 and on the increase. In other words, although

widows receive a great deal of attention in the Social Security debate because of their incidence of poverty, the projections for the never-married, on average, show even higher poverty rates. Such outcomes call attention to the circumstances of never-married retirees and more broadly to marital trends in relation to the Social Security program.

Heterogeneity among never-married retirees must also be recognized. Varied circumstances among never-married retirees can be observed in the distribution of income as well as in educational attainment. Around 17 percent of never-married men and 11 percent of never-married women (65 or older) reported total income of \$40,000 or more in 2004, almost half had income from assets, and around 25 percent received some income from private pensions or annuities. The future never-married elderly are projected to have a higher than average share of persons with a college degree in 2020 but also a slightly higher percentage of persons without a high school diploma. Thus, the never-married may be expected to exhibit diverse economic outcomes.

Given the looming sociodemographic changes in the retiree population as the first wave of the baby-boom cohort begins to reach retirement age, an important area of study is the relationship between family structures and retirement outcomes. Although considerable research has documented the importance of marital status on adult well-being, work specifically focused on the elderly population is more limited. This analysis demonstrates that research is needed on different categories of unmarried retirees. Finally, multivariate analysis that estimates the net effect of marital status on economic and health well-being in old age, while controlling for factors such as education level, race and ethnicity, and age, would be useful. Such focal points would help explore the retirement needs of all elderly Americans.

## Notes

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<sup>1</sup> The increasing rate of unmarried adults has been associated with various factors, including the ratio of women's earnings to men's, no-fault divorce legislation, and social and cultural factors, such as the increase in cohabitation and divorce.

<sup>2</sup> Social Security auxiliary benefits are based on a retiree's current marital status or marital history. Married individuals can qualify for a *spousal benefit* at retirement. A spousal benefit can equal 50 percent of their partner's primary insurance amount (PIA), based on the partner's earnings history. Persons divorced from a retired worker or disabled worker may also qualify for a spousal benefit, provided that they were married for at least 10 years. *Survivor benefits*, which can equal 100 percent of the worker's PIA, are based on marital history (in addition to a worker's earnings history). Reduced survivor benefits are payable to widows as early as at age 60, provided that their deceased spouse worked in employment covered by Social Security and that they have not remarried before the age of 60 (SSA 2006a).

<sup>3</sup> Most of the literature is based on U.S. data. However, recent research shows increasing interest in international comparisons. Steinsultz (2006), for example, compares the level of wealth of never-married women across Canada, Germany, Sweden, and the United States using the Luxembourg Income Study (LIS).

<sup>4</sup> See the appendix in SSA's (2006b) *Income of the Population 55 or Older, 2004*, for methods on computing standard errors and testing for differences between two sample estimates.

<sup>5</sup> Poverty rates also vary by age group (65–74, 75 or older), education, and race and ethnicity.

<sup>6</sup> The poverty rate of widow(er)s dropped from around 35 percent in 1970 (the marital group with the highest elderly poverty rate at this time) to 14.5 percent in 2004, and that of divorced persons from 32.5 percent to 17 percent. Changes have been made in the survey over time, which are discussed in some detail in U.S. Census Bureau, Current Population Reports, Series P60 (various years).

<sup>7</sup> More than 31 percent of women beneficiaries aged 62 or older in 2004 were entitled solely on the basis of a current, former, or deceased spouse (SSA 2006a, Table 5.A14). Another 28 percent were *dually entitled* to spouse or survivor benefits. Dual entitlement occurs when a person is also entitled to a worker benefit (the full worker benefit and a partial spouse or survivor benefit are paid in these cases).

<sup>8</sup> Although the marriage mortality "advantage" holds for both men and women, it is greater for men (Lillard and Panis 1996).

<sup>9</sup> The NHIS represents a major data source of health behavior and conditions of the noninstitutionalized U.S. civilian population. The survey is conducted by the National Center for Health Statistics of the Centers for Disease Control and Prevention and reflects a nationally representative sample.

<sup>10</sup> The Centers for Disease Control and Prevention recommends interpreting the work limitation measure in Table 3 with caution because many in the 65 or older group have left the workforce (Schoenborn 2004, 5).

<sup>11</sup> The never-married may be worse off than widow(er)s when controlling for age. The percentage difference between the divorced and never-married is not statistically significant (at the 0.05 level).

<sup>12</sup> Differences in the health behaviors across marital groups can be even larger among younger and middle-aged groups (Schoenborn 2004, 4).

<sup>13</sup> Rogers, Hummer, and Nam (2000) give evidence that divorced persons have the highest occurrence of morbidity and mortality and that widow(er)s' health and lifestyle behaviors are closer to those of married persons.

<sup>14</sup> SIPP is a survey of the U.S. civilian noninstitutionalized population. Because the survey design is a continuous national panel, SIPP supports both longitudinal and cross-sectional data analysis. Interviews are conducted every 4 months for 28 to 36 months. The survey provides robust information on income and wealth, labor force participation, participation in government programs, marital histories, and a host of other socioeconomic and demographic variables that allow measurement of the future costs and effectiveness of existing government programs.

<sup>15</sup> Specifically, the 1960–1964 MINT respondents serve as potential "donors" in statistical matches to respondents in the 2003 Current Population Survey (CPS) or, for the 1984–2017 cohorts, to simulated individuals in Census Bureau projections. Matching variables from the CPS include age, sex, race and ethnicity, education (less than high school, high school graduate, and college graduate), age-specific earnings, age-specific marital status, and foreign-born status. Matching variables for Census projections include only sex, race and ethnicity, and foreign-born status.

<sup>16</sup> These figures correspond with population projections from SSA's Office of the Chief Actuary (see Bell 1997, Table 21C).

<sup>17</sup> Along this line, Goldstein and Kenny (2001) approximated that among women born between 1960 and 1964, 93 percent of whites will ever marry compared with 64 percent of blacks (see also Harrington Meyer, Wolf, and Himes 2004).

<sup>18</sup> Changes in patterns of economic growth, labor force participation, and real wage growth could alter these figures.

## References

- Barrett, Anne E., and Scott M. Lynch. 1999. Caregiving networks of elderly persons: Variation by marital status. *Gerontologist* 39(6): 695–704.
- Becker, Gary S. 1981. *A treatise on the family*. Cambridge, MA: Harvard University Press.
- Bell, Felicitie C. 1997. *Social Security area population projections*. Actuarial Study No. 112. Baltimore: Social Security Administration, Office of the Chief Actuary.

- Brown, Susan. 2000. The effects of union type on psychological well-being: Depression among cohabitators versus marrieds. *Journal of Health and Social Behavior* 41(3): 241–255.
- Brown, Susan L., Jennifer Roebuck Bulanda, and Gary R. Lee. 2005. The significance of nonmarital cohabitation: Marital status and mental health benefits among middle-aged and older adults. *Journal of Gerontology Series B, Psychological and Social Sciences* 60(1): S21–S29.
- Butrica, Barbara A., and Howard M. Iams. 2000. Divorced women at retirement: Projections of economic well-being in the near future. *Social Security Bulletin* 63(3): 3–12.
- Butrica, Barbara A., Howard M. Iams, James Moore, and Mikki Waid. 2001. *Methods in Modeling Income in the Near Term (MINT)*. ORES Working Paper No. 91. Washington, DC: Social Security Administration, Office of Policy.
- Cherlin, Andrew J. 1992. *Marriage, divorce, and remarriage*, rev ed. Cambridge, MA: Harvard University Press.
- Easterlin, Richard A., Christine M. Schaeffer, and Diane J. Macunovich. 1993. Will the baby boomers be less well off than their parents? Income, wealth, and family circumstances over the life cycle in the United States. *Population and Development Review* 19(3): 497–522.
- Elwert, Felix, and Nicholas A. Christakis. 2006. Widowhood and race. *American Sociological Review* 71(1): 16–41.
- Favreault, Melissa, and Karen Smith. 2004. A primer on the Dynamic Simulation of Income Model (DYNASIM3). Discussion Papers 02-04, Urban Institute, Washington, DC.
- Goldman, Noreen. 1993. Marriage selection and mortality patterns: Inferences and fallacies. *Demography* 30(2): 189–198.
- Goldman, Noreen, Sanders Korenman, and Rachel Weinstein. 1995. Marital status and health among the elderly. *Social Science and Medicine* 40(12): 1717–1730.
- Goldstein, Joshua R. 1999. The leveling of divorce in the United States. *Demography* 36(3): 409–414.
- Goldstein, Joshua R., and Catherine T. Kenney. 2001. Marriage delayed or marriage forgone? New cohort forecasts of first marriage for U.S. women. *American Sociological Review* 66(August): 506–519.
- Gustman, Alan, and Thomas Steinmeier. 2000. Retirement in dual-career families: A structural model. *Journal of Labor Economics* 18(3): 505–545.
- Hardy, Melissa A., and Kim Shuey. 2000. Pension decisions in a changing economy: Gender, structure, and choice. *Journal of Gerontology Series B, Psychological and Social Sciences* 55(5): S271–S277.
- Harrington Meyer, Madonna, Douglas A. Wolf, and Christine L. Himes. 2004. Linking benefits to marital status: Race and diminishing access to Social Security spouse and widow benefits in the U.S. CRR Working Paper 2004-05, Center for Retirement Research at Boston College, Chestnut Hill, MA. Available at [www.bc.edu/centers/crr/papers/wp\\_2004-05.pdf](http://www.bc.edu/centers/crr/papers/wp_2004-05.pdf).
- . 2006. Declining eligibility for Social Security spouse and widow benefits in the United States? *Research on Aging* 28(2): 240–260.
- He, Wan, Manisha Sengupta, Victoria A. Velkoff, and Kimberly A. DeBarros. 2005. *65+ in the United States: 2005*. Current Population Reports, P23-209. Washington, DC: U.S. Census Bureau.
- Keith, Pat. 2003. Resources, family ties, and well-being of never-married men and women. *Journal of Gerontology Series B, Psychological and Social Sciences* 42(2): 51–75.
- Kreider, Rose M. 2005. *Number, timing, and duration of marriages and divorces: 2001*. Current Population Reports, P70-97. Washington, DC: U.S. Census Bureau.
- Kreider, Rose M., and Tavia Simmons. 2003. Marital status: 2000. Census 2000 Brief, C2KBR-30, U.S. Census Bureau, Washington, DC.
- Lillard, Lee A., and Constantijn W.A. Panis. 1996. Marital status and mortality: The role of health. *Demography* 33(3): 313–327.
- Lillard, Lee A., and Linda J. Waite. 1995. ‘Til death do us part: Marital disruption and mortality. *American Journal of Sociology* 100(5): 1131–1156.
- Martin, Patricia, and David Weaver. 2005. Social Security: A program and policy history. *Social Security Bulletin* 66(1): 1–15.
- Morgan, Leslie A. 1992. Marital status and retirement plans: Do widowhood and divorce make a difference? In *Families and retirement*, ed. Maximiliane Szinovacz, David J. Ekerdt, and Barbara H. Vinick, 114–126. Newbury Park, CA: Sage Publications.
- Murphy, Mike, Karen Glaser, and Emily Grundy. 1997. Marital status and long-term illness in Great Britain. *Journal of Marriage and the Family* 59(1): 156–164.
- Norton, Arthur J., and Louisa F. Miller. 1992. *Marriage, divorce, and remarriage in the 1990s*. Current Population Reports, Special Studies P23-180. Washington, DC: U.S. Census Bureau.
- Panis, Constantijn, and Lee Lillard. 1999. *Near-term model development part II*. Final Report, SSA Contract No. 600-96-27335. Santa Monica, CA: RAND.
- Pienta, Amy Mehraban, and Mark D. Hayward. 2002. Who expects to continue working after age 62? The retirement plans of couples. *Journal of Gerontology Series B, Psychological and Social Sciences* 57(4): S199–S208.

- Rogers, Richard G., Robert A. Hummer, and Charles B. Nam. 2000. *Living and dying in the USA*. New York: Academic Press.
- Ross, Catherine E., John Mirowsky, and Karen Goldsteen. 1990. The impact of the family on health: The decade in review. *Journal of Marriage and the Family* 52(4): 1059–1078.
- Ruggles, Steven. 1997. The rise of divorce and separation in the United States, 1880–1990. *Demography* 34(4): 455–466.
- Schoenborn, Charlotte A. 2004. Marital status and health: United States, 1999–2002. Advance Data from Vital and Health Statistics No. 351. National Center for Health Statistics, Hyattsville, MD.
- Schone, Barbara S., and Robin M. Weinick. 1998. Health-related behaviors and the benefits of marriage for elderly persons. *Gerontologist* 38(5): 618–627.
- Seigel, Jacob S. 1993. *A generation of change: A profile of America's older population*. New York: Russell Sage Foundation.
- Simon, Robin W. 2002. Revisiting the relationships among gender, marital status, and mental health. *American Journal of Sociology* 107(4): 1065–1096.
- Smith, Karen E., David B. Cashin, and Melissa M. Favreault. 2005. *Modeling Income in the Near Term 4*. Final Report, SSA Contract No. 0600-01-60123. Washington, DC: Urban Institute.
- Smock, Pamela J., Wendy D. Manning, and Sanjiv Gupta. 1999. The effect of marriage and divorce on women's economic well-being. *American Sociological Review* 64(6): 794–812.
- [SSA] Social Security Administration. 2006a. *Annual Statistical Supplement to the Social Security Bulletin, 2005*. Washington, DC: Office of Policy.
- \_\_\_\_\_. 2006b. *Income of the Population 55 or Older, 2004*. Washington, D.C.: Office of Policy.
- Steinsultz, Linda. 2006. Inequality of wealth for never married women in Canada, Germany, Sweden, and the United States. Luxembourg Income Study Working Paper No. 437. Available at <http://www.lisproject.org/publications/liswps/437.pdf>, August 20, 2007.
- Toder, Eric, Lawrence Thompson, Melissa Favreault, Richard Johnson, Kevin Pevese, Caroline Ratcliffe, Karen Smith, Cori Uccello, Timothy Waidmann, Jillian Berk, Romina Woldermariam, Gary Burtless, Claudia Sahm, and Douglas Wolf. 2002. *Modeling Income in the Near Term—Revised projections of retirement income through 2020 for the 1931–1960 birth cohorts*. Final Report, SSA Contract No. 600-96-27332. Washington, DC: Urban Institute.
- Umberson, Deborah. 1987. Family status and health behaviors: Social control as a dimension of social integration. *Journal of Health and Social Behavior* 28(3): 306–319.
- Waite, Linda J. 1995. Does marriage matter? *Demography* 32(4): 483–507.
- Waite, Linda J., and Maggie Gallagher. 2000. *The case for marriage: Why married people are happier, healthier, and better off financially*. New York: Doubleday.
- Weaver, David A. 1997. The economic well-being of Social Security beneficiaries, with an emphasis on divorced beneficiaries. *Social Security Bulletin* 60(4): 3–17.
- \_\_\_\_\_. 2002. The widow(er)'s limit provision of Social Security. *Social Security Bulletin* 64(1): 1–15.
- Wilmoth, Janet, and Gregor Koso. 2002. Does marital history matter? Marital status and wealth outcomes among preretirement adults. *Journal of Marriage and Family* 64(1): 254–269.

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# ***The Impact of the Unit of Observation on the Measurement of the Relative Importance of Social Security Benefits to the Elderly***

by T. Lynn Fisher

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## ***Introduction***

Financial adequacy in retirement largely depends on Social Security, pensions, and savings—commonly referred to as the “three-legged stool” of retirement income. Correspondingly, the elderly who receive all of their income from Social Security benefits are recognized as being economically vulnerable. *Income of the Population 55 or Older, 2004* reports that 21 percent of beneficiary aged units 65 or older received all of their income from Social Security. Other publications using the same data source as *Income of the Population 55 or Older, 2004* have produced different statistics that appear contradictory. The primary purpose of this article is to explain how the choice of the unit of observation plays a role in our perception of the relative importance of Social Security benefits for the elderly.

The unit of observation may be a person, family, marital unit, or other grouping of persons. The unit of observation is important because it performs two functions. First, it is the unit that gets counted and is the base for computing percentages. For example, consider two families—a poor family of two persons and a nonpoor family of six persons. Half of the families (one of two) are poor, but only 25 percent of the persons (two of eight) are poor. Second, the unit of observation may also dictate the boundaries for the income

being considered. A married person may have no personal income while his or her spouse does. Many would assume that spouses share income, making statistics based only on personal income undesirable when the objective is to consider the resources available. Others may want to know what income each person contributes to their unit, which would make statistics based on personal income preferred.

## ***Data and Concepts***

The Social Security Administration (SSA) has been producing two series of publications on the income of the elderly and near-elderly—*Income of the Population 55 or Older*, since 1976, and the *Income of the Aged Chartbook*, since 1990. Both series are derived from the Annual Social and Economic Supplement, also known as the March Supplement, to the Current Population Survey (CPS), conducted every March by the U.S. Census Bureau.<sup>1</sup> For comparability with data in *Income of the Population 55 or Older, 2004* (SSA 2006), this article uses data on 2004 income from the March 2005 Supplement to the CPS.<sup>2</sup>

Research about the income of the elderly often asks one of two types of questions: what income do elderly persons *provide* for themselves and those they live with, and what income is *available as a resource* for the elderly? Different units of observation can be

useful for answering one question or the other but also can be misleading if an unsuitable unit is chosen.

Statistics for *persons* are based solely on the income and demographic attributes (age, sex, race, or Hispanic origin) of each person; no spousal or other family income is included. Statistics on person income provide information on the resources an aged person contributes to his or her living unit. These statistics do not necessarily answer questions on the resources available to an aged person.<sup>3</sup>

Statistics for the *family income of persons* are also based on the demographic attributes (age, sex, race, or Hispanic origin) of each person. Total income from all family members (related through blood, marriage, or adoption) is treated as another attribute of the person. If any person in the family has income from a specific source, the aged person is considered to be in a recipient family. These statistics are designed to answer questions on the resources available to an aged person.

Statistics for *aged units* treat each marital unit (married couple or nonmarried individual) as one unit.<sup>4</sup> A nonmarried individual has only his or her own income and demographic attributes. In SSA's two data series (cited earlier), aged units classified as "65 or older" are defined as follows:

- nonmarried persons 65 or older, or
- married couples in which either
  - the husband is 65 or older, or
  - the husband is younger than 55 and the wife is 65 or older.<sup>5</sup>

All other demographic characteristics for a married couple, including the sample statistical weight, are that of the husband. Income for the married couple is the sum of both spouses' income; if either spouse has income from a specific source, the married couple is considered to be a recipient unit. The aged unit focuses

on the income of the aged, whether they live with other family members or not, while still recognizing married couples as economic units that share resources (Fisher 2005).

Statistics on aged-unit income are intended to be flexible enough to answer a variety of questions, but with a couple of qualifications. First, unlike person statistics in which each person counts as a unit, aged-unit statistics treat each married couple as one unit and each nonmarried person as one unit. Interpreting aged-unit statistics in the same way as person statistics will emphasize the economic well-being of nonmarried persons relative to that of married persons. Second, aged-unit statistics exclude the income of other family members, which may not provide a complete picture of the resources available to the unit.

Table 1 illustrates the differences across units for median total money income. Median income is higher for aged units than it is for aged persons because aged-unit income includes the combined income of two persons for married couples. Median family income of persons 65 or older is higher still because it includes income from all family members, not just a spouse. The number of units is the same for persons and family income of persons because only the attribute of interest (person versus family income) has changed. The number of aged units is lower than that for persons because a married couple is counted as one unit, not two persons.

### ***The Unit of Observation and the Relative Importance of Social Security***

The choice of unit of observation and the choice of whose income to include as a resource have large effects on the estimation of the sources and amounts of income available to the elderly. Tables on the relative importance of Social Security in *Income of the Popula-*

**Table 1.**  
**Median income, by unit of observation, 2004**

|                             | Persons<br>65 or older | Aged units<br>65 or older | Family income<br>of persons<br>65 or older |
|-----------------------------|------------------------|---------------------------|--|
| Median income (dollars)     | 14,710                 | 20,481                    | 28,698                                     |
| Number of units (thousands) | 35,213                 | 26,865                    | 35,213                                     |

SOURCES: Social Security Administration; author's calculations using the March 2005 Supplement to the Current Population Survey.

NOTE: Standard errors can be computed using data from U.S. Census Bureau (2005).

tion 55 or Older and *Income of the Aged* have reported statistics for aged units. In addition to being a unit of observation, the aged-unit designation in this article bounds the resources being considered as income received by the individual or couple and excludes income from other, nonspouse family members.

As a point of comparison, official poverty statistics are calculated for persons on the basis of family income. The poverty statistic compares a person's total family income to a poverty threshold on the basis of the number and ages of persons in the family. If the same methodology were used for the reliance measure, a person would be considered 100 percent reliant on Social Security if all of his or her family's income came from Social Security. This differs from the current measure based on the aged unit in two ways: (1) the aged unit excludes income from family members other than a spouse (resource bounds); and (2) the aged-unit definition counts a married couple as one unit, just as a nonmarried person counts as one unit (unit of observation).

To illustrate the importance of the unit of observation, consider the following example based on three elderly persons (Table 2). Alice receives all of her income from Social Security benefits, while Bob and Cindy receive other income in addition to their Social Security benefits. If the person is the unit of observation and the income basis, then 33.3 percent of the elderly are 100 percent reliant on Social Security benefits. If the aged unit is the unit of observation and the income basis, the 100 percent reliance on Social Security statistic changes according to marital status:

- If all three persons are not married, then one of three units (33.3 percent) is completely reliant on Social Security (Example A);

- If Alice and Bob are married, then no units (0 percent) are completely reliant on Social Security (Example B); or,
- If Bob and Cindy are married, then one of two units (50.0 percent) is completely reliant on Social Security (Example C).

Finally, as illustrated in Examples D and E, if the person is the unit of observation and the family is the income basis, scenarios in which Alice is a relative of Bob or Cindy results in a 0 percent rate of complete reliance on Social Security; if Alice is a one-person family, the rate of complete reliance on Social Security is 33.3 percent.

In this example, the difference between the two measures with the person as the unit of observation comes solely from what income basis is considered. Comparing the cases for the aged unit in which all persons were nonmarried with the case in which only the completely reliant individual (Alice) was unmarried illustrates how counting a married couple as one unit places emphasis on the economic resources of nonmarried persons.

Using the aged unit as a unit of observation also requires additional choices as to which spouse's characteristics are attributed to a married unit. In *Income of the Population 55 or Older*, the aged unit's race and ethnicity are the husband's race and ethnicity. The age of the married unit is the husband's age, unless the husband is under age 55, in which case the married unit's age is the wife's age. Also, the sample weight applied to the married aged unit is the husband's sample weight. Finally, a considerable number of spouses differ in age; men in particular are more likely to marry a younger woman, as shown by the estimate

**Table 2.**  
**Example of relative importance of Social Security benefits, by unit of observation and income basis (in percent)**

| Example   | Person income of person | Aged-unit income of aged unit | Family income of person |
|---|-------------------------|-------------------------------|-------------------------|
| A. Alice, Bob, and Cindy are not married and are not family members | 33.3                    | 33.3                          | 33.3                    |
| B. Alice and Bob are married; Cindy is not married                  | 33.3                    | 0                             | 0                       |
| C. Bob and Cindy are married; Alice is not married                  | 33.3                    | 50.0                          | 33.3                    |
| D. Alice and Bob are a nonspouse family; all are not married        | 33.3                    | 33.3                          | 0                       |
| E. Bob and Cindy are married; Alice is a nonspouse family member    | 33.3                    | 50.0                          | 0                       |

SOURCE: Social Security Administration; author's calculations.

NOTE: Alice receives all of her income from Social Security benefits. Bob and Cindy receive other income in addition to their Social Security benefits.

**Table 3.**  
**Receipt of income of persons or units aged 65 or older, by marital status and sex, 2004**

|                              | All persons | Married |       | Nonmarried |        | Married couples | All aged units |
|------------------------------|-------------|---------|-------|------------|--------|-----------------|----------------|
|                              |             | Men     | Women | Men        | Women  |                 |                |
| Number (thousands)           | 35,213      | 10,858  | 8,420 | 4,292      | 11,643 | 10,930          | 26,865         |
| Percent with—                |             |         |       |            |        |                 |                |
| Earnings                     | 18.0        | 25.1    | 15.7  | 17.9       | 13.1   | 36.9            | 23.5           |
| Retirement benefits          | 91.0        | 92.1    | 90.2  | 90.5       | 90.9   | 93.1            | 91.7           |
| Social Security              | 88.2        | 88.1    | 87.8  | 87.3       | 88.8   | 90.1            | 89.1           |
| Public pensions              | 11.6        | 14.3    | 8.6   | 12.6       | 10.9   | 18.5            | 14.2           |
| Private pensions             | 23.8        | 32.4    | 11.8  | 29.2       | 22.4   | 36.5            | 29.2           |
| Asset income                 | 55.6        | 64.1    | 61.7  | 47.8       | 46.3   | 67.4            | 55.1           |
| Public assistance            | 3.5         | 1.5     | 1.7   | 4.7        | 6.1    | 2.4             | 4.4            |
| Supplemental Security Income | 3.3         | 1.5     | 1.5   | 4.7        | 5.9    | 2.2             | 4.2            |

SOURCES: Social Security Administration; author's calculations using the March 2005 Supplement to the Current Population Survey.

NOTE: Standard errors can be computed using data from U.S. Census Bureau (2005).

of 10.9 million married men aged 65 or older and only 8.4 million women aged 65 or older.<sup>6</sup>

Table 3 compares the percentages receiving income from various sources for the different units of observation and income bases. Married persons and couples are more likely to receive income from sources other than Social Security benefits than are nonmarried persons, except for public assistance.<sup>7</sup>

These differences based on sex and marital status are responsible in part for the lower rates of 100 percent reliance on Social Security when using the person as the unit of observation based on family income (Table 4). In March 2005, approximately 23.6 percent of elderly aged units and 21.3 percent of elderly persons in the CPS were living with nonspouse family members; inclusion of nonspouse family income is

responsible for the remainder of the drop in complete reliance on Social Security benefits.<sup>8</sup>

### Conclusion

The unit of observation has a large effect on the perceived well-being of the elderly. Earlier editions of the Social Security Administration's publication *Income of the Population 55 or Older* that were published before the 2004 edition have only shown statistics on the relative importance of Social Security for aged units.<sup>9</sup> But the aged unit focuses on the income of aged persons and married couples alone and not on that of the families in which they live.

Beginning with the expanded 2004 edition, *Income of the Population 55 or Older* will add statistics using the person as the unit of observation and treating

**Table 4.**  
**Heavy reliance on Social Security of persons or units 65 or older, by unit of observation and income basis, 2004**

| Unit of observation | Income basis | 90 percent or more from Social Security | 100 percent from Social Security |
|---------------------|--------------|---|----------------------------------|
| Person              | Person       | 36.2                                    | 22.1                             |
| Aged unit           | Aged unit    | 31.1                                    | 19.5                             |
| Person              | Family       | 23.3                                    | 13.3                             |

SOURCE: Social Security Administration; author's calculations using the March 2005 Supplement to the Current Population Survey.

NOTE: Standard errors can be computed using data from the U.S. Census Bureau (2005). To calculate standard errors, the following base populations should be used: persons based on person income (33,679,000); aged units (25,891,000); and persons based on family income (34,418,000).

family income as an attribute of the person to provide additional information on the economic well-being of the elderly. The official poverty measure considers all income received by all members of the family when considering whether a person is in poverty; that is, the assumption is that family members can pool their resources, regardless of whether or not they do. Considering persons on the basis of family income would be consistent with current and recommended poverty measures and would provide an additional interpretation of the relative importance of Social Security benefits.

## Notes

<sup>1</sup> The Annual Social and Economic Supplement was formerly called the Annual Demographic Survey.

<sup>2</sup> All calculations from the CPS are weighted.

<sup>3</sup> The use of person income can be problematic. First, some sources of income may be jointly received by a married couple but allocated to only one spouse in survey data (for example, interest income from a jointly held account). Second, some surveys, including the CPS, ask a representative of the household (called the reference person) about each individual's income. Preliminary research indicates that the reference person may report income received by one person as being received by another (for example, a husband is reported as having received both his and his wife's Social Security benefits). Income for married couples or families is less likely to be distorted by these kinds of survey errors. Although SSA does not generally report statistics on person income in its *Income of the Population 55 or Older* series, such measures are included in this analysis to place SSA statistics in context with other reports that use person income. For examples, see Chapters 6 and 7 of Employee Benefit Research Institute (2006) and Whitman and Purcell (2006).

<sup>4</sup> The aged unit is used in the *Income of the Population 55 or Older* and *Income of the Aged Chartbook* series.

Persons who are widowed, divorced, never married, separated, or married but living apart from their spouse are classified as nonmarried persons.

<sup>5</sup> In both the *Income of the Population 55 or Older* and *Income of the Aged Chartbook* series, the age of a married couple is the age of the husband if he is 55 or older; otherwise, the age of the married couple is the age of the wife if she is 55 or older.

<sup>6</sup> Similar choices would need to be made if the family or the household were the unit of observation. Using the family (or household) income of a person eliminates the need for these choices.

<sup>7</sup> Pensions are the exception for women, most likely because nonmarried women may be receiving survivor's benefits from a deceased husband's pension.

<sup>8</sup> In the CPS, 24.0 percent of married couples and 41.1 percent of nonmarried persons who reported 100 percent reliance on Social Security benefits were living with nonspouse family members.

<sup>9</sup> The 2004 expanded publication is forthcoming and will be available on the Web only. Future editions (2006 and forward) will follow the expanded format.

## References

- Employee Benefit Research Institute. 2006. *Income statistics of the population ages 55 and over* (chapter 6) and *Sources of income for persons ages 55 and over* (chapter 7), updated October 2006. EBRI Databook on Employee Benefits. <http://www.ebri.org/publications/books/index.cfm?fa=databook> (accessed November 28, 2006).
- Fisher, T. Lynn. 2005. Measurement of reliance on Social Security benefits. Paper presented at the Federal Committee on Statistical Methodology Research Conference, Washington, DC, November 15.
- [SSA] Social Security Administration. 2006. *Income of the Population 55 or Older; 2004*. Washington, DC: Office of Policy, Office of Research, Evaluation, and Statistics.
- U.S. Census Bureau. 2005. *Source and accuracy of estimates for income, poverty, and health insurance coverage in the United States: 2004*. [http://www.census.gov/hhes/www/income/p60\\_229sa.pdf](http://www.census.gov/hhes/www/income/p60_229sa.pdf) (accessed June 21, 2007).
- Whitman, Debra, and Purcell, Patrick. 2006. *Topics in aging: Income and poverty among older Americans in 2005*. Congressional Research Service Report for Congress RL32697, updated September 21, 2006.



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# *Estimates of Unreported Asset Income in the Survey of Consumer Finances and the Relative Importance of Social Security Benefits to the Elderly*

by T. Lynn Fisher

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## ***Introduction***

Throughout the 1990s and the early 2000s, the Social Security Administration's publication *Income of the Population 55 or Older* has reported a decline in the proportion of the elderly receiving asset income and a corresponding rise in the proportion of the elderly receiving all of their income from Social Security. The decrease in receipt of asset income is puzzling because greater numbers of people were participating in a booming financial market.<sup>1</sup> Thus one would expect that a greater proportion of the elderly would have asset income and a smaller proportion would receive all of their income from Social Security. Because retirement income ideally is composed of multiple sources of income (savings, pensions, and Social Security), the elderly receiving all of their income from any single source of income are deemed to be economically vulnerable. The Social Security Administration is thus particularly concerned about beneficiaries whose only source of income is their Social Security benefits.

The question arises of whether receipt of asset income is actually declining among the elderly or whether some asset income is merely unreported. After addressing that question, the article attempts to ascertain how unreported asset income affects our under-

standing of how many of the elderly receive income only from Social Security. The *Income of the Population 55 or Older* is based on the Current Population Survey (CPS). Ideally, this analysis would examine the asset holdings of those reporting no asset income in the CPS, but data on asset holdings are not collected in the CPS. Consequently, this analysis uses the Federal Reserve Board's Survey of Consumer Finances (SCF), which collects detailed data on asset holdings. Both surveys show a drop of 10 percentage points over the 1990s in the receipt of any asset income by the population aged 65 or older and a corresponding increase in the proportion of the elderly receiving all of their income from Social Security.

This analysis uses the SCF from 1992 to 2001 to examine the financial asset holdings of the elderly not reporting asset income to determine if they in fact hold assets that are likely to generate income during the given year. Income from interest is also estimated for savings and money market accounts as well as certificates of deposit, bonds, and mutual funds. Finally, estimates of asset income are used to determine what proportion of the elderly would have received all of their income from Social Security if estimated asset income had been reported.

## Ownership of Financial Assets Among Elderly Individuals

The first question is whether respondents not reporting asset income have financial assets. Of those aged 65 or older not reporting asset income in the 2000 SCF, 87 percent reported holding one or more assets.<sup>2,3</sup> The aged unit is chosen as the unit of observation because the trends in declining reports of asset income and rising reports of all income coming from Social Security are evident in the *Income of the Population 55 or Older*, which has primarily used the aged unit as the unit of observation.<sup>4,5</sup> This analysis focuses

solely on the importance of unreported asset income, making it important to keep as constant as possible other factors affecting the relative importance of Social Security, including the unit of observation.

Holding assets without reporting asset income is less pronounced for 1991 than for 2000; 77 percent of those not reporting asset income held one or more assets in 1991 compared with 87 percent in 2000. Table 1 separates elderly aged units into groups based on whether or not they reported asset income. The table reports the percentage of units in each group that own a particular type of asset.<sup>6</sup> For example, 39 per-

**Table 1.**  
**Ownership of assets among units aged 65 or older, by type of asset and reported receipt of asset income, 1991 and 2000 (in percent)**

| Type of asset                          | Reported any income from assets in 1991? |     | Reported any income from assets in 2000? |    |
|--|--|-----|--|----|
|  | Yes                                      | No  | Yes                                      | No |
| Held one or more assets?               |  |     |  |    |
| Yes                                    | 98                                       | 77  | 100                                      | 87 |
| No                                     | 2  | 23  | 0  | 13 |
| Had a checking account?                |  |     |  |    |
| Yes                                    | 96                                       | 76  | 99                                       | 82 |
| No                                     | 4  | 24  | 1  | 18 |
| Had a savings account?                 |  |     |  |    |
| Yes                                    | 39                                       | 24  | 53                                       | 36 |
| No                                     | 61                                       | 76  | 47                                       | 64 |
| Owned certificates of deposit (CDs)?   |  |     |  |    |
| Yes                                    | 50                                       | 11  | 44                                       | 23 |
| No                                     | 50                                       | 89  | 56                                       | 77 |
| Had a money market account?            |  |     |  |    |
| Yes                                    | 24                                       | 3   | 21                                       | 4  |
| No                                     | 76                                       | 97  | 79                                       | 96 |
| Owned savings bonds?                   |  |     |  |    |
| Yes                                    | 19                                       | 6   | 17                                       | 8  |
| No                                     | 81                                       | 94  | 83                                       | 92 |
| Owned other bonds?                     |  |     |  |    |
| Yes                                    | 12                                       | 2   | 8  | 1  |
| No                                     | 88                                       | 98  | 92                                       | 99 |
| Owned stock?                           |  |     |  |    |
| Yes                                    | 29                                       | 1   | 35                                       | 6  |
| No                                     | 71                                       | 99  | 65                                       | 94 |
| Owned a mutual fund?                   |  |     |  |    |
| Yes                                    | 21                                       | 4   | 34                                       | 5  |
| No                                     | 79                                       | 96  | 66                                       | 95 |
| Had a trust and/or managed investment? |  |     |  |    |
| Yes                                    | 5  | 0   | 7  | 2  |
| No                                     | 95                                       | 100 | 93                                       | 98 |

SOURCES: Author's calculations using the 1992 and 2001 Survey of Consumer Finances.

cent of elderly units who reported asset income had a savings account in 1991, but 61 percent of elderly units who reported asset income did not have one; in contrast, 24 percent of elderly units who did not report receiving asset income had a savings account, while 76 percent of elderly units who did not report receiving asset income did not have one. Likewise in 2000, 53 percent of elderly units who reported income from assets had a savings account, but 47 percent did not; 36 percent of elderly units who did not report receiving asset income had a savings account, but 64 percent did not. Although not all of the assets reported would necessarily distribute income in the survey year because of maturities or possible losses, savings accounts and money market accounts generally would. The increase in the proportion of elderly units that reported no asset income but had savings and/or money market accounts suggests that an increasing proportion of units are not reporting asset income that they most likely received.

### ***Estimates of Income from Financial Assets***

Given that such a large fraction of individuals who do not report asset income do report holding assets, we would like to know the amount of asset income that could be reasonably expected from those assets. Asset income is estimated using market interest rates for units not reporting any asset income based on their asset holdings; this procedure is particularly suggested for those with lower levels of assets.<sup>7</sup> However, the procedure may introduce some distortion because

some respondents will have invested at rates higher or lower than the market rate, but the estimates of asset income should be closer to reality than zero asset income reported in the survey. Those units with lower levels of assets, say in savings accounts, may not notice the interest being “directly deposited” into their accounts. In addition, respondents may simply assume that low levels of asset income under \$50 or \$100 are not significant enough to report. Table 2 shows the rates of return assumed for different asset types. Because of variability, returns were not estimated for stocks or trusts. These restrictions should produce a somewhat conservative estimate of the asset income received.

The estimates of income from assets were derived for those who held assets but reported receiving no asset income. Because estimates of asset income are sensitive to which assets are assumed to generate income, two estimates for asset income are computed. The first is a lower-bound estimate, which imputes only interest for savings and money market accounts using the rates in Table 2. These assets almost surely provide interest during the time in which they are held. The second estimate not only imputes this same asset income from savings and money market accounts but also assumes asset income from certificates of deposit (CDs), savings bonds, other bonds, and mutual funds, using the rates in Table 2. Savings bonds, CDs, and other bonds are financial instruments with a specified term, which raises the question of whether interest should be accounted for as it accrues or when the

**Table 2.**  
**Estimated rates of return, by type of asset (in percent)**

| Type of asset                 | 1991  | 2000  | Basis of estimate   |
|-------------------------------|-------|-------|---|
| Savings accounts              | 5     | 1.75  | Industry average <sup>a</sup>   |
| Money market accounts         | 5.25  | 2     | Industry average <sup>a</sup>   |
| Certificates of deposit (CDs) | 5.9   | 6     | Average of Federal Reserve rates for 1-, 3-, and 6-month CDs, and industry average of 6-month and 1-year CDs <sup>a</sup> |
| Savings bonds                 | 6.488 | 6.261 | Average of Treasury 2-year yield  |
| Other bonds                   | 7.808 | 6.694 | Average of returns for state and local Aaa and Baa bonds, municipal bonds, and corporate Aaa and Baa seasoned bonds       |
| Mutual funds <sup>b</sup>     | --    | 6     | CNN/Money (article), December 2000 29(13). (7 percent top yields for money market funds)                                  |

SOURCES: See "Basis of estimate" in table.

NOTE: -- = not available.

a. Industry averages obtained from Bankrate.com.

b. Estimates for mutual funds used the rate from 2000.

**Table 3.**  
**Comparison of the reported and estimated percentage of elderly units receiving positive asset income, selected years 1991–2000**

| Year | Reported | Estimated                                      |                           |
|------|----------|--|---------------------------|
|      |          | With imputed savings and money market interest | With all imputed interest |
| 1991 | 61       | 71   | 75                        |
| 1994 | 56       | 69   | 72                        |
| 1997 | 50       | 70   | 76                        |
| 2000 | 51       | 69   | 77                        |

SOURCES: Author's calculations using the 1992–2001 Survey of Consumer Finances.

financial instrument is cashed out. For example, tax on the interest on long-term Treasury notes can be paid either over the life of the note or upon redemption.

After constructing estimates for asset income for those who did not report receipt of such, the proportion of all aged units receiving asset income increased from 61 percent to 75 percent in 1991 and from 51 percent to 77 percent in 2000, as reported in Table 3.<sup>8</sup> These estimates suggest that nearly one-fifth (14/75) of units receiving asset income in 1991 did not report such income; the proportion of units receiving, but not reporting, asset income rose to approximately one-third (26/77) in 2000.<sup>9</sup> Charts 1 and 2 provide the percentage distribution of reported and estimated asset income among all elderly units in 1991 and 2000, respectively. As illustrated in the charts, the majority of the difference between reported and estimated asset income occurs for aged units reporting less than \$750 in 1991 and less than \$2,000 in 2000.<sup>10</sup>

When asset income is estimated only from savings and money market accounts, the rate of receipt of such income hovers around 70 percent from 1991 to 2000. These lower-bound distributions resemble the estimated distributions for all asset income values under \$250 and are similar to the reported asset income distribution above \$1,000 (Charts 1 and 2).

### ***Impact of Estimated Asset Income on the Relative Importance of Social Security***

One important implication of estimated asset income is how it affects the relative importance of Social Security income for elderly units. After including estimated asset income from the broader range of assets, the

proportion of aged units receiving all of their income from Social Security fell from 15 percent to 11 percent in 1991 and dropped from 18 percent to 10 percent in 2000. Because most small amounts of estimated asset income are generated by savings or money market accounts, the lower-bound estimates restricted to savings and money market accounts do not differ much from the estimates including the wider range of assets. Table 4 conveys the growing difference between the reported proportion of elderly units receiving all of their income from Social Security and the two estimates.

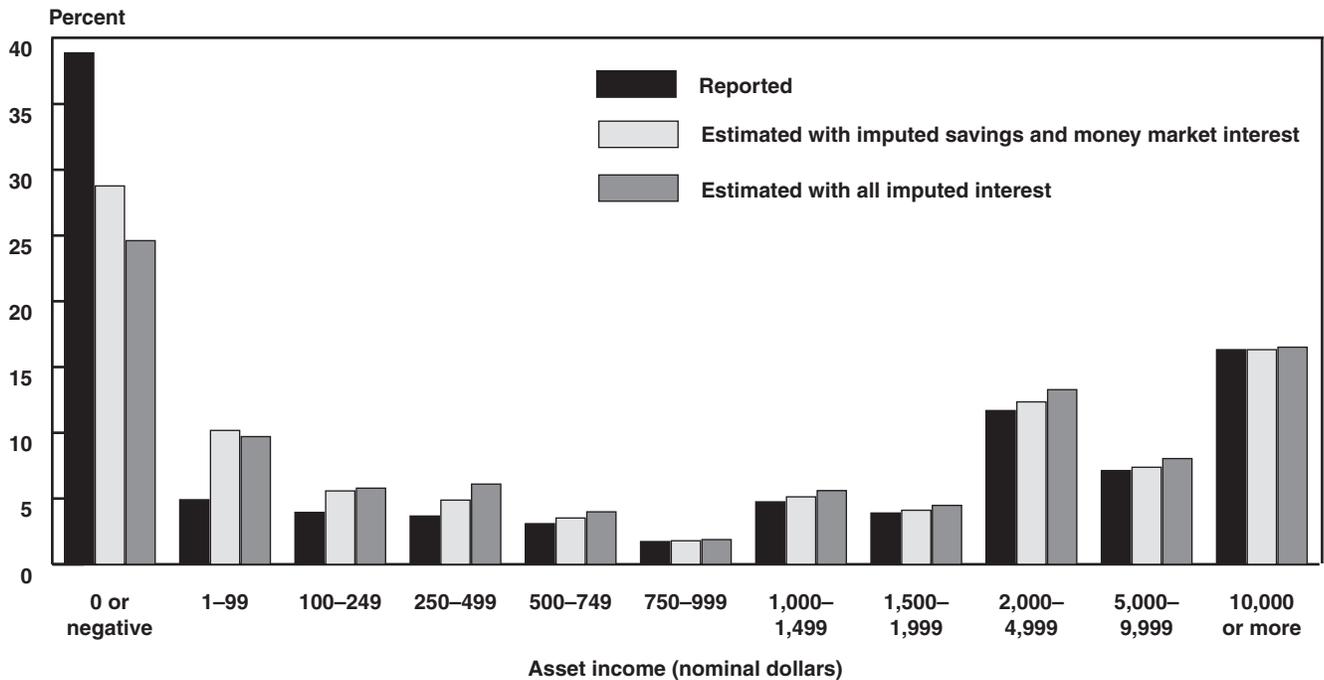
Other thresholds for the relative importance of Social Security are those units who receive almost all of their income (90 percent or more) and those who receive a majority of their income (50 percent or more) from Social Security. The omission of small amounts of asset income is more likely to affect the measurement of the proportion of the elderly receiving all of their income from Social Security than measures of the proportion of the elderly receiving at least 50 percent

**Table 4.**  
**Percentage of aged units with given proportion of income from Social Security, 1991–2000**

| Year  | Reported | Estimated                                      |                           |
|---|----------|--|---------------------------|
|   |          | With imputed savings and money market interest | With all imputed interest |
| <b><i>100 percent of income from Social Security</i></b>        |          |  |                           |
| 1991  | 15.1     | 12.4   | 11.1                      |
| 1994  | 16.9     | 13.4   | 12.2                      |
| 1997  | 21.9     | 14.0   | 11.2                      |
| 2000  | 18.2     | 11.4   | 10.1                      |
| <b><i>90 percent or more of income from Social Security</i></b> |          |  |                           |
| 1991  | 25.8     | 25.5   | 24.7                      |
| 1994  | 24.4     | 24.3   | 23.6                      |
| 1997  | 27.3     | 27.1   | 25.2                      |
| 2000  | 24.7     | 23.9   | 22.7                      |
| <b><i>50 percent or more of income from Social Security</i></b> |          |  |                           |
| 1991  | 57.7     | 57.4   | 57.2                      |
| 1994  | 53.5     | 53.4   | 53.1                      |
| 1997  | 52.2     | 52.0   | 51.3                      |
| 2000  | 51.4     | 50.9   | 50.3                      |

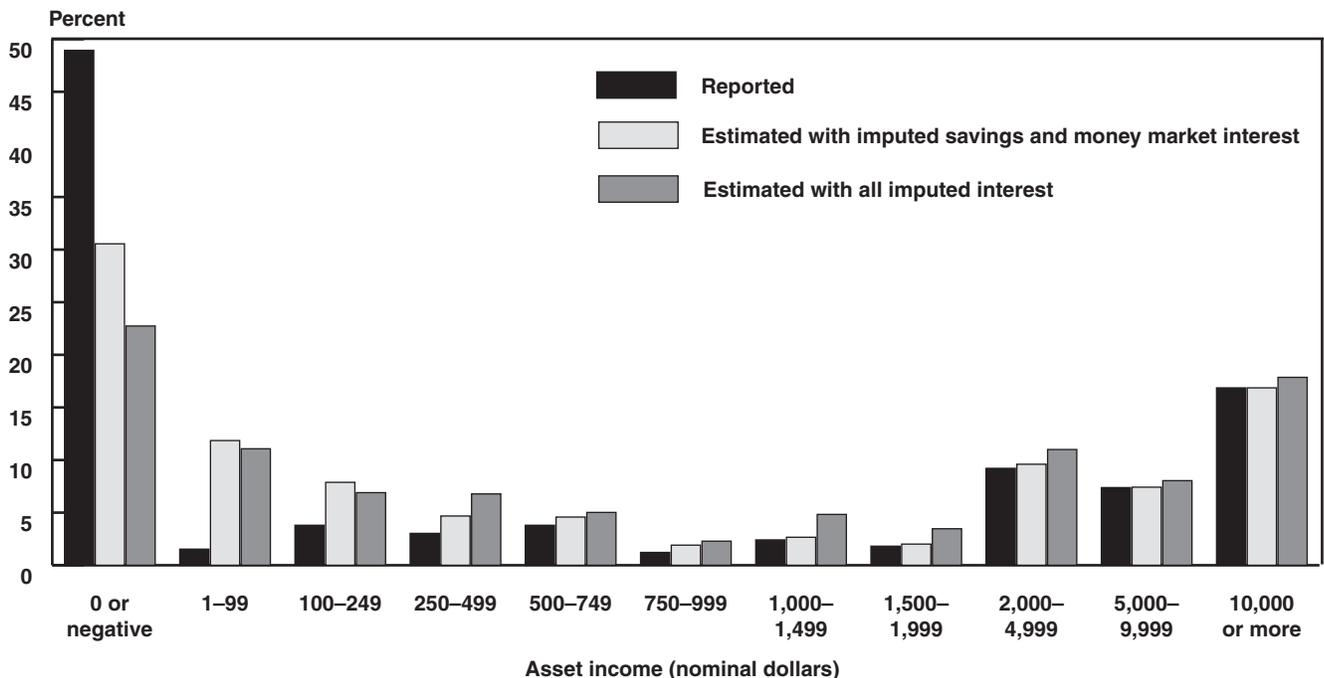
SOURCES: Author's calculations using the 1992–2001 Survey of Consumer Finances.

**Chart 1.**  
**Percentage distribution of reported and estimated asset income among all elderly units, 1991**



SOURCE: Author's calculations using the 1992 Survey of Consumer Finances.

**Chart 2.**  
**Percentage distribution of reported and estimated asset income among all elderly units, 2000**



SOURCE: Author's calculations using the 2001 Survey of Consumer Finances.

or 90 percent of their income from Social Security. The differences between the reported proportions of the elderly receiving at least 50 percent or 90 percent of their income from Social Security and the estimates using imputed asset income are smaller than 2 percentage points. The trends in the reported proportions of the elderly receiving at least 50 percent or 90 percent of their income from Social Security are echoed by the imputed asset income estimates. Because the 90 percent measure is less affected by unreported asset income, it would be a more reliable measure of economic vulnerability than the proportion of elderly receiving all of their income from Social Security.

## Conclusion

This brief analysis suggests two things. First, some asset income—particularly smaller amounts—appears to go unreported in surveys. Second, the proportion of respondents receiving asset income but not reporting it in the survey appears to have increased over time. Of all units expected to report asset income, approximately one-fifth did not report such income for 1991 and approximately one-third did not report it for 2000. Including estimates of asset income from available data on asset holdings could be a useful tool for identifying, imputing, and correcting for low reporting levels of asset income. As a result of including estimated asset income, the proportion of elderly aged units with positive asset income holds relatively steady or increases slightly from 1991 through 2000. In contrast, without the inclusion of estimated asset income for nonreporters, the proportion of elderly aged units with reported asset income decreases over time.

As a result of the growth in unreported asset income, the estimates of the proportion of aged units receiving all of their income from Social Security appear to have grown over the 1990s. After adjusting for unreported asset income, however, a smaller proportion of aged units received all of their income from Social Security in 2000 than in 1991. Because smaller amounts of asset income are more likely to go unreported, estimates of the proportion of units receiving 90 percent or more of their income from Social Security are affected to a lesser extent. This result suggests that the proportion of aged units receiving 90 percent or more of their income from Social Security would be a more consistent measure to follow over time.

Further work is planned with Internal Revenue Service (IRS) administrative data on interest and dividends matched to Census surveys. These data would

provide actual amounts of asset income, rather than the estimates used here, that are based on market rates.<sup>11</sup>

## Notes

<sup>1</sup> See the Federal Reserve Board's tabulations of the 1989–2004 Survey of Consumer Finances at <http://www.federalreserve.gov/pubs/oss/oss2/2004/bulletin.tables.int.nominal.xls>. The tabulations in Table 5 of that report indicate that the percentage of families holding any financial assets increased from 88.9 percent in 1989 to 93.8 percent in 2004.

<sup>2</sup> Asset income in the Survey of Consumer Finances may have been reported as any of the following: interest; dividends; net gains or losses from the sale of stocks, bonds, or real estate; or net rent, trusts, or royalties. Asset income reported in *Income of the Population 55 or Older* does not include net gains or losses from the sale of stocks, bonds, or real estate.

<sup>3</sup> All tabulations are weighted.

<sup>4</sup> An aged unit consists of a nonmarried individual aged 65 or older or a married couple aged 65 or older. The age of the married couple is the age of the husband if he is 55 or older; otherwise, the age of the couple is that of the wife. The Survey of Consumer Finances, however, provides information on primary economic units (PEUs). A PEU contains the financially dominant person in the household and persons in the household who are financially interdependent with him or her; assets are reported for the PEU as a whole and not assigned to a specific person in the PEU. Most elderly PEUs consist solely of a married couple or nonmarried individual and as such can also be considered aged units. Approximately 10 percent of PEUs containing aged units 65 or older also contain other individuals in the household. These PEUs are excluded to prevent counting income from assets of nonaged individuals. Those omitted tended to have higher total income than the aged-only units.

<sup>5</sup> These numbers and later estimates of reliance on Social Security income are not directly comparable with those in *Income of the Population Aged 55 or Older*, which are derived from the Current Population Survey. Since the CPS reports data on all individuals in the household, noneconomically dominant units are represented in the CPS, while the Survey of Consumer Finances has only a few variables for members of a household who are not in the primary economic unit (PEU). The SCF generally reports higher median incomes for PEUs aged 65 or older than does the CPS for all aged units 65 or older.

<sup>6</sup> Breakdowns of asset holdings in 1994 and 1997 are consistent with the general trend from 1991 through 2000 of increasing asset ownership by respondents with no reported asset income.

<sup>7</sup> Arthur Kennickell, project director of the Survey of Consumer Finances, suggested “imputing” interest income from asset holdings using market interest rates of return.

He gives two reasons. First, the SCF is primarily concerned with the measurement of assets and liabilities, with measurement of income by source of secondary importance. Second, he cites Tom Juster's work on underreporting of asset income in the Health and Retirement Study (correspondence dated December 3, 2003).

<sup>8</sup> Interest from checking accounts was not calculated because of variability in interest rates and required minimum balances for interest-bearing accounts. According to Bankrate.com, the average required minimum balance to avoid fees in October 2003 was approximately \$2,258. Using \$2,200 as the benchmark for whether checking accounts would accrue interest, the estimate of 75 percent of units receiving asset income in 1991 may be revised upward to 77 percent to reflect those respondents without estimated asset income who have more than the average minimum

amount in their checking accounts. Likewise in 2000, the estimated percentage of units receiving asset income would increase from 77 percent to 80 percent.

<sup>9</sup> These figures were obtained by dividing the difference between the percentage of units with reported and imputed asset income receipt by the percentage of units with imputed or reported asset income receipt; for 1991, this was calculated as  $(75-61)/75$ .

<sup>10</sup> All dollar estimates are in nominal dollars.

<sup>11</sup> Although these administrative data would generally provide more accurate amounts of asset income received, they would not necessarily provide data on interest below \$10 or interest accrued on financial instruments taking longer than 1 year to mature. Further, these administrative data would not be able to be matched to all units in a survey.



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# ***The Impact of Survey Choice on Measuring the Relative Importance of Social Security Benefits to the Elderly***

by T. Lynn Fisher

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## ***Introduction***

The Social Security Administration (SSA) produces a popular statistical series, *Income of the Population 55 or Older*, to meet the demand for statistics on the receipt of income from various sources, income distributions, aggregate income, and poverty. This statistical series is based on data from the March Supplement to the Census Bureau's Current Population Survey (CPS).<sup>1</sup> These statistics are affected by the selection of the CPS as its data source.

This article provides insight into how the data collected in the CPS affect measures describing the economic well-being of the elderly. Because *Income of the Population 55 or Older* is based on a survey, the accuracy of its statistics is dependent on the willingness and ability of CPS respondents to answer survey questions accurately. Different surveys have different strengths and weaknesses, and one method of assessing the differences is to compare one survey's data with those of other surveys. The article also compares statistics calculated using the CPS with another Census Bureau survey that is particularly strong at measuring income—the Survey of Income and Program Participation (SIPP).

Another method for determining the accuracy of survey data is to compare them with administrative data. The Census Bureau in collaboration with SSA has matched admin-

istrative records for the Social Security and Supplemental Security Income (SSI) programs to the SIPP and selected years of the CPS. Although administrative data are not used in *Income of the Population 55 or Older*, they are used in parts of this article to evaluate the accuracy of the reported data for Social Security benefits and Supplemental Security Income in both the CPS and the SIPP.

First, the major features of the CPS and SIPP are outlined, and a description of SSA's administrative data available to be matched to those two surveys is also given. The article then compares estimates from the SIPP and CPS of the proportion of the elderly receiving income from various sources. Next, administrative data for Social Security benefits and SSI are used to evaluate the accuracy of the estimates derived from the surveys. Finally, the conclusion discusses the tradeoffs involved in selecting a data source.

## ***Data Sources Used in this Analysis***

The Social Security Administration has been producing two series of publications on the income of the elderly and near-elderly—*Income of the Population 55 or Older* (IP55), since 1976 and *Income of the Aged Chartbook*, since 1990. Both series are derived from the March Supplement to the Current Population Survey, which is conducted annually by the

U.S. Census Bureau. Another Census survey that asks more detailed questions regarding income is the Survey of Income and Program Participation. This analysis uses income data for 1996 because the SIPP match rate to administrative data declined considerably for the 2001 panel.<sup>2</sup>

### Survey Data

Depending on their respective purposes, surveys may differ in many ways: the subjects covered, the questionnaire length and detail, the frequency of interviews, and the sample of the population surveyed are a few of the dimensions along which surveys may vary. The following descriptions of the CPS and SIPP outline some of the broader differences between the surveys that may influence differences in the statistics produced using their data.

**Current Population Survey.** The CPS is a monthly survey conducted by the Census Bureau and sponsored jointly with the Bureau of Labor Statistics. The CPS is a representative sample of the “civilian noninstitutional population.” The survey has been conducted for more than 50 years and is used for official monthly unemployment and labor force statistics. Annual income data have been collected in the March Supplement since 1948, with information gathered concerning income received during the previous calendar year for approximately 35 cash and in-kind sources. Official estimates of income and poverty in the United States are based on the March Supplement (Herz 1996; U.S. Census Bureau 2005 and 2006). Table 1 summarizes major features of the CPS.

This article uses the 1997 March Supplement to the CPS (then called the Annual Demographic Survey), which collected data for annual income received in

1996. Persons are designated as “65 or older” if they were at least age 65 as of the interview in March 1997. In SSA’s two data series (cited earlier), aged units—classified as “65 or older”—are defined as follows:

- nonmarried persons 65 or older (in March 1997),
- or married couples in which either
  - the husband is 65 or older, or
  - the husband is younger than 55 and the wife is 65 or older (in March 1997).

**Survey of Income and Program Participation.** The SIPP is a longitudinal panel survey conducted by the Census Bureau. The survey is designed to collect data on sources and amounts of income to provide improved statistics on the distribution of income in the United States. The sample is also representative of the noninstitutional population. The first SIPP panel began in October 1983; subsequent panels have begun periodically with durations ranging from 2½ to 4 years. Data are collected on approximately 70 cash and in-kind sources of income (U.S. Census Bureau 2005 and 2006). Table 1 summarizes major features of the SIPP.

In this article, analysis of SIPP income data is based on information collected in the 1996 SIPP panel concerning income received during 1996. Persons classified as “65 or older” were at least age 64 as of the interview in March 1996. Aged units classified as “65 or older” were nonmarried persons 64 or older (in March 1996) or married couples in which the husband is 64 or older or the husband was younger than 54 and the wife was 64 or older (in March 1996).<sup>3</sup>

### Administrative Data

The Social Security Administration administers two cash benefit programs: (1) Social Security, or Old-Age,

**Table 1.**  
**Major features of the Current Population Survey and Survey of Income and Program Participation**

| Feature                 | Current Population Survey<br>(March 1997 Supplement) | Survey of Income and Program Participation<br>(1996 panel)                        |
|-------------------------|--|---|
| Sample size             | Approximately 50,500 households                      | 40,188 households   |
| Frequency of interviews | Once per year for supplement                         | Once every 4 months   |
| Income data             | About 35 cash and in-kind sources                    | About 70 cash and in-kind sources   |
| Recall period           | Annual total for prior calendar year                 | Totals for previous 4-month period<br>(monthly reporting for most sources)        |
| Asset holdings data     | Home ownership                                       | Detailed inventory of real and financial<br>assets and liabilities once each year |

SOURCE: U.S. Census Bureau (1999, 2001, 2005, and 2006).

Survivors, and Disability Insurance, and (2) Supplemental Security Income, the separate program for low-income aged and disabled persons. In this study, statistics based on administrative data refer to statistics based on a combination of survey-reported and administrative information. For matched survey records, self-reported data on program benefit receipt were replaced with Social Security's administrative data.<sup>4</sup> Self-reported data from the survey were used for unmatched survey respondents. A slightly greater proportion of observations in the 1996 SIPP were matched with Social Security administrative records (85 percent of those aged 64 or older present in March 1996) than in the CPS (77 percent of those 65 or older).<sup>5</sup>

**Social Security (OASDI).** Survey-based Social Security benefit amounts have been replaced with the administrative amount of the Social Security benefit paid to the beneficiary plus the beneficiary's Medicare Part B premium (when the latter is applicable) in both the SIPP and the CPS.

**Supplemental Security Income (SSI).** Survey-based SSI payments have also been replaced by administrative payment amounts.<sup>6</sup> The process is somewhat more complicated for the SSI program because there are federal and state components to SSI payments. The SIPP and the CPS treat this differently in their questionnaires: the SIPP asks specifically for federal payments and state payments separately; the CPS asks respondents for a single, combined SSI payment amount.

For states with federally administered state SSI payments, both federal and state SSI amounts were taken directly from administrative payment data files and were used to replace reported SSI payments for matched observations for both the SIPP and the CPS. For states without federally administered state SSI payments, the procedure was different for processing the SIPP and the CPS. For the SIPP, survey-collected federal payments were replaced by administrative data, and survey-based state payments were not changed. For the CPS, the survey-based SSI payment (combined state and federal) amount was replaced by administrative information.<sup>7</sup>

### ***Impact of Survey Selection on Estimates of the Relative Importance of Social Security Benefits***

Traditionally, economic resources for the elderly are expected to come from three sources: Social Security, pensions, and savings. Collectively these sources are referred to as the "three-legged stool" of retirement. If

one or more of the "legs" are missing, the "stool" may not be able to provide adequate support during retirement, particularly if economic or health shocks occur. Therefore, elderly beneficiaries who receive all of their income from Social Security are considered economically vulnerable. Depending on whether the CPS or the SIPP was used, the proportion of elderly beneficiaries receiving all of their income from Social Security could appear quite different. In the CPS data for 1996, 17.9 percent of aged units 65 or older reported that all of their income came from Social Security benefits compared with only 8.5 percent in the SIPP.

The difference in results from the two surveys may be due in part to two factors: the survey recall period and the structure and detail of the questionnaires. First, respondents in the CPS are asked in March about income from the previous calendar year, while participants in the SIPP are asked about their income in 4-month intervals. Second, respondents in the SIPP are asked more detailed questions about their sources of income. For example, for questions involving asset income, SIPP respondents are asked if they own a particular asset and are then asked if they received income from that asset and how much; CPS respondents are only asked if they received a particular type of asset income and how much. These factors make participants in the SIPP more likely to report small and/or infrequently received amounts of income (U.S. Census Bureau 2006; Hurd, Juster, and Smith 2003).

Table 2 illustrates the differences in the percentages of aged units 65 or older reporting various sources of income. With the exception of earnings, respondents in the SIPP report receipt of income in every major category more often than respondents in the CPS. The gaps between the SIPP and the CPS are particularly large for asset income—especially interest—and private pensions.<sup>8</sup> The large differences in reported receipt of asset income and pensions between the CPS and SIPP may be responsible for the differences in the proportions of beneficiary aged units who report receiving all of their income from Social Security.<sup>9</sup>

According to *Income of the Population 55 or Older* (based on the CPS), the proportion of aged units 65 or older (referred to here as elderly aged units) reporting that they received all of their income from Social Security benefits rose from a low of 12 percent in 1990 to a high of 20 percent in 2002 (Chart 1). The receipt of asset income appears to be negatively correlated with the percentage of elderly aged units reporting that they received all of their income from Social

**Table 2.**  
**Percentage of aged units 65 or older with income**  
**from specified source, 1996**

|                                      | CPS    | SIPP   |
|--------------------------------------|--------|--------|
| Number of aged units (thousands)     | 24,553 | 25,671 |
| Percentage of aged units reporting—  |        |        |
| Earnings                             | 20.7   | 21.4   |
| Retirement benefits <sup>a</sup>     | 93.1   | 96.1   |
| Social Security <sup>a</sup>         | 90.6   | 94.2   |
| Pensions <sup>a</sup>                | 41.2   | 55.7   |
| Public <sup>a</sup>                  | 13.6   | 20.3   |
| Private <sup>a</sup>                 | 29.9   | 42.9   |
| Asset income <sup>a</sup>            | 63.0   | 73.5   |
| Interest <sup>a</sup>                | 60.9   | 71.5   |
| Not interest <sup>a</sup>            | 24.7   | 32.0   |
| Public assistance <sup>a</sup>       | 5.9    | 9.7    |
| SSI <sup>a</sup>                     | 5.6    | 7.9    |
| Other public assistance <sup>a</sup> | 0.4    | 2.5    |
| Veterans' benefits <sup>a</sup>      | 4.6    | 5.9    |
| Unemployment compensation            | 0.8    | 0.8    |
| Workers' compensation <sup>b</sup>   | 0.6    | 1.0    |

SOURCES: Author's calculations using the 1996 Survey of Income and Program Participation and March 1997 Current Population Survey.

NOTES: Estimates are weighted.

CPS = Current Population Survey; SIPP = Survey of Income and Program Participation; SSI = Supplemental Security Income.

- a. Difference between the surveys is significant at the 99 percent level.
- b. Difference between the surveys is significant at the 95 percent level.

Security since 1978, especially from 1990 through 2002 (Chart 2). From 1994 through 2002, receipt of asset income fell from 67 percent to 55 percent. The same observation does not hold for receipt of pension income, which hovered between 41 percent and 43 percent over the same period (Chart 3).<sup>10</sup> As seen in these charts, restricting the comparison to beneficiary units does not alter the relationship between the estimates of elderly aged units who received asset income and elderly aged units who received Social Security as their sole source of income. This relationship is an indication that the difference in the reporting of asset income may be an important factor contributing to the divergence in measures of the relative importance of Social Security benefits between the CPS and the SIPP.

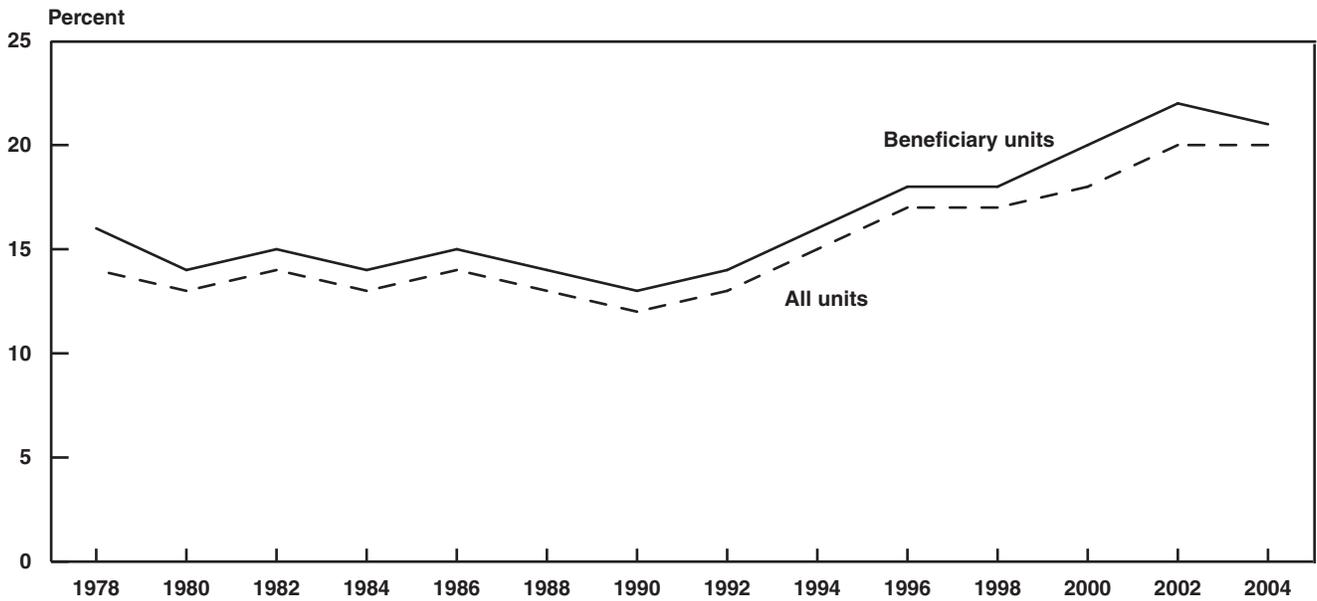
Since it is more likely that small amounts of income are being overlooked by the CPS rather than by the SIPP, it is useful to consider the other income

sources of beneficiary aged units that are receiving most, but not all, of their income from Social Security in the SIPP. Of those beneficiary aged units 65 or older receiving at least 95 percent, but not all, of their income from Social Security, 86.5 percent reported asset income, while only 11.5 percent reported pension income. Similarly, 82.2 percent of those receiving at least 90 percent, but not all, of their income from Social Security reported asset income, and 22.3 percent reported pension income, which again suggests that differences in the reporting of asset income may be responsible for the major portion of the discrepancies in the rates of complete reliance on Social Security between the two surveys.

In addition to the frequency of interviews and detail of the questionnaire, the effect of the order of questions in a survey can be significant. Hurd, Juster, and Smith (2003) examined the Health and Retirement Study (HRS) and Assets and Health Dynamics of the Oldest-Old (AHEAD) and compared waves that asked asset and income questions in separate components to waves that had a “merged” asset and income module. The merged module had questions about particular types of assets followed immediately by questions about income from the asset. They found that asset income was more likely to be reported for the “merged” format that was not able to be explained by an increase in reported assets. They suggested that asset income would be better reported in the CPS if questions about asset ownership preceded the questions about income from those assets.

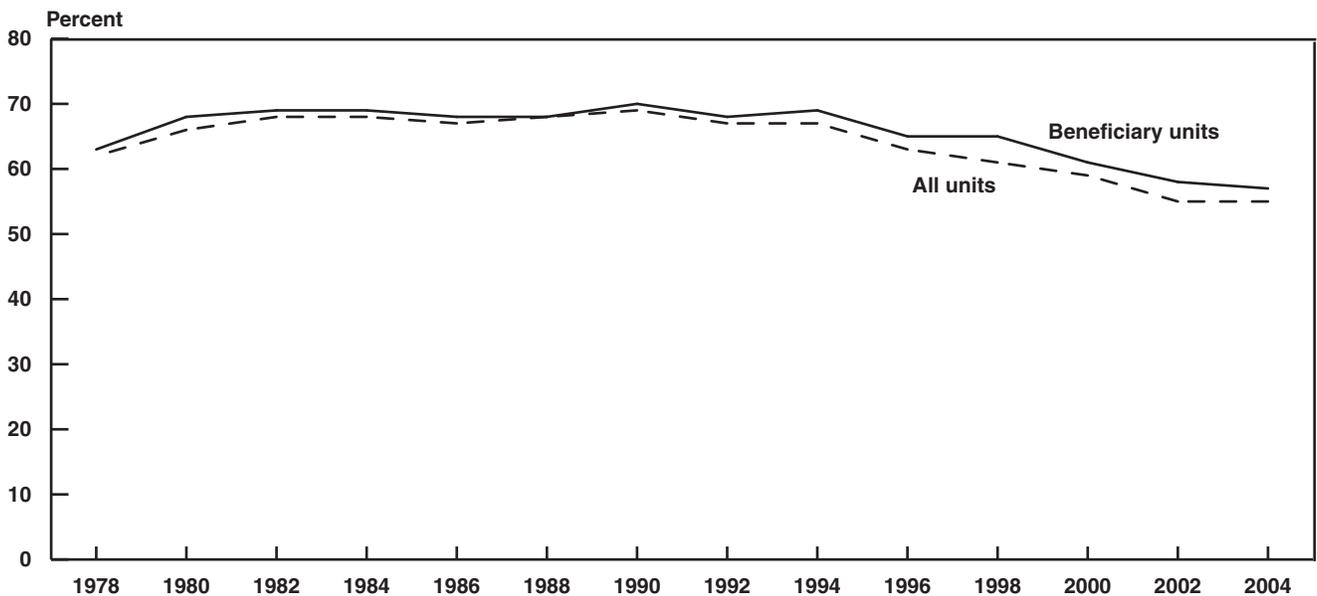
Other studies have compared the CPS and SIPP with other benchmarks to determine the accuracy of their respective data. Roemer (2000) found that for 1996 the CPS underestimated aggregate income from Social Security and Railroad Retirement by 8 percent, SSI by 16 percent, pensions by 23 percent, and asset income by 29 percent. He also found that for 1996 the SIPP underestimated aggregate income by more than the CPS in these categories, except for pensions, which were underestimated by 14 percent, and SSI, which was overestimated by 1 percent. Koenig (2003) and Fisher (2005), however, found that the SIPP does a better job of classifying Social Security beneficiaries and SSI recipients than does the CPS. Czajka and others (2003) found that asset holdings in the 1996 SIPP were underestimated, which may indicate corresponding underestimates of asset income amounts in the SIPP. Taken together, the work of these authors suggests a difficult situation for analysis: the CPS is more likely than the SIPP to underestimate whether or

**Chart 1.**  
**Percentage of aged units 65 or older reporting all income from Social Security, 1978–2004**



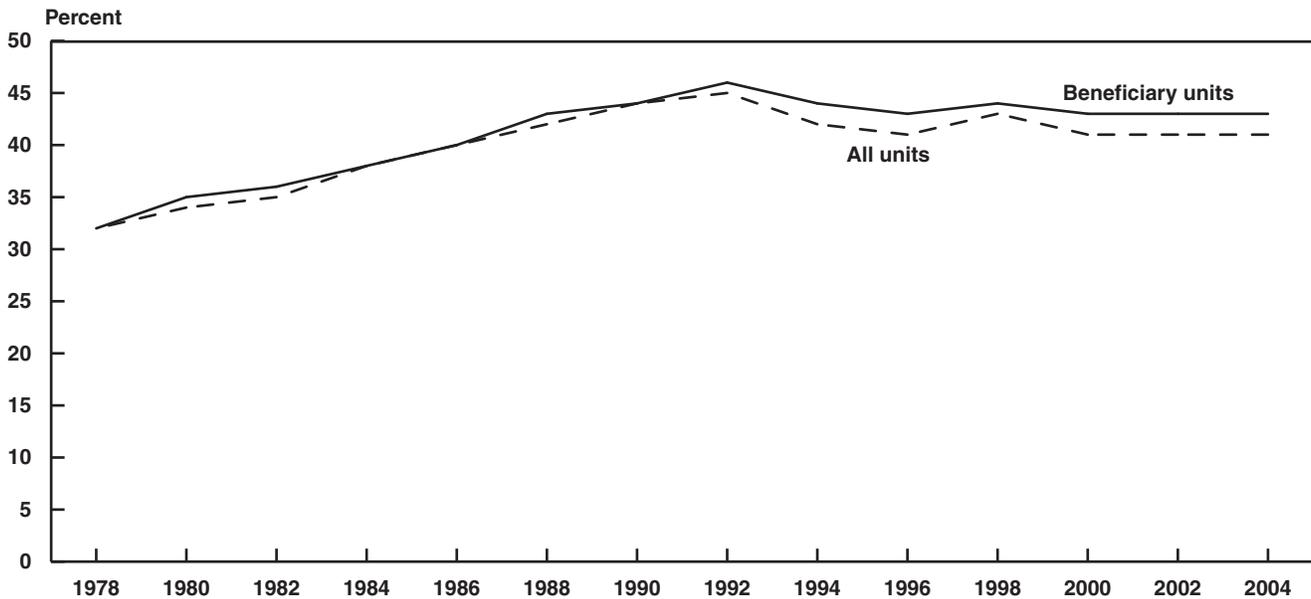
SOURCE: *Income of the Population 55 or Older*, selected years.

**Chart 2.**  
**Percentage of aged units 65 or older reporting asset income, 1978–2004**



SOURCE: *Income of the Population 55 or Older*, selected years.

**Chart 3.**  
**Percentage of aged units 65 or older reporting pension income, 1978–2004**



SOURCE: *Income of the Population 55 or Older*, selected years.

not a source of income was received, while for those reporting receipt, the SIPP may be more likely than the CPS to underestimate the amount of income received by an individual.

***Impact of Using Administrative Data in Place of Self-Reported Data on Estimates of the Relative Importance of Social Security Benefits***

Several studies have evaluated the effect of substituting Social Security’s administrative data for respondents’ answers for income received from Social Security’s Old-Age, Survivors, and Disability Insurance and SSI programs. Sears and Rupp (2003) and Huynh, Rupp, and Sears (2002) compared administrative data with SIPP-reported data, and Koenig (2003) and Fisher (2005) compared administrative data with reported data for both the CPS and the SIPP.<sup>11</sup> These studies identified several sources of reporting error for both Social Security and SSI income amounts:

- The respondent does not report the income at all.
- The respondent misreports SSI payments as Social Security income or vice versa.
- The respondent reports the current monthly payment amount, which may differ from the payment received in the survey’s retrospective time period.

- The respondent reports the amount received on the Social Security check, which is lower than the actual monthly benefit because it excludes the Medicare Part B premium deducted from the Social Security benefit.<sup>12</sup>

Koenig (2003) found that Social Security benefit amounts were more likely to be underreported in the 1996 SIPP than the March 1997 CPS because the SIPP was more likely to net out Medicare Part B premiums.<sup>13</sup>

For the administrative statistics in Tables 3 and 4, self-reported data have been replaced with Social Security’s administrative data for matched observations. Self-reported data continue to be used for unmatched observations. Table 3 illustrates that the CPS reports slightly lower rates of receipt of Social Security benefits and SSI compared with administrative data, while the SIPP reports slightly higher rates of benefit receipt.<sup>14</sup> Part of the variation between the two surveys after the substitution of administrative data may be due to the higher administrative match rate in the SIPP.<sup>15</sup>

The differences in the estimates of the relative importance of Social Security benefits from using administrative data are far smaller than the differences from using a different survey, as shown in Table 4.<sup>16</sup> Misreporting SSI as Social Security benefits and vice

**Table 3.**  
**Percentage of aged units 65 or older receiving income from selected sources, 1996**

| Income                       | CPS      |                | SIPP     |                |
|------------------------------|----------|----------------|----------|----------------|
|                              | Reported | Administrative | Reported | Administrative |
| Retirement benefits          | 93.1     | 94.1           | 96.1     | 95.4           |
| Social Security              | 90.6     | 92.0           | 94.2     | 92.6           |
| Public assistance            | 5.9      | 6.9            | 9.7      | 9.3            |
| Supplemental Security Income | 5.6      | 6.6            | 7.9      | 7.5            |

SOURCES: Author's calculations using the 1997 Current Population Survey and the 1996 Survey of Income and Program Participation.

NOTES: Estimates are weighted.

CPS = Current Population Survey; SIPP = Survey of Income and Program Participation.

versa can affect classification as a beneficiary and as a completely reliant beneficiary, changing estimates of complete reliance on Social Security benefits. Koenig (2003) found that the SIPP is less likely than the CPS to misclassify a person as a beneficiary. For matched elderly persons receiving all of their individual income from Social Security (with either reported or administrative data), Fisher (2005) found that the dominant problem with SIPP was the classification of nonbeneficiaries as Social Security beneficiaries. The CPS, however, was only slightly more likely to misclassify a Social Security beneficiary as a nonbeneficiary than vice versa. SSI payments were much more likely to be omitted or reported as Social Security benefits in the CPS than in the SIPP.<sup>17</sup>

**Table 4.**  
**Percentage of beneficiary aged units by ratio of Social Security benefits to total income, 1996**

| Survey/match        | 90 percent or more of income from Social Security | 100 percent of income from Social Security |
|---------------------|---|--|
| CPS reported        | 30.4  | 17.9                                       |
| CPS administrative  | 30.0  | 17.3                                       |
| SIPP reported       | 19.9  | 8.5  |
| SIPP administrative | 20.5  | 8.4  |

SOURCES: Author's calculations using the March 1997 Current Population Survey and 1996 Survey of Income and Program Participation.

NOTES: Estimates are weighted.

CPS = Current Population Survey; SIPP = Survey of Income and Program Participation.

Aged units with negative earnings, asset income, or nonpositive total income are excluded.

### **Conclusion**

The purpose of this exercise was to ascertain how the choice of data source affects our understanding of the resources available to the elderly. As demonstrated in this article, the selection of a data source is highly influential on the results; nevertheless, tradeoffs exist when choosing a source.

Several factors must be considered when selecting a survey. The CPS is timely, released within approximately 6 months of data collection, and used by other agencies for official statistics; however, it underreports receipt of income compared with the SIPP. The SIPP may identify recipients missed in the CPS, but panels have not started at regular intervals and the survey may soon be replaced.<sup>18</sup> Other surveys, such as the Survey of Consumer Finances and the Panel Study of Income Dynamics, do not provide enough detailed information on individual income sources, do not have a large enough sample to support detailed distributions of the composition of income by demographic characteristics, or do not provide person-level data. In the cases of *Income of the Population 55 or Older* and *Income of the Aged Chartbook*, availability of timely data at regular intervals and the ability to work with person- and family-level data have led to the selection of the CPS as the underlying source of data.

Although administrative data are more accurate for income receipt, these data alone are not able to fully address important policy analysis questions. SSA's administrative data on Social Security benefits, SSI, and earnings are limited to information needed to operate its programs with limited demographic information.<sup>19</sup>

Matching administrative data with survey data also results in complicated tradeoffs. For example, the administrative data can be matched to the SIPP and

the CPS only after the data linkages are made available to SSA following a significant processing period. Further, not all persons in the surveys can be matched to their administrative records. Even after the data are matched, the analyst must decide how to accommodate nonmatched respondents—whether nonmatched respondents should be dropped from the analysis or included using reported data. Using only matched respondents would introduce bias if these respondents differed systematically in any way from unmatched respondents. Either choice may lead to false movements in statistics over time if the proportions and/or characteristics of respondents that are matched change over time.

One conclusion that remains clear is that matching administrative data to survey data provides a strong tool in assessing the accuracy of self-reported income data. Based on the results presented here, the percentage of beneficiary aged units receiving 100 percent of their income from Social Security benefits may be overestimated when using the CPS. The statistic published in *Income of the Population 55 or Older, 1996*—17.9 percent of beneficiary aged units were completely reliant on Social Security in 1996—is much higher than the estimated 8.4 percent using SIPP and administrative data. Because this statistic is often used to make inferences about the well-being of the elderly, it is necessary to keep in mind the issues outlined in this article when interpreting the data.

## Notes

<sup>1</sup> The March Supplement is currently called the Annual Social and Economic (ASEC) Supplement. Before 2003, the Supplement was called the Annual Demographic Survey (ADS).

<sup>2</sup> The more recent 2001 panel of SIPP was able to be matched to only approximately 60 percent of respondents as opposed to over 80 percent of respondents for the 1996 SIPP. Matched records will be discussed further in the Administrative Data subsection.

<sup>3</sup> The classification of age 64 as of March 1996 as “65 or older” makes the sample comparable with the CPS sample, which is age 65 as of March 1997. This analysis uses the longitudinal core files for waves 1 through 4 of the 1996 panel of SIPP. For observations that were missing data, either because their first interviews did not collect information on January and/or February 1996 or because of the lack of an interview, the income data for the missing months were replaced with the individual’s average income for the reported months. March 1996 weights were used for three reasons: (1) March 1996 is the first month in which all rotation groups were interviewed; (2) the 1996 calendar year weights would eliminate observations that had not been

present the entire year, making attrition bias a concern; and (3) using the March 1996 weights excludes persons who entered the sample because of their association with an original survey respondent.

<sup>4</sup> Survey records were matched if they had a valid Social Security number and an age within 5 years of the age on the administrative files.

<sup>5</sup> An earlier study by Koenig (2003) also provides analysis of CPS and SIPP data matched to administrative records. The CPS match rate here is higher than that of Koenig’s study because of the discovery in 2004 of additional survey identifiers matched to administrative records.

<sup>6</sup> Social Security administrative data come from the monthly benefit credited from the Master Beneficiary Record (MBR), which is usually, but not always, the amount received by the beneficiary. Other studies have used the Payment History Update System (PHUS), which records the actual check amount. Discrepancies may arise between the MBR and the PHUS when payment for retroactive benefits is issued in a single check. Less than 1 percent of elderly observations had discrepancies between the MBR and PHUS. SSI administrative data come from the Supplemental Security Record (SSR).

<sup>7</sup> Any state-administered state SSI amounts would be replaced with a value of zero during the substitution of administrative data into the CPS, resulting in the administrative estimate of SSI receipt for the CPS being a lower bound.

<sup>8</sup> The statistics presented here were calculated using the most recent methodology from *Income of the Population 55 or Older, 2002*. Because small changes may have occurred in the data or the methods for calculating the statistics, the statistics presented here for the CPS may not match the statistics published in *Income of the Population 55 or Older, 1996*.

<sup>9</sup> Beneficiary aged units are aged units in which the non-married person or at least one spouse of the married couple is receiving Social Security benefits.

<sup>10</sup> Hungerford and others (2002) provide a more complete overview of the trends in income sources and the overall economic status of the elderly.

<sup>11</sup> In these studies, SSA’s administrative records are matched to survey reports using Social Security numbers provided during the interview. The administrative amounts of Social Security benefits and SSI payments can then be compared with the respondents’ reported income.

<sup>12</sup> Medicare Part B premiums are deducted from Social Security benefits before beneficiaries receive their payments, so the total benefit amount is generally higher than the check (or direct deposit) amount. Not all beneficiaries are enrolled in Medicare Part B, and other beneficiaries may have their premiums paid through other programs. Reporting only the net benefit makes it difficult, if not impossible,

to reconstruct the gross benefit, all of which is counted as income.

<sup>13</sup> Huynh, Rupp, and Sears (2002) had previously found that the 1996 SIPP reported net Social Security benefits.

<sup>14</sup> Koenig (2003) provides a much more detailed study of beneficiary classification in the two surveys. Her study compares survey and administrative data rates of benefit receipt for persons able to be matched to the surveys. She found that both surveys classify Social Security beneficiaries well; over 95 percent of the beneficiaries in both surveys reported that they received Social Security benefits, with nearly 100 percent for the SIPP. Federally administered SSI was a problem for the CPS, however, with less than 70 percent of beneficiaries surveyed reporting SSI receipt; over 90 percent of the federally administered SSI beneficiaries in the SIPP did so. Both surveys incorrectly classified approximately 40 percent of Social Security nonbeneficiaries and 1 percent of respondents not receiving SSI as beneficiaries of these programs.

<sup>15</sup> This variation between the surveys may occur if respondents providing a correct Social Security number differ systematically from respondents who do not. Differences may also arise between the surveys because SIPP was designed to provide data on income and government programs and oversamples lower-income persons to achieve this goal. Part of the variation may also be a result of differences in sampling methods.

All of the differences between the reported values for the CPS and the SIPP are statistically significant at the 95 percent level. After substituting administrative data, however, the difference between the surveys for Social Security is no longer statistically significant at the 95 percent level; the differences between the CPS and the SIPP for SSI and the higher-level categories of retirement benefits and public assistance remain statistically significant.

<sup>16</sup> Differences between the CPS and SIPP are significant at the 99 percent level for both reported and administrative estimates.

<sup>17</sup> Fisher (2005) also found that the estimates of the elderly in families receiving all of their income from Social Security did not change much after substituting in administrative data, but the changes to estimates of the elderly in beneficiary families receiving at least 90 percent of their income from Social Security were larger, particularly for the SIPP. The most probable explanation for this is that SIPP respondents were more likely to report their net benefits, while CPS respondents were more likely to report their gross benefits (Koenig 2003).

<sup>18</sup> The SIPP is a panel data set that follows respondents for approximately 3 or 4 years. Many respondents drop out of the survey over time, potentially resulting in attrition bias when using later years in the same panel.

<sup>19</sup> The substitution for earnings was not done in this article because administrative earnings data are available annually, not monthly as for Social Security benefits and SSI payments. Although this does not pose a problem with the CPS, it is unclear how to substitute administrative earnings data across months for persons not in the SIPP for the entire year or for persons entering or exiting a marital unit midyear. In addition, while most earnings are available on the administrative file, there may be other earned income that would be reported on a 1040, but not on a W-2 or Schedule SE form, or informal earnings that would not be reported on any administrative record. Additionally, the receipt of earnings does not appear to be misreported as often as the receipt of SSI or Social Security.

## References

- Czajka, John, J. Jacobson, and S. Cody. 2003. *Survey estimates of wealth: A comparative analysis and review of the Survey of Income and Program Participation*. Final report for the Social Security Administration (August 23).
- Fisher, T. Lynn. 2005. Measurement of reliance on Social Security benefits. Paper presented at the Federal Committee on Statistical Methodology Research Conference, Washington, DC, November 15.
- Herz, Diane. 1996. CPS: Overview. <http://www.bls.census.gov/cps/overmain.htm> (last modified May 9, 1996).
- Hungerford, Thomas, M. Rasette, H. Iams, and M. Koenig. 2002. Trends in the economic status of the elderly, 1976–2000. *Social Security Bulletin* 64(3): 12–22.
- Hurd, Michael, F. T. Juster, and J. P. Smith. 2003. Enhancing the quality of data on income: Recent innovations from the HRS. *Journal of Human Resources* 38(3): 758–772.
- Huynh, Minh, K. Rupp, and J. Sears. 2002. The assessment of Survey of Income and Program Participation benefit data using longitudinal administrative records. The Survey of Income and Program Participation Report No. 238. Washington, DC: U.S. Census Bureau.
- Koenig, Melissa. 2003. An assessment of the Current Population Survey and the Survey of Income and Program Participation using Social Security administrative data. Paper presented at the Federal Committee on Statistical Methodology Research Conference, Washington, DC, November 18.
- Roemer, Marc. 2000. Assessing the quality of the March Current Population Survey and the Survey of Income and Program Participation income estimates, 1990–1996. <http://www.census.gov/hhes/www/income/assess1.pdf> (accessed June 2, 2005).
- Sears, James, and K. Rupp. 2003. Exploring Social Security payment history matched with the Survey of Income and Program Participation. Paper presented at the Federal

- Committee on Statistical Methodology Research Conference, Washington, DC, November 18.
- [SSA] Social Security Administration. 1998. *Income of the Population 55 or Older, 1996*. Washington, DC: Office of Research, Evaluation, and Statistics, Office of Policy.
- U.S. Census Bureau. 1999. March 1997 Overview. Current Population Survey, technical documentation. <http://www.census.gov/apsd/techdoc/cps/mar97/overview.html> (last revised April 13, 1999).
- . 2000. *Money income in the United States: 1999*. Current Population Reports, P60-209.
- . 2001. *Survey of Income and Program Participation users' guide*. <http://www.sipp.census.gov/sipp/usrguide/sipp2001.pdf> (accessed April 12, 2005).
- . 2005. 2005 Annual Social and Economic Supplement. Current Population Survey, technical documentation. <http://www.census.gov/apsd/techdoc/cps/cpsmar05.pdf> (accessed May 26, 2006).
- . 2006. Introduction to SIPP: Comparison of SIPP with other surveys. Survey of Income and Program Participation. <http://www.sipp.census.gov/sipp/vs.html> (accessed May 26, 2006).

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# ***Measuring the Relative Importance of Social Security Benefits to the Elderly***

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## ***Introduction***

Financial adequacy in retirement largely depends on Social Security, pensions, and savings—commonly referred to as the “three-legged stool” of retirement income. Correspondingly, the elderly who receive all of their income from Social Security benefits are recognized as being economically vulnerable. *Income of the Population 55 or Older, 2004*, produced by the Social Security Administration (SSA 2006), reported that 21 percent of beneficiary aged units 65 or older received all of their income from Social Security. Three other articles in this issue of the *Bulletin* examine how the estimate of the percentage of elderly beneficiaries receiving most or all of their income from Social Security changes depending on the unit of observation and the source of the data. This article presents the combined effects of the unit of observation and the data source and evaluates the relative impact of each measurement option.

The unit of observation is an important methodological choice related to what constitutes an economic resource. The measure of the relative importance of Social Security income that SSA has been using in its data series includes only income received by an aged unit (aged nonmarried person or aged couple). In addition, each married couple counts as one unit, just as one nonmarried person counts as

one unit. Different units of observation have been used for other measures of economic vulnerability; for example, the official poverty measure includes income received by all members of the family and counts each person as a unit when determining poverty rates. This article constructs statistics similar to official poverty measures for comparison with the aged-unit statistics produced by SSA.

The publicly available Annual Social and Economic (ASEC) Supplement to the Current Population Survey (CPS), referred to here as the March Supplement, is used to produce both *Income of the Population 55 or Older* and *Income of the Aged Chartbook*. One alternative to using the CPS as the data source would be to generate statistics from the Survey of Income and Program Participation (SIPP). Another option would be to combine administrative data on Social Security benefits and Supplemental Security Income (SSI) with reported data from the CPS or the SIPP. This article uses data on annual income for 1996 from both surveys and administrative data in its analysis.

The article illustrates the effects of these measurement alternatives in combination. The cumulative effect of switching from the CPS to the SIPP, using administrative data in place of survey-reported data, and considering family income of persons rather than aged

units is striking. The published statistic of 17.9 percent of elderly beneficiary aged units being completely reliant on Social Security in 1996 falls to an estimated 4.8 percent of elderly beneficiary persons based on family income using the SIPP and administrative data.

### ***Unit of Observation***

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The Social Security Administration produces two series on the income of the elderly and near-elderly: *Income of the Population 55 or Older* (since 1976) and *Income of Aged Chartbook* (since 1990). Both publications primarily provide income data for aged units, which consist either of nonmarried persons or married couples.

Although these SSA publications focus on aged units, researchers may choose to use different units of observation, such as persons, families, or households, based on the resources they wish to measure. One prominent example is the official poverty statistic produced by the U.S. Census Bureau, which includes family income when determining whether a person is in poverty. To demonstrate the effect of the unit of observation, this article compares estimates of the relative importance of Social Security using aged units with estimates using the family income of aged persons.

Statistics for *aged units* treat each marital unit (married couple or nonmarried individual) as one unit. A nonmarried individual has only his or her own income and demographic attributes. In both of SSA's data series cited earlier, aged units classified as "65 or older" are nonmarried persons 65 or older or married couples in which the husband is 65 or older or the husband is younger than 55 and the wife is 65 or older. All other demographic characteristics for a married couple, including the sample statistical weight, are that of the husband. Income for the married couple is the sum of both spouses' income; if either spouse has income from a specific source, the married couple is considered to be a recipient unit. The aged unit focuses on the income of the aged, whether they live with other family members or not, but counts married couples as a single unit with shared resources. Aged-unit statistics exclude the income of nonspouse members and hence may not provide a complete picture of the resources available to the unit. Interpreting aged-unit statistics in the same way as person statistics will emphasize the economic well-being of nonmarried persons relative to that of married persons.

Statistics for the *family income of persons* are based on the demographic attributes (age, sex, race, and Hispanic origin) of each person. Total income from all family members (related through blood, marriage, or adoption) is treated as another attribute of the person. If any person in the family has income from a specific source, the aged person is considered to be in a recipient family.

### ***Data Sources***

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*Income of the Population 55 or Older* and *Income of the Aged Chartbook* are derived from the Annual Social and Economic Supplement to the Current Population Survey, which is conducted annually by the Census Bureau. Alternative data sources, which have different strengths and weaknesses, are also available. The Survey of Income and Program Participation is strong at measuring small or infrequently received sources of income but is not conducted at regular intervals. SSA's administrative records are more accurate than survey data but lack demographic information and supply data for only a few income sources. This analysis uses income data for 1996 because the SIPP match rate to administrative data declined considerably in the 2001 panel.<sup>1</sup>

### ***Survey Data***

Surveys may differ in many ways, and these differences may affect the statistics produced from the resulting data. The following descriptions of the CPS and SIPP briefly describe some of the broader differences between the surveys that may influence differences in the statistics produced using their data, such as questionnaire detail and the frequency of interviews.

**Current Population Survey.** The Annual Social and Economic (ASEC) Supplement to the CPS is conducted annually in March.<sup>2</sup> The survey, also known as the March Supplement, collects data on income received during the previous calendar year for approximately 35 cash and in-kind sources. Official estimates of income and poverty in the United States are based on this survey (U.S. Census Bureau 2007).

This article uses the 1997 March Supplement to the CPS, which collected data for annual income received in 1996. Persons are designated as "65 or older" if they were at least age 65 as of the interview in March 1997. Aged units classified as "65 or older" are nonmarried persons 65 or older (in March 1997) or married couples in which the husband is 65 or older or the husband is younger than 55 and the wife is 65 or older (in March 1997).

**Survey of Income and Program Participation.** The SIPP is a longitudinal panel survey conducted by the Census Bureau; panels begin periodically with durations ranging from 2½ to 4 years. The survey is designed to collect data on sources and amounts of income to provide improved statistics on the distribution of income in the United States. Data are collected on approximately 70 cash and in-kind sources of income (U.S. Census Bureau 2005 and 2007).

This article uses the 1996 SIPP panel for income received during 1996; income is reported for individual months and summed over the entire year.<sup>3</sup> Persons classified as “65 or older” were at least age 64 as of the interview in March 1996. Aged units classified as “65 or older” were nonmarried persons 64 or older (in March 1996) or married couples in which the husband was 64 or older or the husband was younger than 54 and the wife was 64 or older (in March 1996).<sup>4</sup>

### **Administrative Data**

The Social Security Administration administers two cash benefit programs—Social Security, or Old-Age, Survivors, and Disability Insurance (OASDI), and Supplemental Security Income (SSI), the separate program for low-income aged and disabled persons.

In this article, statistics based on administrative data refer to statistics based on a combination of survey-reported and administrative information. Self-reported data were replaced with Social Security’s administrative data for matched survey records.<sup>5</sup> Self-reported data from the survey were used for unmatched survey respondents. A slightly greater proportion of observations in the 1996 SIPP were matched with Social Security administrative records (85 percent of those aged 64 or older present in March 1996) than in the March 1997 Supplement of the CPS (77 percent of those aged 65 or older).

**Social Security (OASDI).** Survey-based Social Security benefit amounts have been replaced with the administrative amount of the Social Security benefit paid to the beneficiary plus the beneficiary’s Medicare Part B premium (when the latter is applicable) in both the SIPP and the CPS.<sup>6</sup>

**Supplemental Security Income (SSI).** Survey-based SSI payments have also been replaced by administrative payment amounts.<sup>7</sup> The process is somewhat more complicated for the SSI program because there are federal and state components to SSI payments. The SIPP and the CPS treat this differently in their questionnaires: the SIPP asks specifically for federal payments

and state payments separately; the CPS asks respondents for a single, combined SSI payment amount.

For states with federally administered state SSI payments, both federal and state SSI payment amounts were taken directly from administrative payment data files and were used to replace reported SSI payments for matched observations for both the SIPP and the CPS. For states without federally administered SSI payments, the procedure was different for processing the SIPP and the CPS. For the SIPP, survey-collected federal payments were replaced by administrative data, and survey-based state payments were not changed. For the CPS, the survey-based SSI payment (combined state and federal) amount was replaced by administrative information.<sup>8</sup>

### **Impact of Changes in Unit of Observation and Data Source**

This analysis compares the estimates of the relative importance of Social Security when changes to the unit of observation and data sources are made singly or in combination. Table 1 highlights the effects of incorporating various combinations of changes. The numbers were calculated according to the methodology currently used in *Income of the Population 55 or Older* and *Income of the Aged Chartbook*. Because the results are similar for beneficiaries receiving almost all (90 percent) of their income from Social Security and beneficiaries receiving all of their income from Social Security (see Table 1), only the latter statistics are discussed.

#### **Impact of the Unit of Observation**

Taken alone, shifting the unit of observation from aged units causes the estimate of 17.9 percent of beneficiary aged units receiving all of their income from Social Security to change to 11.4 percent of the elderly in beneficiary families receiving all of their family income from Social Security. There are two reasons why the estimate for aged units is larger: (1) the aged-unit statistic excludes nonspouse family income, which is included in the measure for persons with family income, and (2) an aged unit may be a nonmarried person or a married couple, in which case one unit consists of two persons. If an aged-unit statistic is interpreted as being based on persons, it places extra emphasis on nonmarried persons, who tend to be less well off economically;<sup>9</sup> in this case it corresponds to a higher percentage of beneficiaries/beneficiary units receiving all of their income from Social Security.<sup>10</sup>

**Table 1.**  
**Percentage of beneficiaries receiving almost all or all of their income from Social Security, 1996**

| Unit of observation            | 90 percent or more from Social Security |      | 100 percent from Social Security |      |
|--------------------------------|---|------|----------------------------------|------|
|                                | CPS                                     | SIPP | CPS                              | SIPP |
| Aged unit                      |   |      |                                  |      |
| Survey data only               | 30.4                                    | 19.9 | 17.9                             | 8.5  |
| Survey and administrative data | 30.0                                    | 20.5 | 17.3                             | 8.4  |
| Family income of persons       |   |      |                                  |      |
| Survey data only               | 22.3                                    | 13.2 | 11.4                             | 4.8  |
| Survey and administrative data | 22.2                                    | 13.7 | 11.2                             | 4.8  |

SOURCES: Author's calculations using the March 1997 Current Population Survey, the 1996 Survey of Income and Program Participation, and Social Security administrative records.

NOTE: CPS = Current Population Survey; SIPP = Survey of Income and Program Participation.

### **Impact of the Survey Source**

Switching only the survey from the CPS to the SIPP causes the estimate of elderly beneficiary aged units receiving all of their income from Social Security to drop by more than half, from 17.9 percent to 8.5 percent. This result is due in part to the SIPP's frequent interviews and questionnaire, which were designed to pick up small or infrequently received sources of income. A more in-depth look at the differences in income reported in the two surveys suggests that underreporting of the receipt of asset income, and possibly pensions, in the CPS leads to discrepancy in the two estimates.<sup>11</sup>

### **Impact of Using Administrative Data**

Social Security's administrative data from the OASDI and SSI programs can be used to replace the income amounts reported by respondents in surveys such as the CPS and the SIPP. However, the impact of using administrative data for program income amounts has a relatively small effect when compared with either the effects of using statistics with various definitions of the unit of observation or various surveys chosen for analysis. The percentage of all beneficiary units receiving all of their income from Social Security decreases slightly, from 17.9 percent using only reported survey data in the CPS to 17.3 percent when administrative data are matched to the CPS to correct program income amounts. This decrease in the CPS estimates because of the use of administrative data indicates that either some nonbeneficiary units are reporting Social Security benefits that they have not received, some units receiving SSI are not reporting SSI, or both.<sup>12</sup>

The change in the estimates from switching reported data for administrative data in the CPS (0.6 percentage points) is smaller than the change that occurs when switching from CPS-reported data to SIPP-reported data (9.4 percentage points) partly because administrative records are used in place of reported data only for Social Security benefits and SSI, not for all sources of income.

Depending on the combination of choices of data sources and units of observation, 4.8 percent to 17.9 percent of elderly beneficiaries are estimated to be completely dependent on Social Security for their income. The lowest figure, 4.8 percent, was calculated for the person based on family income using the SIPP. The highest figure, 17.9 percent, was calculated for the aged unit using only reported data from the CPS—the methodology currently used for the statistics published in both *Income of the Population 55 or Older* and *Income of the Aged Chartbook*. The majority of this difference is attributable to use of the SIPP rather than the CPS because the SIPP better captures sources of income other than Social Security, particularly asset income.

### **Future Directions**

The purpose of these exercises was to demonstrate how key measurement choices affect our understanding of the resources available to the elderly. Depending on the unit of observation and underlying data, the percentage of elderly beneficiaries receiving all of their income from Social Security ranges from 4.8 percent to 17.9 percent. Given this broad range of results, a natural next question is whether any of the

measurement options described in this article should be adopted when measuring the relative importance of Social Security for elderly beneficiaries. As expected, there are tradeoffs associated with each option.

### **Choice of Unit of Observation**

In the case of choosing a unit of observation, the cost of changing from one unit to another is the discontinuity it would introduce into a nearly 30-year time series. Further, some researchers want to include only income of the elderly marital unit, while others want information on income of the entire family. To better accommodate the needs of users of *Income of the Population 55 or Older*, SSA has revised and expanded the publication beginning with an expanded 2004 edition that will be available online only. The new structure provides more information on aged units and the family income of elderly persons. An electronic version of the new publication for 2004 data is expected to be available in 2008, and electronic and paper copies of the new format for 2006 data are also expected to be available in 2008.

### **Choice of Survey**

The selection of survey is highly influential on the results presented in this article, but there are tradeoffs among data sources. The CPS is timely and is used by other agencies for official statistics, but it underestimates whether certain income types were received. The SIPP does a better job of ascertaining whether or not certain income types were received, but it may be more likely to underestimate the amounts of that income.<sup>13</sup> Also, new SIPP panels have not started at regular intervals, which makes it difficult to produce a consistent time-series publication.<sup>14</sup> Other surveys are available but have not been matched to Social Security administrative records. Some surveys provide data on pension withdrawals, savings, and wealth not captured in the CPS, which would provide a broader picture of economic well-being, but these data are not necessarily available at individual and family levels. In the case of *Income of the Population 55 or Older* and *Income of the Aged Chartbook*, availability of data at regular intervals and the ability to work with person- and family-level data have led to the selection of the CPS as the underlying source of data.<sup>15</sup>

The Social Security Administration has agreements in place to match its administrative records to the SIPP and CPS, but only after a significant time lag and not

to all persons in the surveys.<sup>16</sup> The choice here is one of timeliness versus accuracy. Even if matched data were to be used, the question then would be whether to use only matched respondents and data or matched data with reported data for respondents unable to be matched. Using only matched respondents would introduce bias if matched respondents differ systematically in any way from unmatched respondents; either choice may lead to false movements in statistics over time if the proportions of the sample that are matched change over time. Although it may not be desirable to publish a statistical series using administrative data, these data are useful for assessing the accuracy of self-reported data.

### **Other Issues**

Another issue that has not been addressed in this article is the definition of income, which can differ by agency and usage. The definition of income in both *Income of the Population 55 or Older* and *Income of the Aged Chartbook* is the Census Bureau definition of total money income. The definition of total money income excludes capital gains, 401(k) and individual retirement account (IRA) withdrawals that are not regularly scheduled, and noncash benefits. These items also provide resources for the elderly, which are not captured under SSA's current measure of the relative importance of Social Security. The appendix addresses some of the effects of including noncash benefits as income. In addition, SSA is currently working with Census to gather and analyze data on nonannuitized withdrawals from pensions and IRAs.

Regardless of any changes that may be implemented in *Income of the Population 55 or Older* or *Income of the Aged*, it is important to keep in mind the issues outlined here when interpreting the data.

### **Appendix: Inclusion of Noncash Benefits**

Just as family income may be considered a resource, noncash benefits like energy assistance or food stamps may also be a resource for many of the elderly. Non-cash benefits are not included as income for official statistics such as the poverty rate, but they can be an important resource to recipients. Among its list of recommendations for changes to the measurement of poverty, the National Research Council (1995) has suggested that noncash benefits be considered when determining the resources available to an individual or

family. A workshop on experimental poverty measures by the National Research Council (2005, 4) reported that

the omission of these [taxes and near-money government benefits] from the official definition of income has become increasingly serious in recent years because government transfers are now concentrated in benefits that are not considered part of families' gross cash income—such as housing subsidies, child care subsidies, and the EITC—rather than cash welfare assistance. The unfortunate result is that the current official poverty measure no longer captures either people's perceptions of poverty or the effect of various policies on poverty.

Various noncash benefit programs provide food, energy, housing, medical care, transportation, or child care to persons who qualify.

Inclusion of the value of noncash benefits as income for poverty measures has been controversial and difficult to measure.<sup>17</sup> Regardless of the dollar values assigned to food stamps or the like, noncash benefits are a resource. This Appendix presents data on the noncash benefits received by aged units (or persons) receiving all of their income from Social Security and recalculates reliance on Social Security with noncash benefits counted as a resource. These calculations do not require dollar values to be assigned to the noncash benefits received.

The analysis below incorporates food, energy, and housing benefits for 1996. Food benefits in the Current Population Survey comprise Food Stamps; in the

**Table A-1.**  
**Percentages of aged units 65 or older reporting noncash benefits, 1996**

| Type of noncash benefit | All aged units |      | Beneficiary aged units reporting all income from Social Security |      |
|-------------------------|----------------|------|--|------|
|                         | CPS            | SIPP | CPS  | SIPP |
| Energy                  | 3.3            | 3.4  | 5.3  | 6.6  |
| Food                    | 5.6            | 5.5  | 10.5   | 11.8 |
| Housing                 | 5.5            | 5.3  | 10.1   | 11.8 |

SOURCES: Author's calculations using the March 1997 Current Population Survey and the 1996 Survey of Income and Program Participation.

NOTE: CPS = Current Population Survey; SIPP = Survey of Income and Program Participation.

**Table A-2.**  
**Percentage of beneficiary aged units 65 or older reporting all income from Social Security, including various noncash benefits as income, 1996**

| Type of noncash benefit | CPS  | SIPP |
|-------------------------|------|------|
| None                    | 17.9 | 8.5  |
| Energy                  | 16.9 | 7.9  |
| Food                    | 16.0 | 7.5  |
| Housing                 | 16.1 | 7.5  |
| Energy and food         | 15.4 | 7.1  |
| All of the above        | 14.2 | 6.4  |

SOURCES: Author's calculations using the March 1997 Current Population Survey and the 1996 Survey of Income and Program Participation.

NOTE: CPS = Current Population Survey; SIPP = Survey of Income and Program Participation.

SIPP, they comprise the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and Food Stamps.<sup>18</sup> Energy assistance in both surveys includes vouchers, direct payments to utilities, and checks to the household for energy. Housing assistance in both surveys is indicated by a rent subsidy or residence in public housing. Medical benefits in the form of Medicare Part A and Medicaid were not included.<sup>19</sup> Transportation assistance data were unavailable in the 1996 SIPP panel until 1998 (wave 8), and child care benefits are unlikely to be a significant source of non-cash income for the elderly.

According to the SIPP, 24.6 percent of beneficiary aged units reporting all of their cash income from Social Security received housing, energy, or food assistance in 1996, and 5.3 percent of elderly aged units reporting all of their cash income from Social Security received assistance from more than one source (Table A-1). Receipt of noncash benefits is similar in the CPS, with 20.9 percent of beneficiary aged units reporting all of their cash income from Social Security receiving housing, energy, or food assistance and 4.8 percent receiving assistance from more than one source.

As expected, the inclusion of noncash benefits leads to a decline in the percentage of aged units reporting complete dependence on Social Security. In the SIPP, inclusion of food, energy, and housing assistance results in a drop of 2.1 percentage points in 100 percent reliance on Social Security benefits; in the CPS, inclusion of these benefits causes a decrease of 3.7 percentage points (Table A-2).

**Table A-3.**  
**Percentage of elderly beneficiaries reporting all income from Social Security, 1996**

| Unit of observation            | Excluding noncash benefits |      | Including noncash benefits |      |
|--------------------------------|----------------------------|------|----------------------------|------|
|                                | CPS                        | SIPP | CPS                        | SIPP |
| Aged unit                      |                            |      |                            |      |
| Survey data only               | 17.9                       | 8.5  | 14.2                       | 6.4  |
| Survey and administrative data | 17.3                       | 8.4  | 13.8                       | 6.4  |
| Person with family income      |                            |      |                            |      |
| Survey data only               | 11.4                       | 4.8  | 9.0                        | 3.4  |
| Survey and administrative data | 11.2                       | 4.8  | 8.9                        | 3.5  |

SOURCES: Author's calculations using the March 1997 Current Population Survey, the 1996 Survey of Income and Program Participation, and Social Security administrative records.

NOTE: CPS = Current Population Survey; SIPP = Survey of Income and Program Participation.

Table A-3 highlights the effect of including the value of noncash benefits with the combinations of changes in the article. The estimates were calculated according to the methodology currently used in *Income of the Population 55 or Older* and *Income of the Aged Chartbook*.

As with the poverty measure, exclusion of the value of noncash benefits understates the resources available to an individual and thus overstates reliance on Social Security benefits. However, data on the values of noncash benefits are not necessarily available in all surveys.

### Notes

<sup>1</sup> The more recent 2001 panel of SIPP could be matched to only approximately 60 percent of respondents as opposed to over 80 percent of respondents for the 1996 SIPP. Matched records will be discussed further in the subsection on administrative data.

<sup>2</sup> Before 2003, the ASEC was called the Annual Demographic Survey (ADS). The ASEC and ADS are also commonly referred to as the March Supplement.

<sup>3</sup> This analysis uses the longitudinal core files for waves 1 through 4 of the 1996 panel of SIPP. For observations that were missing data either because their first interviews did not collect information on January and/or February 1996 or because of the lack of an interview, the income data for the missing months were replaced with the individual's average income for the reported months.

<sup>4</sup> The classification of age 64 as of March 1996 as "65 or older" makes the sample comparable with the CPS sample, which is age 65 as of March 1997. March 1996 weights were used for three reasons: (1) March 1996 is the first month in which all rotation groups were interviewed; (2) the

1996 calendar year weights would eliminate observations that had not been present the entire year, making attrition bias a concern; and (3) using the March 1996 weights excludes persons who entered the sample because of their association with an original survey respondent.

<sup>5</sup> Survey records were matched if they had a valid Social Security number and an age within 5 years of the age on the administrative files.

<sup>6</sup> OASDI administrative data come from the monthly benefit credited from the Master Beneficiary Record (MBR), which is usually, but not always, the amount received by the beneficiary. Other studies have used the Payment History Update System (PHUS), which records the actual check amount. Discrepancies may arise between the MBR and the PHUS when payment for retroactive benefits is issued in a single check. Less than 1 percent of elderly observations had discrepancies between the MBR and PHUS.

<sup>7</sup> SSI administrative data come from the Supplemental Security Record (SSR). These records reflect actual payments.

<sup>8</sup> Any state-administered state SSI amounts would be replaced with a value of zero during the substitution of administrative data into the CPS, resulting in the administrative estimate of SSI receipt for the CPS being a lower bound.

<sup>9</sup> Table 3 of "The Impact of the Unit of Observation on the Measurement of the Relative Importance of Social Security Benefits to the Elderly" (also in this issue of the *Bulletin*) shows that married persons and couples are more likely to receive income from sources other than Social Security benefits than are nonmarried persons, except for public assistance and pensions for women. Also, the median income in 2004 (\$13,999) for an elderly nonmarried person was less than half (\$34,900) that of an elderly married couple (SSA 2006).

<sup>10</sup> For further discussion of the effects of changes in the unit of observation, see “The Impact of the Unit of Observation on the Measurement of the Relative Importance of Social Security Benefits to the Elderly” (also in this issue of the *Bulletin*).

<sup>11</sup> For further discussion of the effects of survey choice, see “The Impact of Survey Choice on Measuring the Relative Importance of Social Security Benefits to the Elderly” (also in this issue of the *Bulletin*).

<sup>12</sup> “The Impact of Survey Choice on Measuring the Relative Importance of Social Security Benefits to the Elderly” (also in this issue of the *Bulletin*) provides further comparisons of administrative and reported data for Social Security benefits and SSI payments in the CPS and the SIPP.

<sup>13</sup> For further discussion on this topic, see “The Impact of Survey Error on Measuring Reliance on Social Security Benefits” (also in this issue of the *Bulletin*).

<sup>14</sup> SIPP is a panel data set that follows respondents for 2½ to 4 years. Many respondents drop out of the survey over time, resulting in attrition bias, which may introduce problems when using sequential years in the same panel for these measures. In addition, the Census Bureau is currently developing another survey to replace the SIPP.

<sup>15</sup> For further discussion on this topic, see “The Impact of Survey Error on Measuring Reliance on Social Security Benefits” (also in this issue of the *Bulletin*).

<sup>16</sup> SSA maintains records of Social Security benefits, Supplemental Security Income payments, and earnings. Earnings are considered to be federal tax information under the authority of the Internal Revenue Service (IRS). The substitution for earnings was not done in this article because earnings data are available annually, not monthly as for Social Security benefits and SSI payments. It is unclear how to substitute administrative earnings data across months for persons not in the survey for the entire year or for persons entering or exiting a family unit midyear. In addition, while most earnings are available on the administrative file, there may be other earned income that would be reported on a 1040, but not on a W-2 or Schedule SE, or informal earnings that would not be reported on any administrative record. Additionally, the receipt of earnings is not misreported as often as is the receipt of SSI or Social Security.

<sup>17</sup> Noncash transfers enable cash income that would have been spent on goods or services to be used for something else. Even though benefits such as food stamps or energy assistance may be denominated in dollars, that dollar amount may not be the appropriate value for the benefit to the recipient. For example, some recipients may not be willing to pay \$100 in cash for \$100 in food stamps because they lack the flexibility of cash. The question of value is: How much is \$100 in food stamps worth in cash to the individual receiving them?

<sup>18</sup> Other types of food benefits, such as free school lunches, are reported in these surveys, but this analysis focuses solely on food stamps and WIC. WIC benefits would most likely only be received in an elderly person’s family if a younger family member qualified for benefits.

<sup>19</sup> Medicare Part A and Medicaid provide nearly universal coverage of medical benefits for aged units 65 or older. Using a dummy variable for coverage would have resulted in 0 percent of elderly aged units receiving all of their income from Social Security.

## References

- Herz, Diane. 1996. CPS: Overview. <http://www.bls.census.gov/cps/overmain.htm> (last modified May 9).
- Koenig, Melissa. 2003. An assessment of the Current Population Survey and the Survey of Income and Program Participation using Social Security administrative data. Paper presented at the Federal Committee on Statistical Methodology Research Conference, Washington, DC, November 18.
- National Research Council. 1995. *Measuring poverty: A new approach*, eds. Constance F. Citro and Robert T. Michael. Panel on Poverty and Family Assistance: Concepts, Information Needs, and Measurement Methods, Committee on National Statistics, Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academies Press.
- . 2005. Experimental poverty measures: Summary of a workshop. Planning Group for the Workshop to Assess the Current Status of Actions Taken in Response to *Measuring poverty: A new approach*, Committee on National Statistics, Division of Behavioral and Social Sciences and Education. Washington, DC: National Academies Press.
- [SSA] Social Security Administration. 1998. *Income of the Population 55 or Older, 1996*. Office of Policy, Office of Research, Evaluation, and Statistics. Washington, DC: SSA.
- . 2006. *Income of the Population 55 or Older, 2004*. Office of Policy, Office of Research, Evaluation, and Statistics. Washington, DC: SSA.
- U.S. Census Bureau. 2000. *Money income in the United States: 1999*. Current Population Reports, P60-209.
- . 2005. *Survey of Income and Program Participation users’ guide*. <http://www.sipp.census.gov/sipp/usrguide/sipp2001.pdf> (accessed April 12).
- . 2007. Introduction to SIPP: Comparison of SIPP with other surveys. Survey of Income and Program Participation. <http://www.sipp.census.gov/sipp/vs.html> (accessed January 22).

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# *Hispanics, Social Security, and Supplemental Security Income*

by Patricia P. Martin

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## **Summary**

The U.S. Census Bureau reports that Hispanics are the country's largest and fastest growing minority, representing about 14.4 percent of the population in 2005 (Census Bureau 2006b). By 2050, Hispanics will account for an estimated 24.4 percent of the population—or 1 in every 4 persons in the United States (Census Bureau 2004, Table 1a). The Hispanic population tends to be younger than the overall population and currently represents a relatively small but growing fraction of the Social Security beneficiary population. The representation of Hispanics in the Supplemental Security Income (SSI) program, however, approximates that of their representation in the overall population.

This article compares the Hispanic population with the overall population along several dimensions, with a particular focus on the Social Security beneficiary and SSI recipient populations. Data are drawn mainly from the 2005 Public Use Microdata Sample of the American Community Survey (ACS PUMS), a relatively new data source with a rich set of economic and demographic variables. Fully implemented nationwide for the first time in 2005, the ACS became the largest household survey in the United States with a sample of almost 3 million addresses.

The analysis using the ACS finds that the Hispanic population is significantly different from the general population, particularly in the

areas of age distribution, educational attainment, and economic well-being. Compared with the general population, the Hispanic segment is younger and is characterized by lower levels of educational attainment and a higher rate of poverty. The Hispanic Social Security beneficiary population also differs significantly from the general beneficiary population in the same areas. In contrast, the Hispanic and general SSI populations are more comparable with regard to age and economic status and differ significantly only with regard to education.

## **Introduction**

Hispanics constitute an important, growing, and changing demographic subgroup of beneficiaries of the retirement, survivor, and disability programs under Social Security. Today, only about 6 percent of Social Security beneficiaries aged 62 or older are Hispanic, but according to projections by the Social Security Administration's MINT (Modeling Income in the Near Term) model that figure will exceed 15 percent by 2050.<sup>1</sup> Hispanics tend to be younger than the overall population (Ramirez 2004, 4), and by 2050 they may represent an even larger fraction of younger beneficiaries (for example, those under age 62). The Hispanic beneficiary population is not only growing, but its composition is changing. As a result of immigration trends, future Hispanic beneficiary populations will probably reflect a smaller percentage of persons tracing their

ancestry to the Caribbean and larger percentages with Mexican and Central American ancestry.<sup>2</sup>

Hispanics are also an important subgroup of Supplemental Security Income (SSI) recipients. SSI is a means-tested program for disabled and elderly persons who have limited income and assets. It is administered by the Social Security Administration (SSA) but is distinct from the Social Security program. Social Security is financed by payroll taxes and is paid to eligible persons who are lawfully residing in the United States. By contrast, the SSI program is financed by general funds of the U.S. Treasury and restricts payments to U.S. citizens and certain groups of qualified aliens. SSI is available to persons in the 50 states, the District of Columbia, and some U.S. territories but, importantly, not Puerto Rico. Most states provide a supplement to the federal benefit. Among persons aged 15 or older, Hispanics represent an estimated 13.0 percent of the SSI population. That figure matches the estimated percentage of Hispanics in the overall population in the same age group (13.0 percent).

### ***The 2005 American Community Survey***

Because Hispanics represent a growing subgroup of Social Security beneficiaries and a sizable fraction of SSI recipients, policymakers are showing a greater interest in their well-being.<sup>3</sup> To provide a clearer picture of these populations, this article uses the American Community Survey (ACS), which was developed by the U.S. Census Bureau to replace data collected on the long form of the decennial census. Researchers can access detailed ACS data on income, race and ethnicity, and other economic and demographic variables through the survey's Public Use Microdata Sample (PUMS), which in 2005 contained data representing about 1.3 million households (Census Bureau 2006c).<sup>4</sup> This study used the public-use version of the 2005 ACS PUMS.<sup>5</sup> Future Social Security research may be able to use ACS data matched to SSA's administrative records (see Haines and Greenberg 2005, 5).<sup>6</sup>

Surveys vary, to some extent, in the wording of questions used to ascertain Hispanic origin. In the ACS, the origin of each person in the household is determined by an affirmative response to the following question: "Is this person Spanish/Hispanic/Latino?" Respondents are given five choices:

- No
- Yes, Mexican, Mexican American, Chicano
- Yes, Puerto Rican

- Yes, Cuban
- Yes, other Spanish/Hispanic/Latino

Those in the last category are asked to specify a place of origin. People in this category are from Spain, the Spanish-speaking countries of Central or South America, or the Dominican Republic or identify themselves generally as Spanish, Spanish American, Hispanic, Hispano, Latino, and so on (Census Bureau 2006a, 40). The Census Bureau notes that origin can be viewed as "heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors" (Census Bureau 2006a, 40). Hispanics may be of any race.

The ACS includes persons who indicated that the United States was their usual place of residence at the time of the survey. This group includes the foreign-born population, which is made up of naturalized U.S. citizens, lawful permanent residents (immigrants), temporary migrants (for example, foreign students), humanitarian migrants (for example, refugees), and unauthorized migrants (people illegally present in the United States) (Census Bureau 2006a, 31).

The ACS does not ask about immigration status, and thus one cannot decompose the foreign-born population into the various component groups. For that reason, results for Hispanics presented in this article are based on the entire resident Hispanic population and are not restricted to certain groups such as citizens and lawful permanent residents. Note, however, that regardless of a survey's design, certain groups are less likely to be represented in federal surveys. For example, some analysts believe that the net undercount of unauthorized residents in the 2000 Census was much higher than that for foreign-born individuals residing in the country legally—10 percent compared with 2.5 percent (Immigration and Naturalization Service 2003).

Only persons residing in housing units in the 50 states and the District of Columbia were included in the 2005 ACS.<sup>7</sup> Future files will also include persons in group quarters such as college dormitories, prisons, barracks, shelters, and nursing homes. In 2000, less than 3 percent of the total population resided in group quarters (Census Bureau 2001).

This article

- presents background information on the size, composition, and growth of the Hispanic population using data from a variety of sources;

- provides information from the 2005 ACS PUMS on the Hispanic Social Security beneficiary population and the overall Social Security population;
- provides information on SSI recipients; and
- discusses the findings and policy implications.

Comparisons involving the 2005 ACS PUMS data have been statistically tested using replicate weights provided by the Census Bureau. Unless otherwise indicated, all comparisons are statistically significant at the 90 percent confidence level.

## ***Background on the Hispanic Population in the United States***

This section presents an overview of the Hispanic population in the United States—where they come from, who they are, and their participation in the Social Security and Supplemental Security Income programs.

### ***Growth of the U.S. Hispanic Population***

Hispanics now represent the largest ethnic minority subgroup in the United States, and their numbers are projected to increase because of continued immigration and a birth rate that outpaces that of non-Hispanic blacks and whites.<sup>8</sup> The U.S. Census Bureau reports that about 42.7 million Hispanics lived in the United States in 2005 (Chart 1), representing roughly 14.4 percent of the U.S. population. By 2050, Hispanics are projected to number over 100 million and account for 24.4 percent of the population (Census Bureau 2004, Table 1a).

Compared with the growth of the total U.S. population, growth of the Hispanic population was over five times greater between 1980 and 1990, over four times greater between 1990 and 2000, and almost four times greater between 2000 and 2005 (Chart 1).

Between 1980 and 1990, the Hispanic population grew by 53 percent, (Census Bureau 1993), compared with growth of only 10 percent for the total U.S. population (Census Bureau 2002). Between 1990 and 2000, the Hispanic population grew by 59 percent (Census Bureau 1993, 2006b) compared with 13 percent growth for the total U.S. population (Census Bureau 2002). Between 2000 and 2005, the Hispanic population grew by 20 percent, and the U.S. population grew by 5 percent (Census Bureau 2006b).

### ***Country of Origin***

More than three-quarters of U.S. Hispanics report being of Central American, primarily Mexican,

descent (Chart 2). According to ACS data, the population of Mexico accounted for 26.7 percent of the total population in all Spanish-speaking countries, but the percentage of Hispanics in the United States who reported Mexican origin, or descent, was 2.6 times higher (69.3 percent), as shown in Table 1.<sup>9</sup> Also, the U.S. Hispanic population of Mexican origin (26.8 million) is about one-fourth the size of the population of Mexico (107.0 million). These statistics reflect the role that Mexico has played in shaping the Hispanic population in the United States. Furthermore, this role has grown in the past few decades. In 1970, only 56.5 percent of Hispanics reported Mexican origin (Gibson and Jung 2005), excluding the “Other Spanish” category.

Large numbers of U.S. Hispanics report Caribbean origin: those of Puerto Rican, Cuban, and Dominican descent make up some of the largest Hispanic groups in the United States. Other large Hispanic groups include those of Salvadoran, Guatemalan, and Colombian descent.

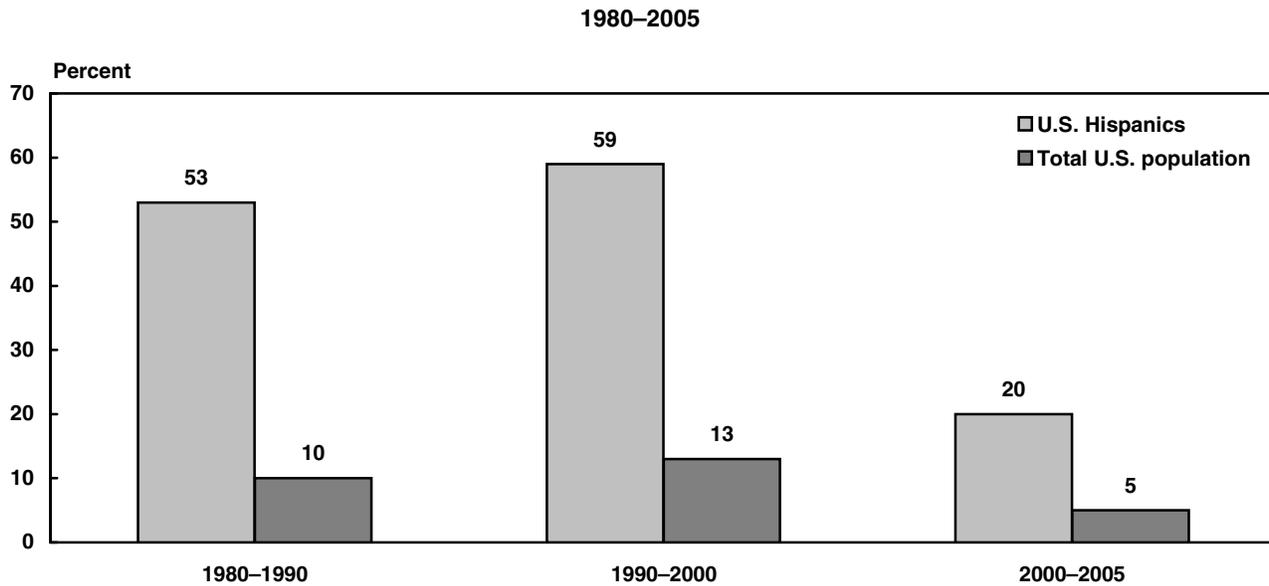
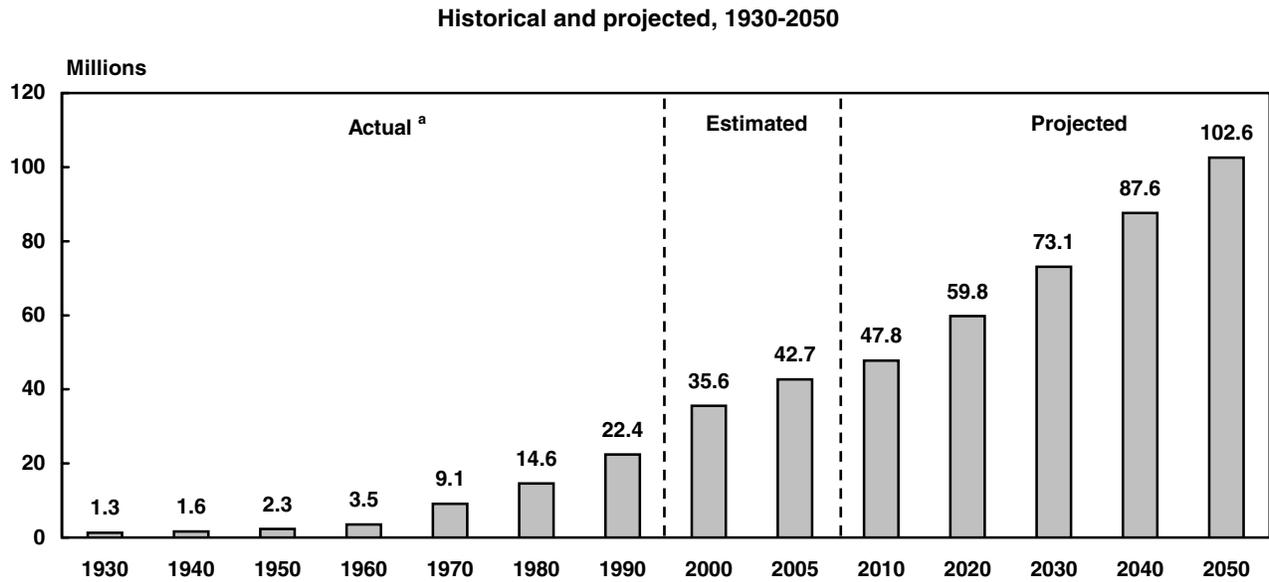
### ***Characteristics of U.S. Hispanics***

This section presents a snapshot of the demographic, economic, and other characteristics of the Hispanic population in the U.S. today and compares them with those of the overall U.S. population (Table 2).

**Age and Marital Status.** Hispanics tend to be younger than the general U.S. population. Almost 30 percent of Hispanics were under age 15 in 2005, compared with about 21 percent of the total population (Chart 3). Forty-six percent of Hispanics were under age 25, compared with 35 percent of the total population. In 2005, the median age for Hispanics was 27.2 years, compared with 36.4 years for the total population.<sup>10</sup> In addition, about one-half of non-Hispanic whites were older than 40.<sup>11</sup> Almost 15 percent of the total population was aged 62 or older, compared with only 6.5 percent of the Hispanic population. In part because Hispanics tend to be younger, they are less likely to be married—almost 36 percent of Hispanics were married, compared with more than 42 percent of the total population.

**Education.** Another difference between Hispanics and the general population is their lower level of educational attainment. About 41 percent of Hispanics aged 25 or older did not have a high school diploma in 2005, compared with 16 percent of the total population. In addition, only about 12 percent of Hispanics had a bachelor’s degree or higher, compared with 27 percent of the overall population.

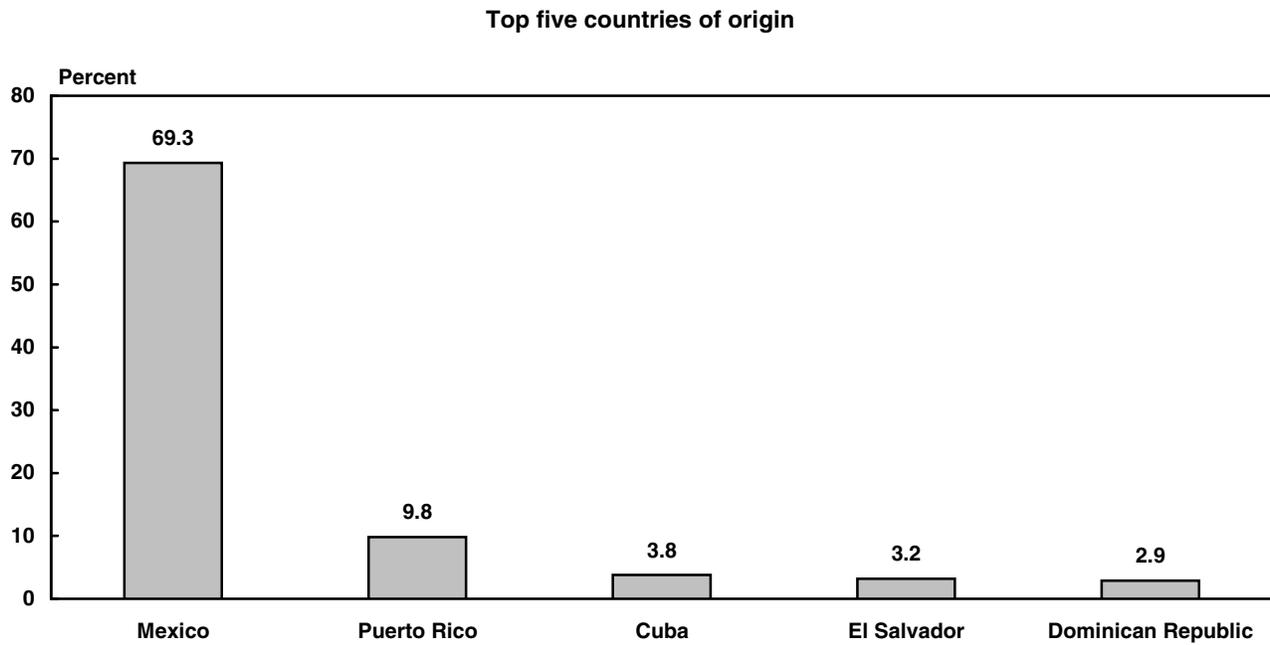
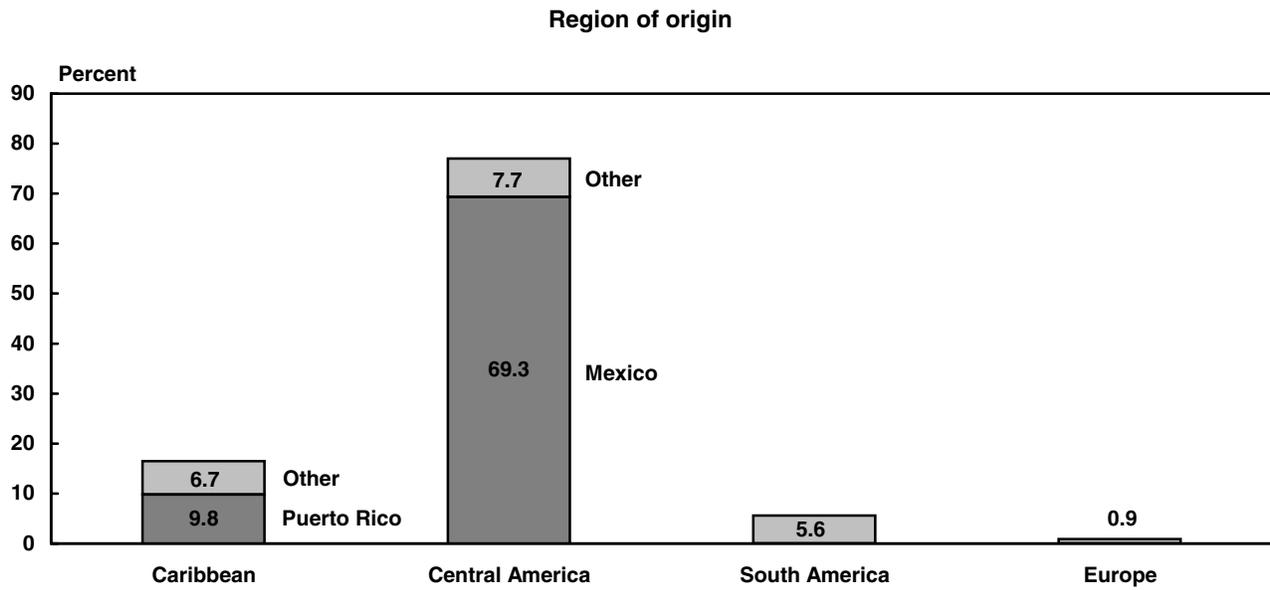
**Chart 1.**  
**Growth of U.S. Hispanics and the total U.S. population**



SOURCE: Actual data (1930-1990) are from Census Bureau (1993). Estimates (2000 and 2005) are from Census Bureau (2006b, Table 4). Projections (2010-2050) are from Census Bureau (2004, Table 1a).

a. Data for 1930 include only "Mexicans," data for 1940 include persons of "Spanish mother tongue," and data for 1950 and 1960 include persons of "Spanish surname." Data for Hispanic origin of any race was not collected in 1950 and 1960 by the U.S. Census.

**Chart 2.**  
**Origin of U.S. Hispanics, 2005**



SOURCE: 2005 American Community Survey, Public Use Microdata Sample.

**Table 1.**  
**Proportion of Hispanics in Spanish-speaking countries and the United States,**  
**by region and country of origin, 2005**

| Region and country of origin | Hispanic population in Spanish-speaking countries |                          | Hispanic population in the United States <sup>a</sup> |                          |  |
|------------------------------|---|--------------------------|---|--------------------------|--|
|                              | Number  | As a percentage of total | Number  | As a percentage of total | Ratio relative to all countries of origin combined |
| Total                        | 401,333,000                                       | 100.0                    | 38,651,397  | 100.0                    | ...  |
| Caribbean                    |   |                          |   |                          |  |
| Cuba                         | 11,269,000  | 2.8                      | 1,461,574   | 3.8                      | 1.35   |
| Dominican Republic           | 8,895,000   | 2.2                      | 1,118,265   | 2.9                      | 1.31   |
| Puerto Rico <sup>b</sup>     | 3,955,000   | 1.0                      | 3,781,317   | 9.8                      | 9.93   |
| Central America              |   |                          |   |                          |  |
| Costa Rica                   | 4,327,000   | 1.1                      | 108,164   | 0.3                      | 0.26   |
| El Salvador                  | 6,881,000   | 1.7                      | 1,239,640   | 3.2                      | 1.87   |
| Guatemala                    | 12,599,000  | 3.1                      | 758,898   | 2.0                      | 0.63   |
| Honduras                     | 7,205,000   | 1.8                      | 459,653   | 1.2                      | 0.66   |
| Mexico                       | 107,029,000                                       | 26.7                     | 26,781,547  | 69.3                     | 2.60   |
| Nicaragua                    | 5,487,000   | 1.4                      | 281,167   | 0.7                      | 0.53   |
| Panama                       | 3,232,000   | 0.8                      | 136,375   | 0.4                      | 0.44   |
| South America                |   |                          |   |                          |  |
| Argentina                    | 38,747,000  | 9.7                      | 185,678   | 0.5                      | 0.05   |
| Bolivia                      | 9,182,000   | 2.3                      | 65,582  | 0.2                      | 0.07   |
| Chile                        | 16,295,000  | 4.1                      | 102,911   | 0.3                      | 0.07   |
| Colombia                     | 45,600,000  | 11.4                     | 730,510   | 1.9                      | 0.17   |
| Ecuador                      | 13,228,000  | 3.3                      | 436,409   | 1.1                      | 0.34   |
| Paraguay                     | 6,158,000   | 1.5                      | 15,084  | 0                        | 0.03   |
| Peru                         | 27,968,000  | 7.0                      | 412,349   | 1.1                      | 0.15   |
| Uruguay                      | 3,463,000   | 0.9                      | 50,921  | 0.1                      | 0.15   |
| Venezuela                    | 26,749,000  | 6.7                      | 164,903   | 0.4                      | 0.06   |
| Europe                       |   |                          |   |                          |  |
| Spain                        | 43,064,000  | 10.7                     | 360,450   | 0.9                      | 0.09   |

SOURCES: Data on the Hispanic population in Spanish-speaking countries are from United Nations (2005). Data on the Hispanic population in the United States are from the 2005 American Community Survey, Table B03001.

NOTE: ... = not applicable.

- a. Data exclude U.S. Hispanics who do not report a specific country of origin. Out of 41,870,703 Hispanics in the United States, 3,219,306 (about 8 percent of the total) could not be classified by country of origin. These data are based on a table from the Census Bureau that uses the full American Community Survey, not the American Community Survey Public Use Microdata Sample.
- b. The population count of Puerto Ricans from the American Community Survey includes only those interviewed in the United States, excluding Puerto Rico.

**Table 2.**  
**Characteristics of U.S. Hispanics and the total U.S. population, 2005**

| Characteristic   | All U.S. Hispanics |                                | Total U.S. population<br>(including Hispanics) |                                |
|--|--------------------|--------------------------------|--|--------------------------------|
|  | Number             | As a<br>percentage<br>of total | Number   | As a<br>percentage<br>of total |
| <b>Demographic characteristics</b>                                     |                    |                                |  |                                |
| Total  | 41,926,302         | 100.0                          | 288,398,819                                    | 100.0                          |
| Sex  |                    |                                |  |                                |
| Male   | 21,507,031         | 51.3                           | 141,363,811                                    | 49.0                           |
| Female   | 20,419,271         | 48.7                           | 147,035,008                                    | 51.0                           |
| Age  |                    |                                |  |                                |
| Under 15   | 12,356,973         | 29.5                           | 60,614,922                                     | 21.0                           |
| 15–24  | 6,897,734          | 16.5                           | 38,853,331                                     | 13.5                           |
| 25–61  | 19,938,489         | 47.6                           | 146,637,237                                    | 50.8                           |
| 62–74  | 1,831,864          | 4.4                            | 25,852,442                                     | 9.0                            |
| 75–84  | 716,964            | 1.7                            | 12,479,794                                     | 4.3                            |
| 85 or older  | 184,278            | 0.4                            | 3,961,093                                      | 1.4                            |
| Marital status   |                    |                                |  |                                |
| Married  | 14,928,199         | 35.6                           | 121,593,813                                    | 42.2                           |
| Widowed  | 987,864            | 2.4                            | 13,727,274                                     | 4.8                            |
| Divorced   | 2,235,707          | 5.3                            | 23,277,197                                     | 8.1                            |
| Separated  | 1,152,994          | 2.8                            | 5,058,319                                      | 1.8                            |
| Never married or younger than age 15                                   | 22,621,538         | 54.0                           | 124,742,216                                    | 43.3                           |
| <b>Educational attainment of persons aged 25 or older <sup>a</sup></b> |                    |                                |  |                                |
| Total  | 22,671,595         | 100.0                          | 188,930,566                                    | 100.0                          |
| No high school diploma   | 9,188,480          | 40.5                           | 29,780,738                                     | 15.8                           |
| High school graduate only  | 6,121,196          | 27.0                           | 55,907,093                                     | 29.6                           |
| Some college but no degree   | 3,420,196          | 15.1                           | 37,922,764                                     | 20.1                           |
| Associate's degree   | 1,157,135          | 5.1                            | 13,942,268                                     | 7.4                            |
| Bachelor's degree or higher  | 2,784,588          | 12.3                           | 51,377,703                                     | 27.2                           |
| <b>Earnings of persons aged 16 or older <sup>b</sup></b>               |                    |                                |  |                                |
| Total  | 20,710,142         | 100.0                          | 156,958,710                                    | 100.0                          |
| \$1–16,628   | 8,838,310          | 42.7                           | 51,538,084                                     | 32.8                           |
| \$16,629–36,952  | 7,667,731          | 37.0                           | 49,617,246                                     | 31.6                           |
| \$36,953–59,124  | 2,669,334          | 12.9                           | 29,485,724                                     | 18.8                           |
| \$59,125–89,999  | 1,041,185          | 5.0                            | 15,616,269                                     | 9.9                            |
| \$90,000 or more   | 493,582            | 2.4                            | 10,701,387                                     | 6.8                            |
| <b>Poverty among persons aged 15 or older <sup>c</sup></b>             |                    |                                |  |                                |
| Total  | 41,650,181         | 100.0                          | 287,268,896                                    | 100.0                          |
| Below 100%   | 9,402,750          | 22.6                           | 38,413,266                                     | 13.4                           |
| 100% to 124%   | 3,328,123          | 8.0                            | 12,732,863                                     | 4.4                            |
| 125% to 149%   | 3,087,906          | 7.4                            | 12,668,023                                     | 4.4                            |
| 150% or above  | 25,831,402         | 62.0                           | 223,454,744                                    | 77.8                           |

(Continued)

**Table 2.**  
**Continued**

| Characteristic   | All U.S. Hispanics |                                | Total U.S. population<br>(including Hispanics) |                                |
|--|--------------------|--------------------------------|--|--------------------------------|
|  | Number             | As a<br>percentage<br>of total | Number   | As a<br>percentage<br>of total |
| <b>Disability status of persons aged 5 or older <sup>d</sup></b> |                    |                                |  |                                |
| Total  | 37,364,167         | 100.0                          | 268,086,256                                    | 100.0                          |
| With disability  | 4,063,347          | 10.9                           | 39,708,398                                     | 14.8                           |
| Without disability   | 33,300,820         | 89.1                           | 228,377,858                                    | 85.2                           |
| <b>Citizenship and nativity</b>                                  |                    |                                |  |                                |
| Total  | 41,926,302         | 100.0                          | 288,398,819                                    | 100.0                          |
| U.S. citizenship   |                    |                                |  |                                |
| U.S. citizen   | 29,779,953         | 71.0                           | 267,562,787                                    | 92.8                           |
| Not U.S. citizen   | 12,146,349         | 29.0                           | 20,836,032                                     | 7.2                            |
| Nativity   |                    |                                |  |                                |
| U.S.-born <sup>e</sup>   | 25,085,528         | 59.8                           | 252,629,216                                    | 87.6                           |
| Not U.S.-born  | 16,840,774         | 40.2                           | 35,769,603                                     | 12.4                           |
| <b>Language of persons aged 5 or older <sup>f</sup></b>          |                    |                                |  |                                |
| Total  | 37,364,167         | 100.0                          | 268,086,256                                    | 100.0                          |
| Ability to speak English   |                    |                                |  |                                |
| English speaker <sup>g</sup>                                     | 28,202,438         | 75.5                           | 255,282,118                                    | 95.2                           |
| Non-English speaker  | 9,161,729          | 24.5                           | 12,804,138                                     | 4.8                            |
| Language spoken at home  |                    |                                |  |                                |
| Only English   | 8,080,214          | 21.6                           | 216,078,959                                    | 80.6                           |
| Other language <sup>h</sup>                                      | 29,283,953         | 78.4                           | 52,007,297                                     | 19.4                           |

SOURCE: 2005 American Community Survey, Public Use Microdata Sample.

NOTE: . . . = not applicable.

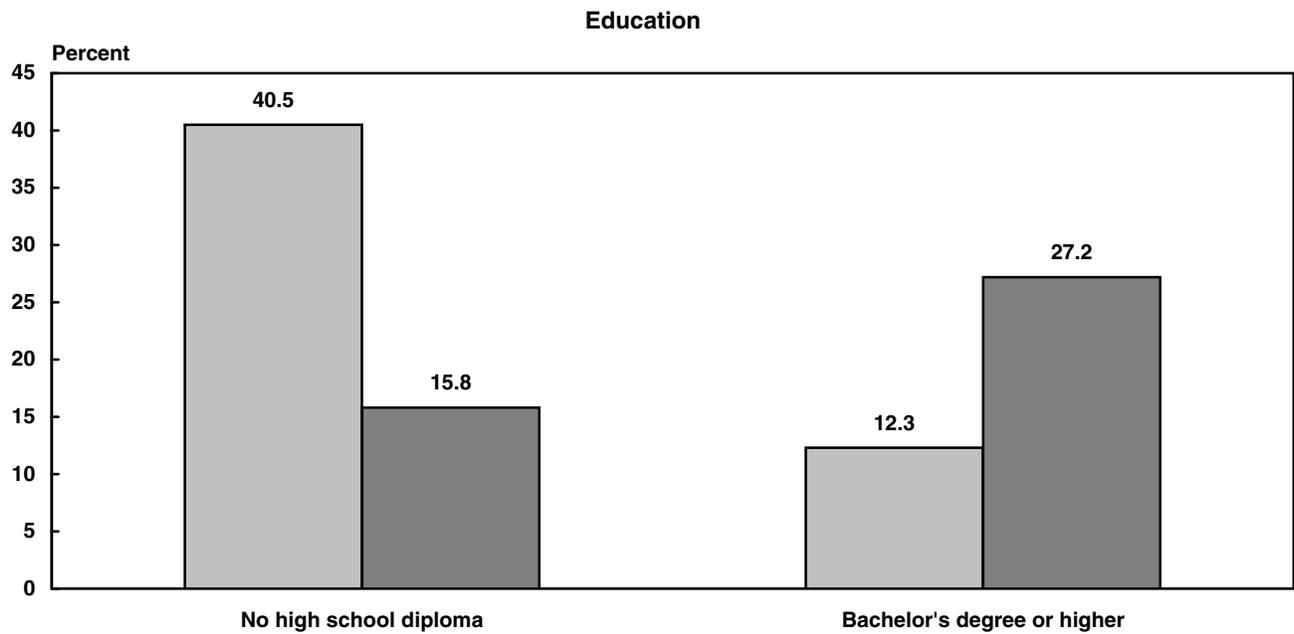
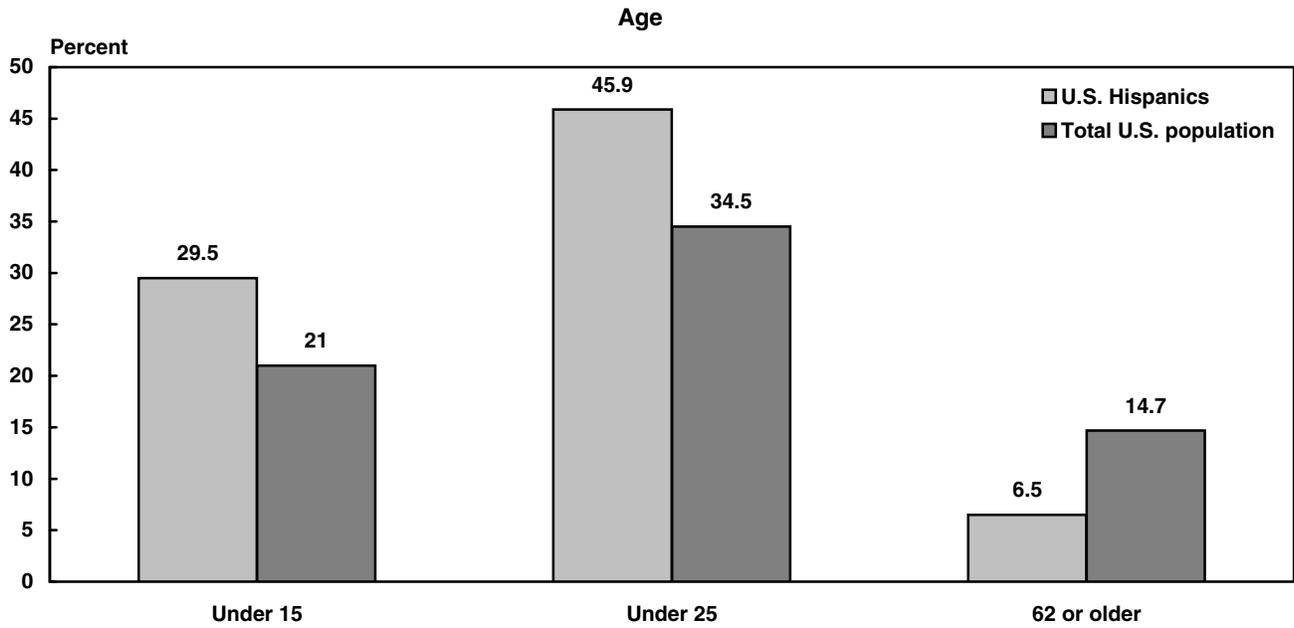
- a. Educational attainment is restricted by author to persons aged 25 or older.
- b. Data exclude persons younger than age 16, who are not asked their earnings by the Census Bureau, and persons with zero or negative earnings.

The 2005 national average wage was \$36,952.54. Persons earning 45 percent of the average wage (\$16,629) are low earners, and those earning 160 percent of the average wage (\$59,125) are high earners. These figures and the maximum taxable earnings under Social Security (\$90,000 in 2005) were used to define the earnings' cutoffs.

See Table 3 for additional earnings data.

- c. The Census Bureau does not measure poverty status for unrelated individuals younger than age 15.
- d. The Census Bureau does not measure disability status for persons younger than age 5.
- e. U.S.-born includes persons born in the United States, those born abroad to U.S. parents, and those born in Guam, Northern Mariana Islands, Puerto Rico, and U.S. Virgin Islands according to the Census Bureau.
- f. The Census Bureau does not measure ability to speak English for persons younger than age 5.
- g. Defined here as a person who speaks only English at home or who speaks English well or very well in addition to speaking another language at home.
- h. The person speaks another language in addition to or in place of English.

**Chart 3.**  
**Characteristics of U.S. Hispanics and the total U.S. population, 2005**



SOURCE: 2005 American Community Survey, Public Use Microdata Sample. See also Table 2 in this article.

**Economic Status.** For illustrative purposes, the Office of the Chief Actuary at the Social Security Administration defines low, medium, and high earners. For 2005, a steady low earner was defined as someone earning less than \$16,629 annually. The figures for medium and high earners were \$36,953 and \$59,125.<sup>12</sup> These figures and the maximum taxable earnings under Social Security (\$90,000 in 2005) were used to define some of the earnings cutoffs in Table 2. Approximately 43 percent of Hispanics aged 16 or older were steady low earners—earning less than \$16,629 annually—compared with 33 percent of the total population (Table 2).

As shown in Table 3, average, or mean, annual earnings were also lower for Hispanics (about \$25,836) than for the overall population (\$37,070).<sup>13</sup> Only in the youngest group—those aged 16–24—were annual mean earnings higher for Hispanics than for the total U.S. population. For Hispanics aged 16 or older with positive earnings, the lowest quartile earned up to

\$10,300, and the highest quartile earned more than \$33,000. For the total population, the lowest quartile earned up to \$12,000, and the highest quartile earned more than \$47,000. Lower levels of education and a younger population may offer partial explanations of the relatively low earnings among Hispanics.

Individual earnings are an important determinant of eventual retirement income because Social Security benefits, pensions, and savings are all linked to earnings, but current economic status can be more directly assessed using the poverty standard. An individual is considered poor if the family’s total income is less than the appropriate poverty threshold for the family. Hispanics of all ages were 1.7 times as likely as the total population (22.6 percent versus 13.4 percent) to be living below the federal poverty level, defined as below 100 percent of the poverty level (Chart 4). Similar results were found when using measures of “near” poverty (125 percent but below 150 percent of poverty).

**Table 3.**  
**Economic status of U.S. Hispanics and the total U.S. population, 2005**

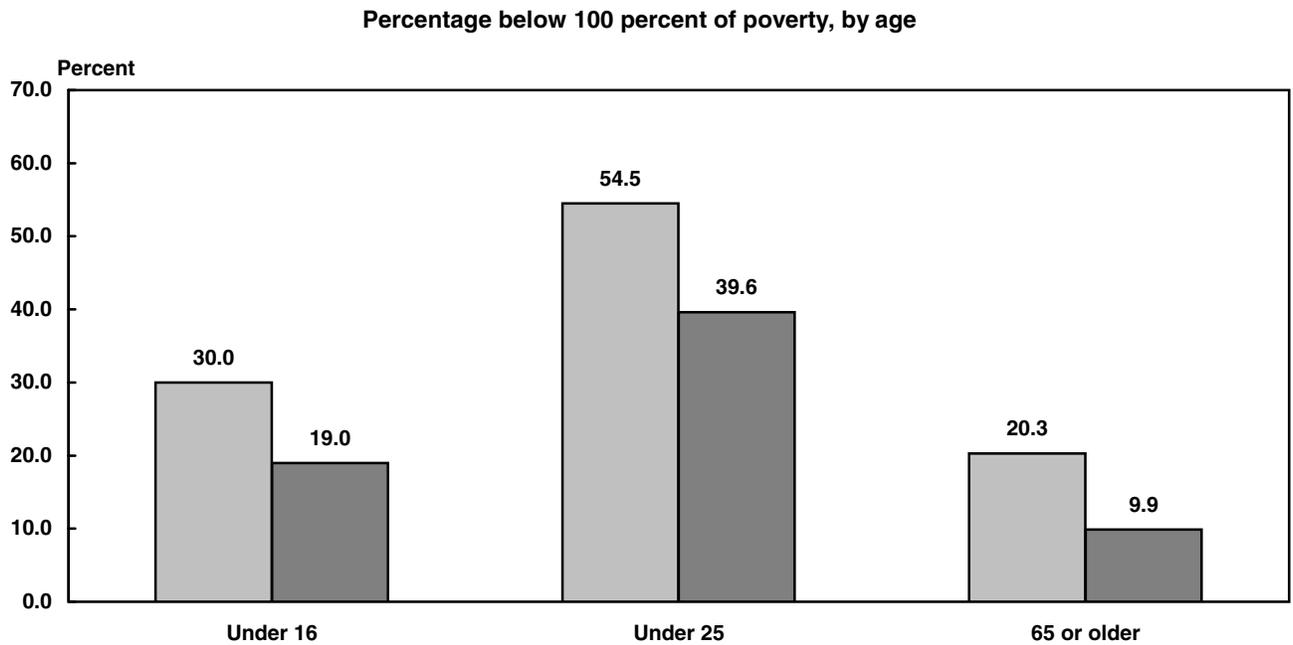
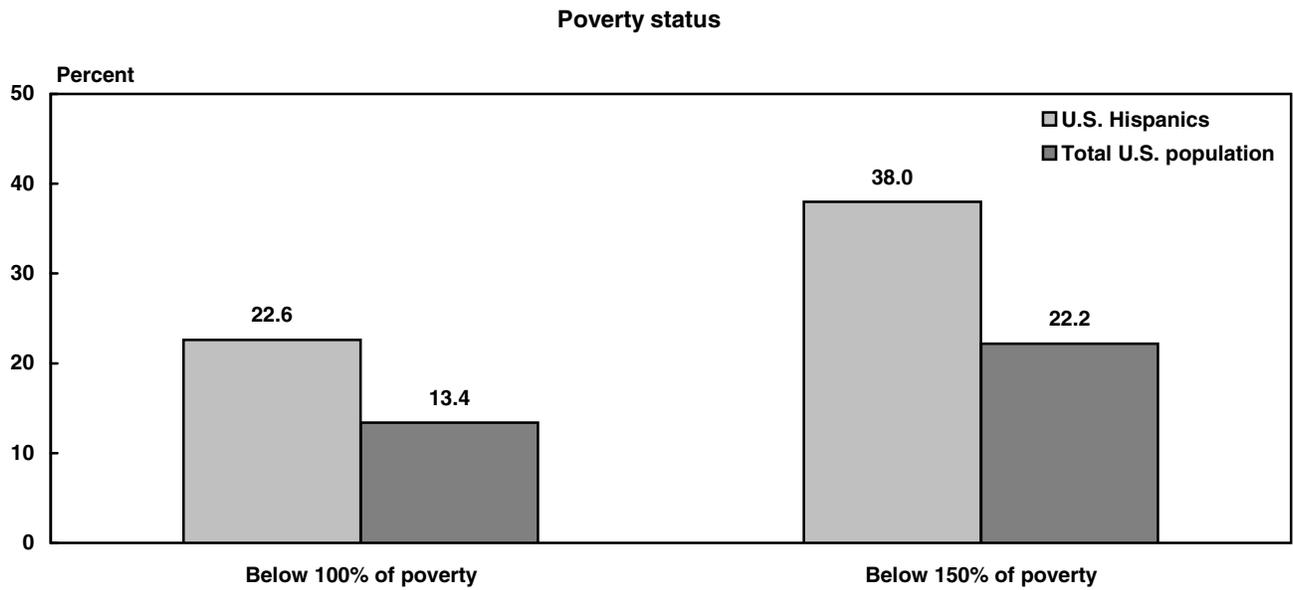
|   | All U.S. Hispanics                                    | Total U.S. population |
|---|---|-----------------------|
|   | <i>Earnings<sup>a</sup> (dollars)</i>                 |                       |
| Total   | 25,836  | 37,070                |
| Annual mean earnings, by age                    |   |                       |
| 16–24   | 12,235  | 11,504                |
| 25–34   | 25,160  | 32,756                |
| 35–44   | 31,164  | 44,442                |
| 45–54   | 32,980  | 47,673                |
| 55–64   | 31,143  | 45,749                |
| 65 or older                                     | 23,065  | 29,247                |
| Monthly mean earnings                           | 2,153   | 3,089                 |
| Distribution, by earnings quartile <sup>b</sup> |   |                       |
| First   | 10,300  | 12,000                |
| Second  | 20,000  | 26,900                |
| Third   | 33,000  | 47,000                |
|   | <i>Percentage below 100% of poverty level, by age</i> |                       |
| Under 16  | 30.0  | 19.0                  |
| 16–24   | 24.5  | 20.6                  |
| 25–34   | 20.2  | 13.3                  |
| 35–44   | 17.5  | 10.3                  |
| 45–54   | 14.1  | 8.4                   |
| 55–64   | 15.9  | 8.7                   |
| 65 or older                                     | 20.3  | 9.9                   |

SOURCE: 2005 American Community Survey, Public Use Microdata Sample.

a. Data exclude persons younger than 16, who are not asked their earnings by the Census Bureau, and persons with zero or negative earnings.

b. Computation of earnings quartiles excludes persons with zero or negative earnings.

**Chart 4.**  
**Poverty among U.S. Hispanics and the total U.S. population, 2005**



SOURCE: 2005 American Community Survey, Public Use Microdata Sample. See also Table 2 in this article.

NOTE: The Census Bureau does not measure poverty status for unrelated individuals younger than age 15.

**Disability Status.** According to the ACS definition of disability, Hispanics were less likely to be disabled than were individuals in the total population (10.9 percent compared to 14.8 percent), which may reflect the fact that Hispanics tend to be younger than the overall population.<sup>14</sup>

**Citizenship, Nativity, and Language.** The large majority of Hispanics residing in the United States (71.0 percent) are U.S. citizens.<sup>15</sup> A majority (59.8 percent) are native born. More than three in four Hispanics are able to speak English, although close to one in five speak only English at home. Not surprisingly, these figures are different than those for the overall population, where more than four in five speak only English at home.

### ***Hispanics Receiving Social Security and SSI***

This analysis also compared selected characteristics of Hispanics receiving Social Security or SSI and compared them with other segments of the U.S. population: all U.S. Hispanics, Hispanic nonbeneficiaries, all beneficiaries, and all SSI recipients. The comparisons focus on persons aged 15 or older.<sup>16</sup>

### ***Hispanic Beneficiaries and All Hispanics***

According to the ACS, about 8 percent of all Hispanics aged 15 or older were beneficiaries of Social Security (Table 4). Hispanic Social Security beneficiaries were older relative to the overall Hispanic population (Chart 5) and more likely to be female and widowed. The incidence of poverty among the overall Hispanic population was similar to that of the subset receiving Social Security (about 20 percent). However, there are some important differences in terms of origin or descent. The beneficiary population has a larger percentage of Hispanics in the overall Caribbean group (Puerto Rico, Cuba, and Dominican Republic) and in the Spanish-descent group and smaller percentages of persons of Mexican, Central American, and South American origin.

The vast majority of Hispanic Social Security beneficiaries (about 87 percent) were U.S. citizens. In addition, a sizable majority (about 67 percent) spoke English, and more than half (57 percent) were born in the United States.

About 2 percent of all Hispanics aged 15 or older received SSI. Compared with all Hispanics and with Hispanic Social Security beneficiaries, SSI recipients had less education and were much more likely to have low income (relative to the poverty standard). The results on poverty are not surprising, because SSI is

designed to assist persons with limited income and resources. SSI recipients were also far more likely to report a disability (93.1 percent) than were all Hispanics (12.3 percent).<sup>17</sup> A majority of SSI recipients of Hispanic origin were U.S. citizens (83.1 percent), were able to speak English (59.0 percent), and were born in the United States (61.1 percent). The relatively high level of U.S. citizenship stems from SSI restrictions on citizenship and qualified alien status.

### ***Hispanic Beneficiaries and Nonbeneficiaries***

The economic status of Hispanic Social Security beneficiaries aged 15 or older, by origin, is shown in Table 5 and compared with that of Hispanic nonbeneficiaries. For the largest group of Hispanics—those of Mexican descent—beneficiaries and nonbeneficiaries had similar levels of income (relative to the poverty threshold). Among persons of Mexican descent, the percentage below poverty was slightly lower for beneficiaries than for nonbeneficiaries (18.4 percent versus 20.8 percent), and the percentage with income above 150 percent of poverty for both groups was about 63 percent.

Some groups, however, had noticeable differences between beneficiaries and nonbeneficiaries. For example, among Hispanics of Cuban origin, nonbeneficiaries had relatively high economic status: the percentage with income below 150 percent of poverty (about 23 percent) was roughly half the percentage for beneficiaries of the same origin (about 42 percent). The general pattern observed with Hispanics of Cuban descent was also observed, but to a lesser extent, among those of Puerto Rican descent: 31 percent of nonbeneficiaries had income below 150 percent of the poverty level, compared with about 45 percent of beneficiaries.

Persons of Dominican origin, whether Social Security beneficiaries or nonbeneficiaries, represent the largest proportion of Hispanics living below the federal poverty level. Among beneficiaries, more than one in three were poor, and a majority (56.0 percent) had income below 150 percent of the federal poverty level. Nonbeneficiaries were somewhat better off but still had a relatively high poverty rate (23.6 percent).

Individuals who trace their origin to Spain, regardless of benefit status, were among the most likely to have income above 150 percent of the federal poverty level. About 73 percent of beneficiaries and 80 percent of nonbeneficiaries of Spanish origin had income above this threshold.

**Table 4.**  
**Characteristics of Hispanics receiving Social Security and Supplemental Security Income**  
**and all U.S. Hispanics, 2005 <sup>a</sup>**

| Characteristic   | Hispanic Social Security beneficiaries |                          | Hispanic Supplemental Security Income recipients |                          | All U.S. Hispanics |                          |
|--|--|--------------------------|--|--------------------------|--------------------|--------------------------|
|  | Number                                 | As a percentage of total | Number   | As a percentage of total | Number             | As a percentage of total |
| <b>Demographic characteristics of persons aged 15 or older</b>         |  |                          |  |                          |                    |                          |
| Total  | 2,485,175                              | 100.0                    | 657,247  | 100.0                    | 29,569,329         | 100.0                    |
| Sex  |  |                          |  |                          |                    |                          |
| Male   | 1,102,569                              | 44.4                     | 250,208  | 38.1                     | 15,168,030         | 51.3                     |
| Female   | 1,382,606                              | 55.6                     | 407,039  | 61.9                     | 14,401,299         | 48.7                     |
| Age  |  |                          |  |                          |                    |                          |
| 15–24  | 77,829                                 | 3.1                      | 39,924   | 6.1                      | 6,897,734          | 23.3                     |
| 25–61  | 457,940                                | 18.4                     | 333,552  | 50.7                     | 19,938,489         | 67.4                     |
| 62–74  | 1,212,935                              | 48.8                     | 153,303  | 23.3                     | 1,831,864          | 6.2                      |
| 75–84  | 592,177                                | 23.8                     | 92,216   | 14.0                     | 716,964            | 2.4                      |
| 85 or older  | 144,294                                | 5.8                      | 38,252   | 5.8                      | 184,278            | 0.6                      |
| Marital status   |  |                          |  |                          |                    |                          |
| Married  | 1,282,832                              | 51.6                     | 185,376  | 28.2                     | 14,928,199         | 50.5                     |
| Widowed  | 561,925                                | 22.6                     | 118,658  | 18.1                     | 987,864            | 3.3                      |
| Divorced   | 286,905                                | 11.5                     | 112,369  | 17.1                     | 2,235,707          | 7.6                      |
| Separated  | 95,484                                 | 3.8                      | 53,469   | 8.1                      | 1,152,994          | 3.9                      |
| Never married or younger than  | 258,029                                | 10.4                     | 187,375  | 28.5                     | 10,264,565         | 34.7                     |
| <b>Educational attainment of persons aged 25 or older <sup>b</sup></b> |  |                          |  |                          |                    |                          |
| Total  | 2,407,346                              | 100.0                    | 617,323  | 100.0                    | 22,671,595         | 100.0                    |
| No high school diploma   | 1,361,279                              | 56.5                     | 411,783  | 66.7                     | 9,188,480          | 40.5                     |
| High school graduate only  | 554,944                                | 23.1                     | 124,573  | 20.2                     | 6,121,196          | 27.0                     |
| Some college but no degree   | 254,212                                | 10.6                     | 49,398   | 8.0                      | 3,420,196          | 15.1                     |
| Associate's degree   | 64,063                                 | 2.7                      | 13,561   | 2.2                      | 1,157,135          | 5.1                      |
| Bachelor's degree or higher  | 172,848                                | 7.2                      | 18,008   | 2.9                      | 2,784,588          | 12.3                     |
| <b>Poverty among persons aged 15 or older <sup>c</sup></b>             |  |                          |  |                          |                    |                          |
| Total  | 2,485,175                              | 100.0                    | 657,247  | 100.0                    | 29,569,329         | 100.0                    |
| Below 100%   | 504,220                                | 20.3                     | 283,992  | 43.2                     | 5,766,509          | 19.5                     |
| 100% to 124%   | 240,839                                | 9.7                      | 81,716   | 12.4                     | 2,191,804          | 7.4                      |
| 125% to 149%   | 205,188                                | 8.3                      | 51,049   | 7.8                      | 2,082,998          | 7.0                      |
| 150% or above  | 1,534,928                              | 61.8                     | 240,490  | 36.6                     | 19,528,018         | 66.0                     |
| <b>Disability status of persons aged 15 or older</b>                   |  |                          |  |                          |                    |                          |
| Total  | 2,485,175                              | 100.0                    | 657,247  | 100.0                    | 29,569,329         | 100.0                    |
| With disability  | 1,176,828                              | 47.4                     | 611,811  | 93.1                     | 3,637,695          | 12.3                     |
| Without disability   | 1,308,347                              | 52.6                     | 45,436   | 6.9                      | 25,931,634         | 87.7                     |

(Continued)

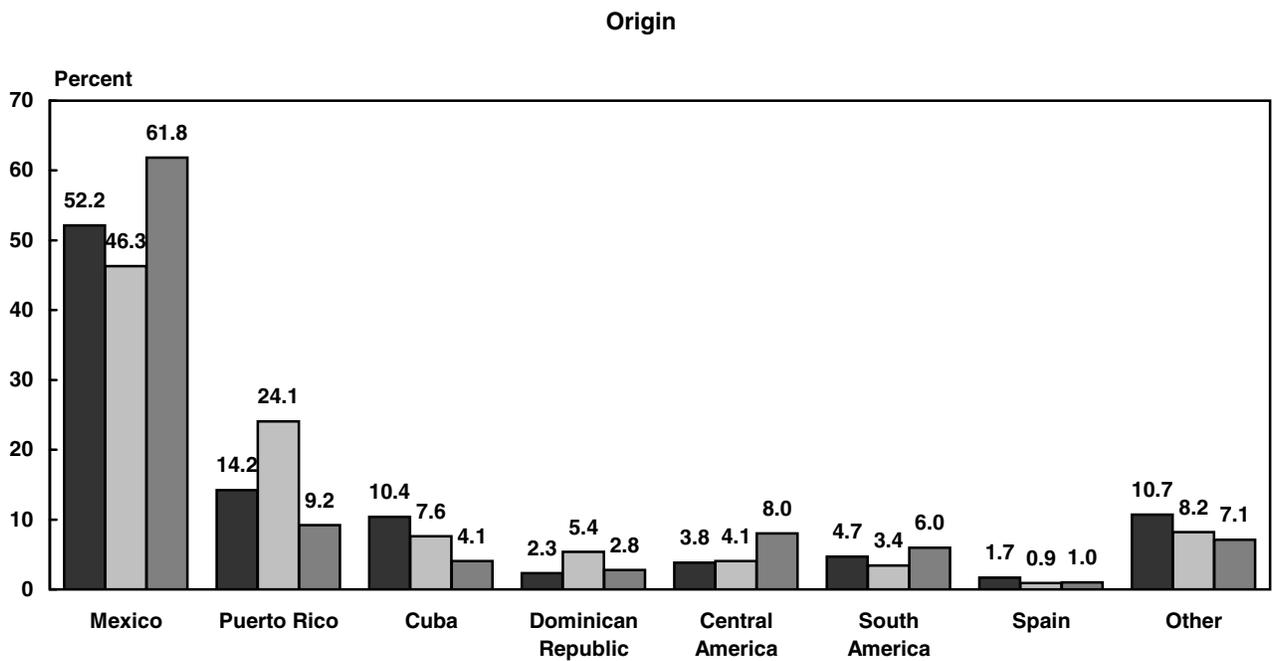
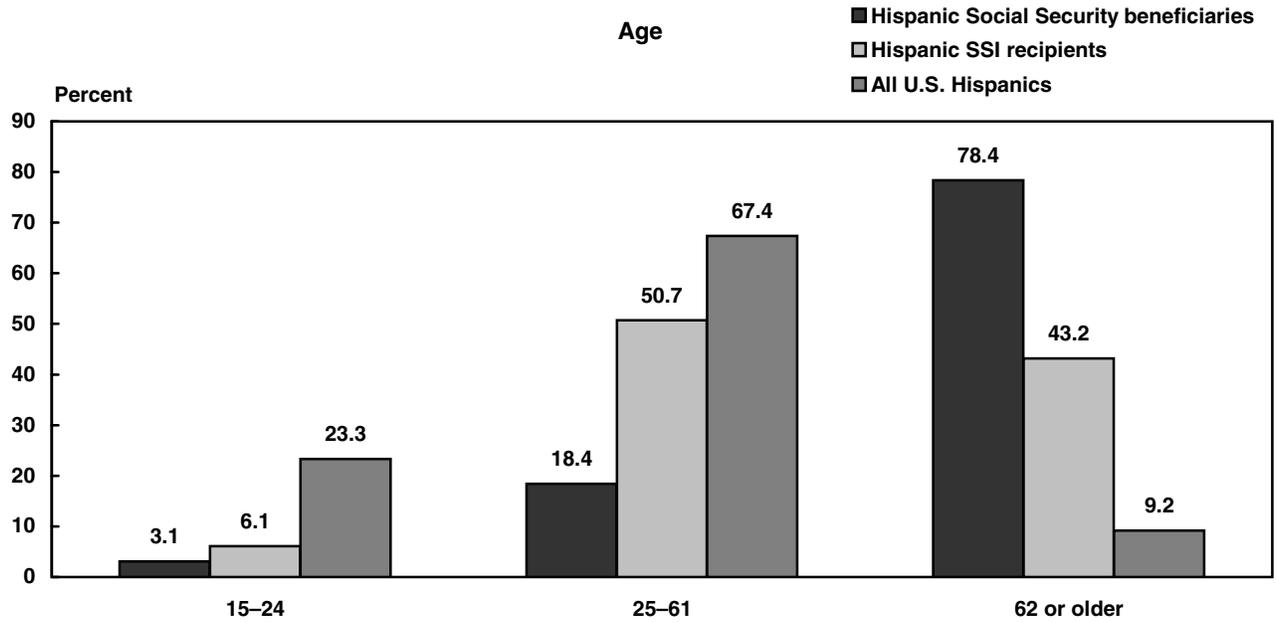
**Table 4.**  
**Continued**

| Characteristic  | Hispanic Social Security beneficiaries |                          | Hispanic Supplemental Security Income recipients |                          | All U.S. Hispanics |                          |
|---|--|--------------------------|--|--------------------------|--------------------|--------------------------|
|   | Number                                 | As a percentage of total | Number   | As a percentage of total | Number             | As a percentage of total |
| <b>Citizenship and nativity of persons aged 15 or older</b> |  |                          |  |                          |                    |                          |
| Total   | 2,485,175                              | 100.0                    | 657,247  | 100.0                    | 29,569,329         | 100.0                    |
| U.S. citizenship  |  |                          |  |                          |                    |                          |
| U.S. citizen  | 2,155,535                              | 86.7                     | 546,446  | 83.1                     | 18,488,928         | 62.5                     |
| Not U.S. citizen  | 329,640                                | 13.3                     | 110,801  | 16.9                     | 11,080,401         | 37.5                     |
| Nativity  |  |                          |  |                          |                    |                          |
| U.S.-born <sup>d</sup>                                      | 1,420,806                              | 57.2                     | 401,275  | 61.1                     | 13,905,099         | 47.0                     |
| Not U.S.-born   | 1,064,369                              | 42.8                     | 255,972  | 38.9                     | 15,664,230         | 53.0                     |
| <b>Language of persons aged 15 or older</b>                 |  |                          |  |                          |                    |                          |
| Ability to speak English <sup>e</sup>                       |  |                          |  |                          |                    |                          |
| English speaker   | 1,676,925                              | 67.5                     | 387,454  | 59.0                     | 20,964,108         | 70.9                     |
| Non-English speaker   | 808,250                                | 32.5                     | 269,793  | 41.0                     | 8,605,221          | 29.1                     |
| Language spoken at home <sup>f</sup>                        |  |                          |  |                          |                    |                          |
| Only English  | 424,140                                | 17.1                     | 119,714  | 18.2                     | 5,627,634          | 19.0                     |
| Other   | 2,061,035                              | 82.9                     | 537,533  | 81.8                     | 23,941,695         | 81.0                     |
| <b>Origin of persons aged 15 or older</b>                   |  |                          |  |                          |                    |                          |
| Total   | 2,485,175                              | 100.0                    | 657,247  | 100.0                    | 29,569,329         | 100.0                    |
| Mexican   | 1,296,088                              | 52.2                     | 304,271  | 46.3                     | 18,288,427         | 61.8                     |
| Puerto Rican  | 353,615                                | 14.2                     | 158,268  | 24.1                     | 2,720,218          | 9.2                      |
| Cuban   | 258,233                                | 10.4                     | 50,086   | 7.6                      | 1,204,868          | 4.1                      |
| Dominican   | 58,189                                 | 2.3                      | 35,339   | 5.4                      | 823,877            | 2.8                      |
| Central American  | 94,992                                 | 3.8                      | 26,629   | 4.1                      | 2,372,395          | 8.0                      |
| South American  | 116,302                                | 4.7                      | 22,533   | 3.4                      | 1,767,620          | 6.0                      |
| Spaniard  | 42,163                                 | 1.7                      | 6,115  | 0.9                      | 292,622            | 1.0                      |
| Other   | 265,593                                | 10.7                     | 54,006   | 8.2                      | 2,099,302          | 7.1                      |

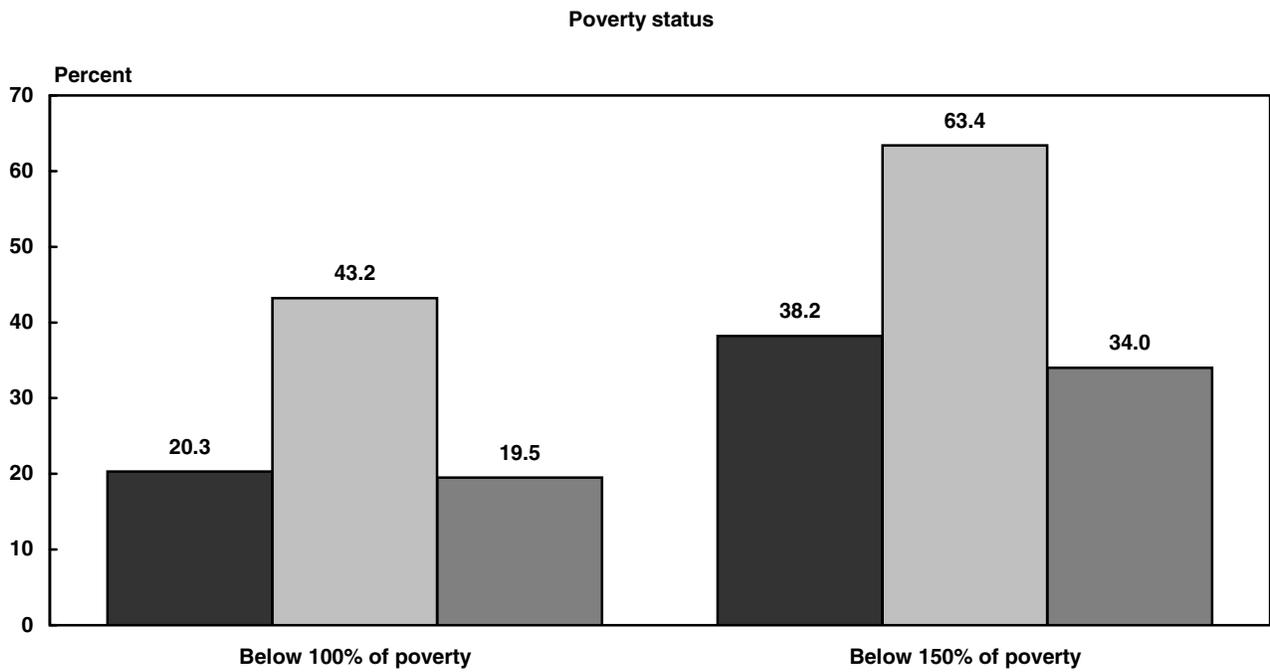
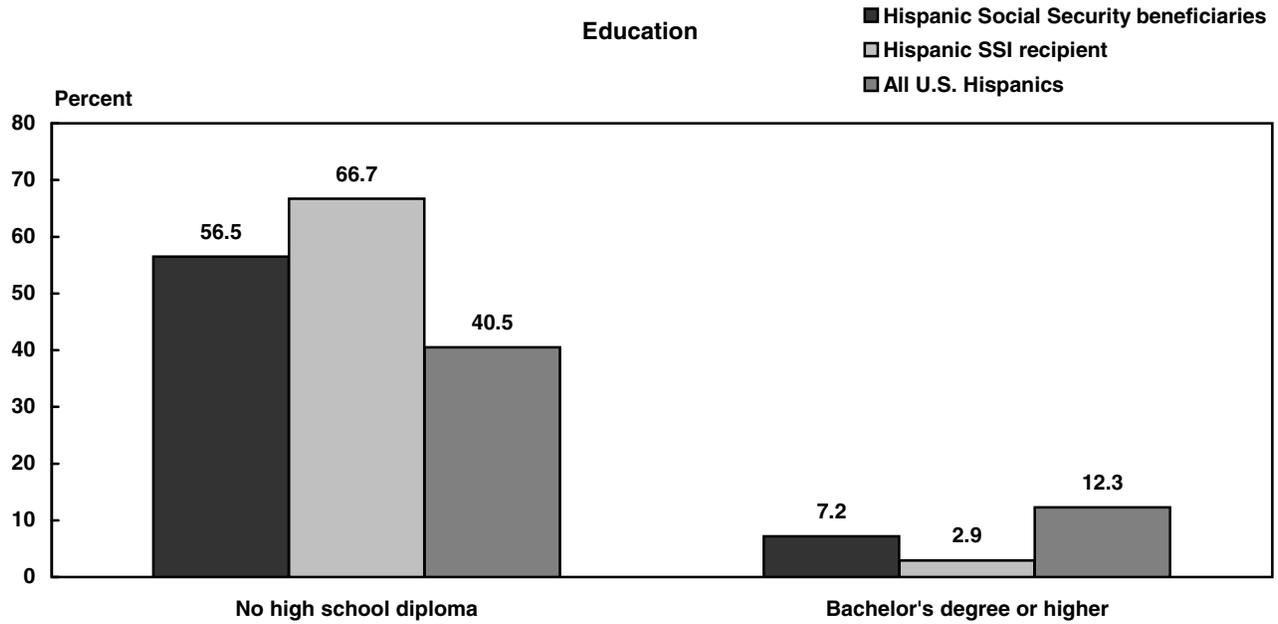
SOURCE: 2005 American Community Survey, Public Use Microdata Sample.

- a. The 2005 ACS PUMS do not provide beneficiary and recipient information for persons under age 15.
- b. Educational attainment is restricted by author to persons aged 25 or older.
- c. The Census Bureau does not measure poverty status for unrelated individuals younger than age 15.
- d. U.S.-born includes persons born in the United States, those born abroad to U.S. parents, and those born in Guam, Northern Mariana Islands, Puerto Rico, and U.S. Virgin Islands according to the Census Bureau.
- e. Defined here as a person who speaks only English at home or who speaks English well or very well in addition to speaking another language at home.
- f. The person speaks another language in addition to or in place of English.

**Chart 5.**  
**Characteristics of U.S. Hispanics and those receiving Social Security or Supplemental Security Income, 2005**



**Chart 5.  
Continued**



SOURCE: 2005 Community Survey, Public Use Microdata Sample. See also Table 4 in this article.

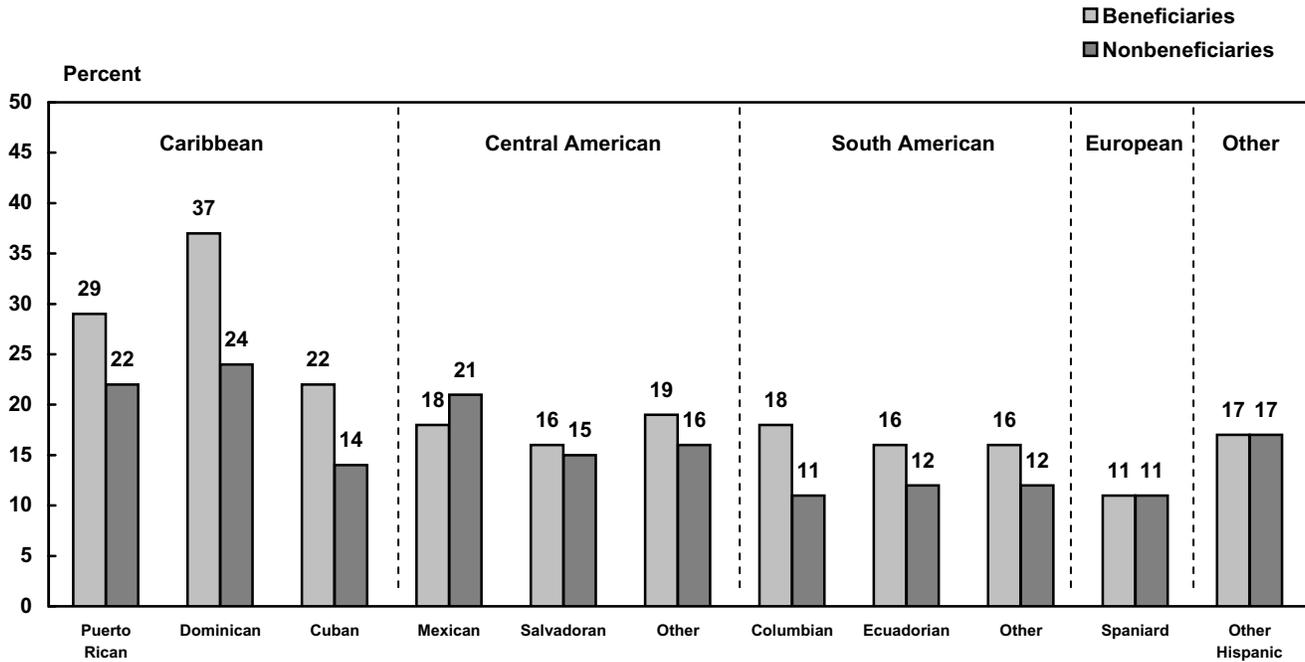
**Table 5.**  
**Poverty among Hispanic beneficiaries of Social Security and Hispanic nonbeneficiaries aged 15 or older,**  
**by region and country of origin, 2005**

| Region and country of origin | All        |         | Below 100% of poverty |         | 100% to 124% |         | 125% to 149% |         | 150% or above |         |
|------------------------------|------------|---------|-----------------------|---------|--------------|---------|--------------|---------|---------------|---------|
|                              | Number     | Percent | Number                | Percent | Number       | Percent | Number       | Percent | Number        | Percent |
| <b>Beneficiaries</b>         |            |         |                       |         |              |         |              |         |               |         |
| Total                        | 2,485,175  | 100.0   | 504,220               | 20.3    | 240,839      | 9.7     | 205,188      | 8.3     | 1,534,928     | 61.8    |
| Mexican                      | 1,296,088  | 100.0   | 237,959               | 18.4    | 127,845      | 9.9     | 113,056      | 8.7     | 817,228       | 63.1    |
| Caribbean                    |            |         |                       |         |              |         |              |         |               |         |
| Puerto Rican                 | 353,615    | 100.0   | 100,787               | 28.5    | 31,379       | 8.9     | 26,278       | 7.4     | 195,171       | 55.2    |
| Cuban                        | 258,233    | 100.0   | 57,367                | 22.2    | 29,816       | 11.5    | 21,353       | 8.3     | 149,697       | 58.0    |
| Dominican                    | 58,189     | 100.0   | 21,720                | 37.3    | 5,622        | 9.7     | 5,257        | 9.0     | 25,590        | 44.0    |
| Central American             |            |         |                       |         |              |         |              |         |               |         |
| Salvadoran                   | 26,003     | 100.0   | 4,082                 | 15.7    | 2,246        | 8.6     | 2,701        | 10.4    | 16,974        | 65.3    |
| Guatemalan                   | a          | a       | a                     | a       | a            | a       | a            | a       | a             | a       |
| Other                        | 68,989     | 100.0   | 12,965                | 18.8    | 7,330        | 10.6    | 3,067        | 4.4     | 45,627        | 66.1    |
| South American               |            |         |                       |         |              |         |              |         |               |         |
| Colombian                    | 40,197     | 100.0   | 7,202                 | 17.9    | 3,076        | 7.7     | 3,225        | 8.0     | 26,694        | 66.4    |
| Ecuadorian                   | 21,426     | 100.0   | 3,418                 | 16.0    | 791          | 3.7     | 1,965        | 9.2     | 15,252        | 71.2    |
| Peruvian                     | a          | a       | a                     | a       | a            | a       | a            | a       | a             | a       |
| Other                        | 54,679     | 100.0   | 8,704                 | 15.9    | 4,001        | 7.3     | 3,687        | 6.7     | 38,287        | 70.0    |
| European                     |            |         |                       |         |              |         |              |         |               |         |
| Spaniard                     | 42,163     | 100.0   | 4,726                 | 11.2    | 4,743        | 11.2    | 1,914        | 4.5     | 30,780        | 73.0    |
| Other Hispanic               | 265,593    | 100.0   | 45,290                | 17.1    | 23,990       | 9.0     | 22,685       | 8.5     | 173,628       | 65.4    |
| <b>Nonbeneficiaries</b>      |            |         |                       |         |              |         |              |         |               |         |
| Total                        | 27,084,154 | 100.0   | 5,262,289             | 19.4    | 1,950,965    | 7.2     | 1,877,810    | 6.9     | 17,993,090    | 66.4    |
| Mexican                      | 16,992,339 | 100.0   | 3,538,930             | 20.8    | 1,352,760    | 8.0     | 1,321,040    | 7.8     | 10,779,609    | 63.4    |
| Caribbean                    |            |         |                       |         |              |         |              |         |               |         |
| Puerto Rican                 | 2,366,603  | 100.0   | 510,244               | 21.6    | 125,366      | 5.3     | 98,272       | 4.2     | 1,632,721     | 69.0    |
| Cuban                        | 946,635    | 100.0   | 133,084               | 14.1    | 49,828       | 5.3     | 35,256       | 3.7     | 728,467       | 77.0    |
| Dominican                    | 765,688    | 100.0   | 180,612               | 23.6    | 55,692       | 7.3     | 50,796       | 6.6     | 478,588       | 62.5    |
| Central American             |            |         |                       |         |              |         |              |         |               |         |
| Salvadoran                   | 913,152    | 100.0   | 135,968               | 14.9    | 67,122       | 7.4     | 77,061       | 8.4     | 633,001       | 69.3    |
| Guatemalan                   | 569,385    | 100.0   | 112,321               | 19.7    | 55,927       | 9.8     | 43,515       | 7.6     | 357,622       | 62.8    |
| Other                        | 794,866    | 100.0   | 130,391               | 16.4    | 54,037       | 6.8     | 54,412       | 6.8     | 556,026       | 70.0    |
| South American               |            |         |                       |         |              |         |              |         |               |         |
| Colombian                    | 528,932    | 100.0   | 56,945                | 10.8    | 26,404       | 5.0     | 25,666       | 4.9     | 419,917       | 79.4    |
| Ecuadorian                   | 318,343    | 100.0   | 38,382                | 12.1    | 18,565       | 5.8     | 19,215       | 6.0     | 242,181       | 76.1    |
| Peruvian                     | 315,042    | 100.0   | 29,882                | 9.5     | 17,990       | 5.7     | 24,566       | 7.8     | 242,604       | 77.0    |
| Other                        | 489,001    | 100.0   | 60,583                | 12.4    | 20,795       | 4.3     | 18,786       | 3.8     | 388,837       | 79.5    |
| European                     |            |         |                       |         |              |         |              |         |               |         |
| Spaniard                     | 250,459    | 100.0   | 28,340                | 11.3    | 9,869        | 3.9     | 11,408       | 4.6     | 200,842       | 80.2    |
| Other Hispanic               | 1,833,709  | 100.0   | 306,607               | 16.7    | 96,610       | 5.3     | 97,817       | 5.3     | 1,332,675     | 72.7    |

SOURCE: 2005 American Community Survey, Public Use Microdata Sample.

a. Numbers too few to list.

**Chart 6.**  
**Hispanic Social Security beneficiaries and nonbeneficiaries below 100 percent of the poverty level, by region and country of origin, 2005**



SOURCE: 2005 American Community Survey, Public Use Microdata Sample. See also Table 5 in this article.

The incidence of poverty in the Hispanic community varies by ethnic origin, as discussed above, but there is no striking pattern (Chart 6). Among the largest group of Hispanics (those of Mexican descent), beneficiaries had a lower incidence of poverty than nonbeneficiaries. For some other groups, the estimated percentages were close. This result suggests that Social Security benefit receipt is not uniformly associated with declines in economic status.

### ***Hispanic Social Security Beneficiaries and All Beneficiaries***

Hispanics aged 15 or older have lower average Social Security benefits than do their counterparts among all beneficiaries (Table 6). Their mean annual Social Security benefit in 2005 was about \$8,056, compared with about \$9,900 for all beneficiaries. Twenty-five percent of Hispanic beneficiaries received up to \$4,900 in annual benefits. By comparison, for the overall beneficiary population, the 25th percentile cutoff occurred at \$6,100.

Social Security benefits are based on earnings in covered employment. As noted in Table 2, Hispanics had lower relative earnings than the overall U.S. population, which will translate into lower average ben-

efits. Note, however, that Social Security's benefit formula provides higher replacement rates (benefits as a percentage of preretirement earnings) for people with low lifetime earnings. This feature helps persons who consistently earn low wages or who have partial careers under the Social Security program and have not accrued the minimum of 40 quarters of coverage under Social Security to be eligible for retirement benefits. Thus, although benefits received by Hispanics tend to be lower than those for the overall population, they probably replace a higher percentage of their preretirement earnings.

Hispanic beneficiaries were nearly twice as likely as all beneficiaries to be living below the federal poverty level—20.3 percent versus 10.7 percent (see Chart 7 and Table 7, which presents selected characteristics of Hispanic beneficiaries and all beneficiaries). They were also 1.8 times as likely as the overall Social Security population to have income below 125 percent of the poverty level and 1.6 times as likely to have income below 150 percent of the poverty level. Recall that the relatively low economic status of Hispanics was also apparent among persons of working age (see Table 2). In other words, Hispanics do not necessarily suffer sharp drops in well-being at retirement; rather,

**Table 6.**  
**Social Security benefits of Hispanic beneficiaries and all beneficiaries, 2005 (in dollars)**

| Benefit amount                    | Hispanic beneficiaries | All beneficiaries |
|-----------------------------------|------------------------|-------------------|
| Mean Social Security benefit      |                        |                   |
| Annual                            | 8,056                  | 9,879             |
| Monthly                           | 671                    | 823               |
| Distribution, by benefit quartile |                        |                   |
| First                             | 4,900                  | 6,100             |
| Second                            | 7,200                  | 9,600             |
| Third                             | 10,800                 | 13,000            |

SOURCE: 2005 American Community Survey, Public Use Microdata Sample.

their well-being in retirement may reflect factors that also exist during their working years.

Educational attainment is a major determinant of labor market earnings and, ultimately, retirement income. It is therefore useful to highlight the data on educational attainment from Table 7. Nearly three-fifths (56.5 percent) of Hispanic beneficiaries never completed high school, compared with slightly more than one-fourth (26.3 percent) of beneficiaries overall. Hispanic beneficiaries were less than half as likely as the overall group to have completed a bachelor's degree (7.2 percent versus 17.1 percent).

Hispanic beneficiaries tend to be younger than other beneficiaries. Three percent of Hispanic beneficiaries are in the 15–24 age range compared with 1.7 percent of all Social Security beneficiaries. Among those aged 62 or older, Hispanics had about 8 percentage points fewer older beneficiaries—78.4 percent compared with 86.6 percent.

With regard to race, about 85 percent of all Social Security beneficiaries were white alone, compared with 64.0 percent of Hispanic beneficiaries. The second largest racial group of Social Security beneficiaries (9.4 percent) was black alone. Among Hispanic Social Security beneficiaries, the second largest group was composed of those of “Some other race alone” (30.4 percent).<sup>18</sup>

### ***Hispanic SSI Recipients and All Recipients***

The study also looked at the same selected demographics of Hispanic SSI recipients and compared them with those of all SSI recipients aged 15 or older (Table 8). The two populations were similar with regard to some key variables, namely, sex, age distributions, marital status, and poverty status. For example, regardless of Hispanic status, SSI recipients had similar high rates of poverty—above 40 percent (Chart 8). The

two populations differ, however, in terms of education. About 67 percent of Hispanic beneficiaries had no high school diploma, compared with 45 percent of the general SSI population. Finally, annual payments received by Hispanics were about 8 percent lower than those received by the overall SSI population—\$5,944 versus \$6,420 (Table 9).

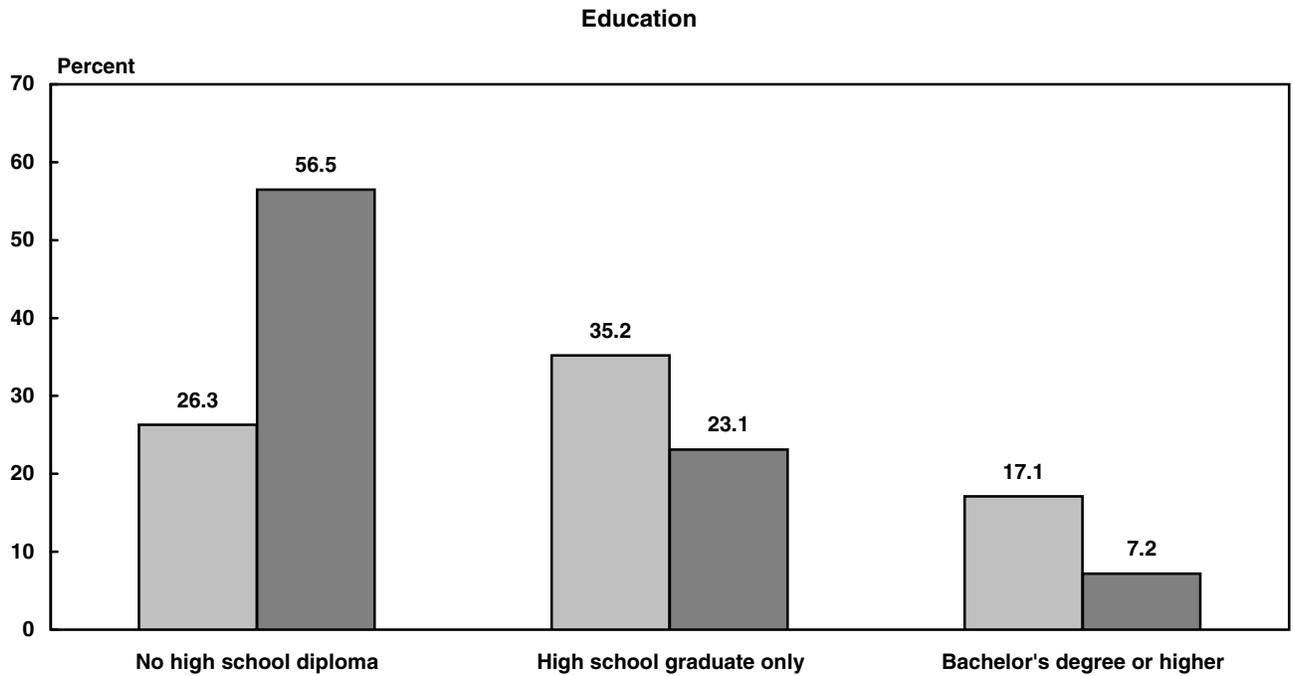
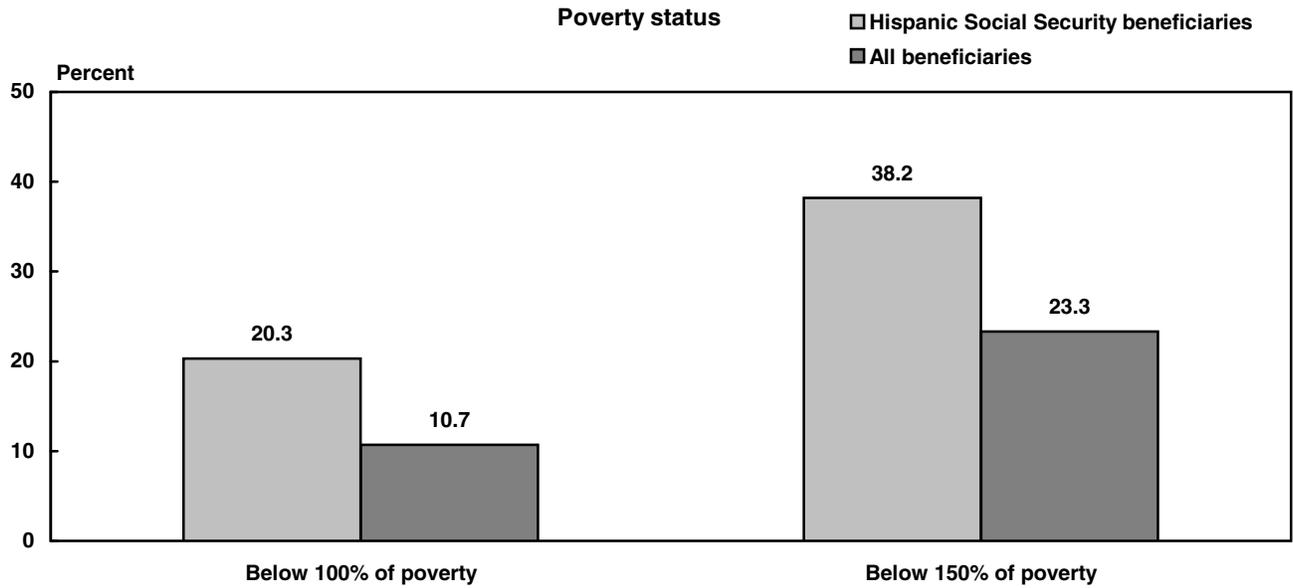
### ***Policy Implications and Future Research***

The demographic and economic differences among the Hispanic population underscore the importance of including more detailed and precise information about Hispanics in any analysis of the Social Security program, including analyses involving the financial status of the program and the effects of various policy options.

This article documents not only the demographic and economic characteristics of the Hispanic population in the United States but also similar characteristics of the growing and changing subgroups of Hispanic Social Security beneficiaries and SSI recipients compared with their general populations. It is important, therefore, for policymakers to consider whether the program's structure will provide adequate benefits to future beneficiary populations and to understand factors that influence economic well-being among Hispanics. For future study, it would be interesting to repeat these analyses for subgroups of the Hispanic population (such as the foreign-born population).

News reports and even scholarly studies tend to lump Hispanics into one group. Yet this article reveals a remarkable diversity within the Hispanic community, and policymakers may therefore wish to pay special attention to certain subgroups within the Hispanic community. For example, the incidence of poverty among Hispanic Social Security beneficiaries varies

**Chart 7.**  
**Poverty status and education of Hispanic Social Security beneficiaries and all beneficiaries, 2005**



SOURCE: 2005 American Community Survey, Public Use Microdata Sample. See also Table 7 in this article.

**Table 7.**  
**Characteristics of Hispanic beneficiaries of Social Security and all beneficiaries, 2005<sup>a</sup>**

| Characteristic   | Hispanic beneficiaries |                          | All beneficiaries |                          |
|--|------------------------|--------------------------|-------------------|--------------------------|
|  | Number                 | As a percentage of total | Number            | As a percentage of total |
| <b><i>Demographic characteristics of persons aged 15 or older</i></b>        |                        |                          |                   |                          |
| Total  | 2,485,175              | 100.0                    | 40,162,673        | 100.0                    |
| Sex  |                        |                          |                   |                          |
| Male   | 1,102,569              | 44.4                     | 17,610,175        | 43.8                     |
| Female   | 1,382,606              | 55.6                     | 22,552,498        | 56.2                     |
| Age  |                        |                          |                   |                          |
| 15–24  | 77,829                 | 3.1                      | 662,934           | 1.7                      |
| 25–61  | 457,940                | 18.4                     | 4,719,388         | 11.8                     |
| 62–74  | 1,212,935              | 48.8                     | 19,689,798        | 49.0                     |
| 75–84  | 592,177                | 23.8                     | 11,452,945        | 28.5                     |
| 85 or older  | 144,294                | 5.8                      | 3,637,608         | 9.1                      |
| Marital status   |                        |                          |                   |                          |
| Married  | 1,282,832              | 51.6                     | 22,011,219        | 54.8                     |
| Widowed  | 561,925                | 22.6                     | 10,403,905        | 25.9                     |
| Divorced   | 286,905                | 11.5                     | 4,184,446         | 10.4                     |
| Separated  | 95,484                 | 3.8                      | 592,560           | 1.5                      |
| Never married or younger than age 15   | 258,029                | 10.4                     | 2,970,543         | 7.4                      |
| <b><i>Educational attainment of persons aged 25 or older<sup>b</sup></i></b> |                        |                          |                   |                          |
| Total  | 2,407,346              | 100.0                    | 39,499,739        | 100.0                    |
| No high school diploma   | 1,361,279              | 56.5                     | 10,372,664        | 26.3                     |
| High school graduate only  | 554,944                | 23.1                     | 13,916,488        | 35.2                     |
| Some college but no degree   | 254,212                | 10.6                     | 6,906,004         | 17.5                     |
| Associate's degree   | 64,063                 | 2.7                      | 1,565,198         | 4.0                      |
| Bachelor's degree or higher  | 172,848                | 7.2                      | 6,739,385         | 17.1                     |
| <b><i>Poverty among persons aged 15 or older<sup>c</sup></i></b>             |                        |                          |                   |                          |
| Total  | 2,485,175              | 100.0                    | 40,162,673        | 100.0                    |
| Below 100%   | 504,220                | 20.3                     | 4,285,977         | 10.7                     |
| 100% to 124%   | 240,839                | 9.7                      | 2,509,942         | 6.2                      |
| 125% to 149%   | 205,188                | 8.3                      | 2,561,446         | 6.4                      |
| 150% or above  | 1,534,928              | 61.8                     | 30,805,308        | 76.7                     |

(Continued)

**Table 7.**  
**Continued**

| Characteristic   | Hispanic beneficiaries |                          | All beneficiaries |                          |
|--|------------------------|--------------------------|-------------------|--------------------------|
|  | Number                 | As a percentage of total | Number            | As a percentage of total |
| <b><i>Disability status of persons aged 15 or older</i></b>        |                        |                          |                   |                          |
| Total  | 2,485,175              | 100.0                    | 40,162,673        | 100.0                    |
| With disability  | 1,176,828              | 47.4                     | 17,499,870        | 43.6                     |
| Without disability   | 1,308,347              | 52.6                     | 22,662,803        | 56.4                     |
| <b><i>Citizenship and nativity of persons aged 15 or older</i></b> |                        |                          |                   |                          |
| Total  | 2,485,175              | 100.0                    | 40,162,673        | 100.0                    |
| U.S. citizenship   |                        |                          |                   |                          |
| U.S. citizen   | 2,155,535              | 86.7                     | 39,400,143        | 98.1                     |
| Not U.S. citizen   | 329,640                | 13.3                     | 762,530           | 1.9                      |
| Nativity   |                        |                          |                   |                          |
| U.S.-born <sup>d</sup>   | 1,420,806              | 57.2                     | 36,644,520        | 91.2                     |
| Not U.S.-born  | 1,064,369              | 42.8                     | 3,518,153         | 8.8                      |
| <b><i>Language of persons aged 15 or older</i></b>                 |                        |                          |                   |                          |
| Total  | 2,485,175              | 100.0                    | 40,162,673        | 100.0                    |
| Ability to speak English <sup>e</sup>                              |                        |                          |                   |                          |
| English speaker  | 1,676,925              | 67.5                     | 38,782,809        | 96.6                     |
| Non-English speaker  | 808,250                | 32.5                     | 1,379,864         | 3.4                      |
| Language spoken at home  |                        |                          |                   |                          |
| Only English   | 424,140                | 17.1                     | 35,412,572        | 88.2                     |
| Other language <sup>f</sup>  | 2,061,035              | 82.9                     | 4,750,101         | 11.8                     |
| <b><i>Race of persons aged 15 or older</i></b>                     |                        |                          |                   |                          |
| Total  | 2,485,175              | 100.0                    | 40,162,673        | 100.0                    |
| White alone  | 1,591,736              | 64.0                     | 34,103,524        | 84.9                     |
| Black or African American alone                                    | 40,630                 | 1.6                      | 3,757,786         | 9.4                      |
| American Indian or Alaska native                                   | 21,285                 | 0.9                      | 235,432           | 0.6                      |
| Asian or Pacific Islander  | 8,818                  | 0.4                      | 906,278           | 2.3                      |
| Some other race alone  | 754,727                | 30.4                     | 791,137           | 2.0                      |
| Two or more major race groups                                      | 67,979                 | 2.7                      | 368,516           | 0.9                      |

SOURCE: 2005 American Community Survey, Public Use Microdata Sample.

- a. The 2005 ACS PUMS does not provide beneficiary and recipient information for persons under age 15.
- b. Educational attainment is restricted by author to persons aged 25 or older.
- c. The Census Bureau does not measure poverty status for unrelated individuals younger than age 15.
- d. U.S.-born includes persons born in the United States, those born abroad to U.S. parents, and those born in Guam, Northern Mariana Islands, Puerto Rico, and U.S. Virgin Islands according to the Census Bureau.
- e. Defined here as a person who speaks only English at home or who speaks English well or very well in addition to speaking another language at home.
- f. The person speaks another language in addition to or in place of English.

**Table 8.**  
**Characteristics of Hispanic recipients of Supplemental Security Income and all recipients, 2005<sup>a</sup>**

| Characteristic  | Hispanic recipients |                          | All recipients |                          |
|---|---------------------|--------------------------|----------------|--------------------------|
|   | Number              | As a percentage of total | Number         | As a percentage of total |
| <b>Demographic characteristics of persons aged 15 or older</b>        |                     |                          |                |                          |
| Total   | 657,247             | 100.0                    | 5,039,182      | 100.0                    |
| Sex   |                     |                          |                |                          |
| Male  | 250,208             | 38.1                     | 2,044,069      | 40.6                     |
| Female  | 407,039             | 61.9                     | 2,995,113      | 59.4                     |
| Age   |                     |                          |                |                          |
| 15–24   | 39,924              | 6.1                      | 331,208        | 6.6                      |
| 25–61   | 333,552             | 50.7                     | 2,972,993      | 59.0                     |
| 62–74   | 153,303             | 23.3                     | 950,828        | 18.9                     |
| 75–84   | 92,216              | 14.0                     | 551,292        | 10.9                     |
| 85 or older   | 38,252              | 5.8                      | 232,861        | 4.6                      |
| Marital status  |                     |                          |                |                          |
| Married   | 185,376             | 28.2                     | 1,363,911      | 27.1                     |
| Widowed   | 118,658             | 18.1                     | 791,912        | 15.7                     |
| Divorced  | 112,369             | 17.1                     | 1,023,119      | 20.3                     |
| Separated   | 53,469              | 8.1                      | 304,374        | 6.0                      |
| Never married   | 187,375             | 28.5                     | 1,555,866      | 30.9                     |
| <b>Educational attainment of persons aged 25 or older<sup>b</sup></b> |                     |                          |                |                          |
| Total   | 617,323             | 100.0                    | 4,707,974      | 100.0                    |
| No high school diploma  | 411,783             | 66.7                     | 2,138,290      | 45.4                     |
| High school graduate only   | 124,573             | 20.2                     | 1,446,977      | 30.7                     |
| Some college but no degree  | 49,398              | 8.0                      | 640,514        | 13.6                     |
| Associate's degree  | 13,561              | 2.2                      | 173,697        | 3.7                      |
| Bachelor's degree or higher   | 18,008              | 2.9                      | 308,496        | 6.6                      |
| <b>Poverty among persons aged 15 or older<sup>c</sup></b>             |                     |                          |                |                          |
| Total   | 657,247             | 100.0                    | 5,039,182      | 100.0                    |
| Below 100%  | 283,992             | 43.2                     | 2,052,513      | 40.7                     |
| 100% to 124%  | 81,716              | 12.4                     | 535,052        | 10.6                     |
| 125% to 149%  | 51,049              | 7.8                      | 388,064        | 7.7                      |
| 150% or above   | 240,490             | 36.6                     | 2,063,553      | 41.0                     |

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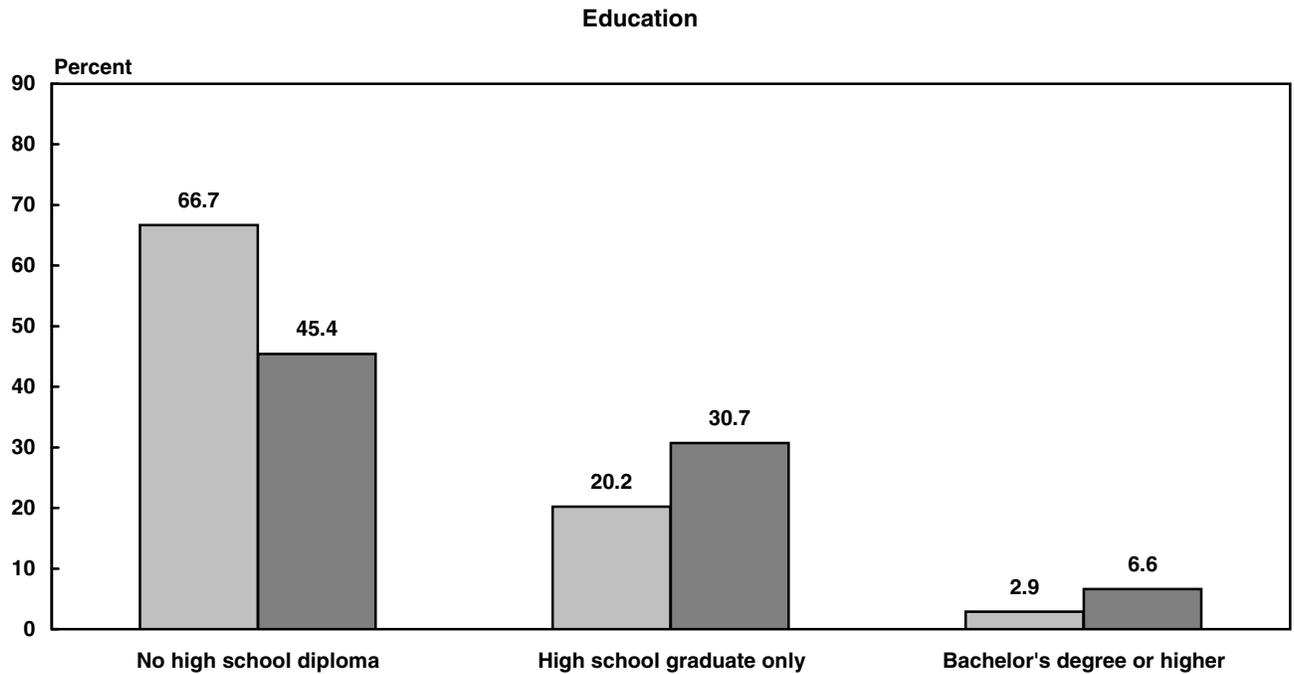
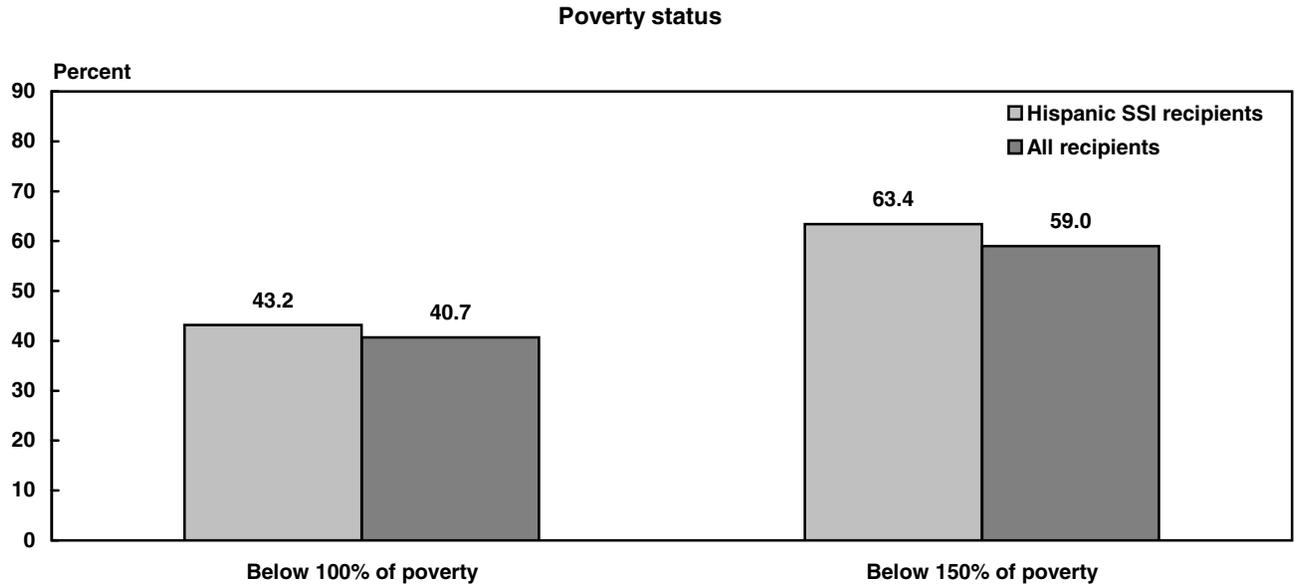
**Table 8.**  
**Continued**

| Characteristic   | Hispanic recipients |                          | All recipients |                          |
|--|---------------------|--------------------------|----------------|--------------------------|
|  | Number              | As a percentage of total | Number         | As a percentage of total |
| <b><i>Disability status of persons aged 15 or older</i></b>        |                     |                          |                |                          |
| Total  | 657,247             | 100.0                    | 5,039,182      | 100.0                    |
| With disability  | 611,811             | 93.1                     | 4,718,101      | 93.6                     |
| Without disability   | 45,436              | 6.9                      | 321,081        | 6.4                      |
| <b><i>Citizenship and nativity of persons aged 15 or older</i></b> |                     |                          |                |                          |
| Total  | 657,247             | 100.0                    | 5,039,182      | 100.0                    |
| U.S. citizenship   |                     |                          |                |                          |
| U.S. citizen   | 546,446             | 83.1                     | 4,810,331      | 95.5                     |
| Not U.S. citizen   | 110,801             | 16.9                     | 228,851        | 4.5                      |
| Nativity   |                     |                          |                |                          |
| U.S.-born <sup>d</sup>   | 401,275             | 61.1                     | 4,326,677      | 85.9                     |
| Not U.S. -born   | 255,972             | 38.9                     | 712,505        | 14.1                     |
| <b><i>Language of persons aged 15 or older</i></b>                 |                     |                          |                |                          |
| Total  | 657,247             | 100.0                    | 5,039,182      | 100.0                    |
| Ability to speak English <sup>e</sup>                              |                     |                          |                |                          |
| English speaker  | 387,454             | 59.0                     | 4,482,766      | 89.0                     |
| Non-English speaker  | 269,793             | 41.0                     | 556,416        | 11.0                     |
| Language spoken at home  |                     |                          |                |                          |
| Only English   | 119,714             | 18.2                     | 3,987,513      | 79.1                     |
| Other language <sup>f</sup>  | 537,533             | 81.8                     | 1,051,669      | 20.9                     |
| <b><i>Race of persons aged 15 or older</i></b>                     |                     |                          |                |                          |
| Total  | 657,247             | 100.0                    | 5,039,182      | 100.0                    |
| White alone  | 344,955             | 52.5                     | 3,231,517      | 64.1                     |
| Black or African American alone                                    | 13,460              | 2.0                      | 1,125,967      | 22.3                     |
| American Indian or Alaska native                                   | 9,084               | 1.4                      | 77,774         | 1.5                      |
| Asian or Pacific Islander  | 2,847               | 0.4                      | 228,476        | 4.5                      |
| Some other race alone  | 264,856             | 40.3                     | 275,541        | 5.5                      |
| Two or more major race groups                                      | 22,045              | 3.4                      | 99,907         | 2.0                      |

SOURCE: 2005 American Community Survey, Public Use Microdata Sample.

- a. The 2005 ACS PUMS does not provide beneficiary and recipient information for persons under age 15.
- b. Educational attainment is restricted by author to persons aged 25 or older.
- c. The Census Bureau does not measure poverty status for unrelated individuals younger than age 15.
- d. U.S.-born includes persons born in the United States, those born abroad to U.S. parents, and those born in Guam, Northern Mariana Islands, Puerto Rico, and U.S. Virgin Islands according to the Census Bureau.
- e. Defined here as a person who speaks only English at home or who speaks English well or very well in addition to speaking another language at home.
- f. The person speaks another language in addition to or in place of English.

**Chart 8.**  
**Poverty status and education of Hispanic Supplemental Security Income recipients and all recipients aged 15 or older, 2005**



SOURCE: 2005 American Community Survey, Public Use Microdata Sample. See also Table 8 in this article.

**Table 9.**  
**Supplemental Security Income payments of Hispanic recipients and all recipients, 2005 (in dollars)**

|                                   | Hispanic recipients | All recipients |
|-----------------------------------|---------------------|----------------|
| Mean SSI payment                  |                     |                |
| Annual                            | 5,944               | 6,420          |
| Monthly                           | 495                 | 535            |
| Distribution, by payment quartile |                     |                |
| First                             | 3,600               | 4,000          |
| Second                            | 6,000               | 6,400          |
| Third                             | 7,200               | 7,500          |

SOURCE: 2005 American Community Survey, Public Use Microdata Sample.

by ethnic origin. The findings suggest that country of origin is a strong predictor of economic well-being among U.S. Hispanics. Beneficiaries, as a rule, are not consistently worse (or better) off than nonbeneficiaries. This finding suggests that retirement (or, more specifically, Social Security benefit receipt) is not uniformly associated with declines in economic status. Quantifying the diversity across Hispanic groups may aid forecasts of the effects of various program policy options.

The analyses in this article shed some light on the relationship of U.S. Hispanics to Social Security. For instance, the relatively low earnings of Hispanics are of significance to a special aspect of the program: the Social Security benefit formula replaces a higher percentage of preretirement earnings for persons with lower lifetime earnings. Moreover, some Social Secu-

rity reform proposals contain provisions that specifically target augmented benefits to low lifetime earners.

This article, however, contains a cautionary tale regarding retirement policy. The overall economic well-being of Hispanics during their working years and retirement is largely dependent on their success in the labor market, which in turn is strongly related to educational attainment. Thus, a focus only on retirement policy will not address the underlying issues associated with well-being among Hispanics.

Finally, over time the Social Security program will become increasingly important to Hispanics. As today's relatively young Hispanic population ages, more Hispanics will become eligible for the retirement, disability, and survivor benefits available under Social Security.

## Notes

*Acknowledgments:* Harriet Duleep, Dawn Haines, David Timmons, and David Weaver provided helpful comments and suggestions. Special thanks to Todd Williams for help in calculating standard errors for statistical testing.

<sup>1</sup> The 6 percent figure is derived from ACS tabulations in Table 7 of this article, and the 15 percent figure is based on unpublished tabulations from the MINT model (see Smith, Cashin, and Favreault [2005] for a description of MINT projection methods).

<sup>2</sup> Population growth has varied by Hispanic group. For example, the population of Mexican descent grew by 54.4 percent between 1980 and 1990, compared with 35.4 percent and 30.0 percent for those of Puerto Rican and Cuban descent. Also, the 1980s witnessed a substantial increase in immigrants from Central America (Census Bureau 1993).

<sup>3</sup> Data from the public-use files of the March 2001–2005 Income Supplement to the Current Population Survey indicate that the percentage of Social Security beneficiaries aged 15 or older who are Hispanic has been growing in recent years—from 5.5 percent in 2000 to 6.1 percent in 2004 (Social Security Administration 2001, 2005, Table 3.C8). Data from the same source also indicate a growing percentage of Hispanic SSI recipients.

<sup>4</sup> See <http://www.census.gov/acs/www/SBasics/index.htm> for basic information about the survey, including the questionnaire and data collection procedures. Refer to [http://www.census.gov/hhes/www/poverty/acs\\_cpspovcompreport.pdf](http://www.census.gov/hhes/www/poverty/acs_cpspovcompreport.pdf) for more detail about how the ACS survey differs from other government surveys, such as the Current Population Survey.

<sup>5</sup> The PUMS was released September 11, 2006, with corrected replicate weights for statistical testing. The PUMS data are a subset of the full ACS sample (Census 2006c).

<sup>6</sup> Matched administrative records can be used to improve information from the survey. Research indicates that some survey respondents are confused about sources of income (for example, some respondents confuse SSI income with Social Security income and vice versa). See Sears and Rupp (2003) for a fuller discussion of this and other issues related to the accuracy of survey data.

<sup>7</sup> The population counts of Puerto Ricans in the tables in this article include only persons interviewed in the United States as part of the American Community Survey. This article excludes information on residents of Puerto Rico that is collected as part of the Puerto Rico Community Survey. That survey, which began in 2005, may be used in future work on Hispanics by SSA researchers.

<sup>8</sup> Downs (2003) notes that Hispanic women had the highest fertility rate in 2002 among all race and origin groups.

<sup>9</sup> The data reported here and in Table 1 illustrate patterns of origin, but they do not measure immigration status. For example, a person who reports Mexican descent may be an immigrant or a person born in the United States. Also note that Puerto Ricans are U.S. citizens.

<sup>10</sup> Statistics on median age from the 2005 ACS are available at the American FactFinder site maintained by the Census Bureau (<http://factfinder.census.gov>). See Tables B01002 Median Age by Sex (Total Population) and B01002I Median Age by Sex (Hispanic or Latino).

<sup>11</sup> See Table B01002H, Median Age by Sex (White Alone, not Hispanic or Latino) at <http://factfinder.census.gov>.

<sup>12</sup> The dollar values for steady low, medium, and high earners in a given year are determined by applying factors (0.45, 1.0, and 1.6) to the year's average wage (computed for SSA program purposes). For 2005, that average wage was \$36,952.94, which is close to the average wage tabulated in the ACS (\$37,069.81).

<sup>13</sup> Because the overall populations in Table 2 encompass a broad age range, some statistics (earnings and poverty) are also presented for narrower age ranges.

<sup>14</sup> The ACS classifies individuals as disabled on the basis of whether they report sensory, physical, mental, self-care, go-outside-home, or work disabilities. Persons aged 16–64 are classified as disabled if they report at least one of these six types of disability. The go-outside-home and work disabilities questions are not used to assess persons aged 65 or older, and the questions about go-outside-home disability are not used to assess persons aged 5–15.

<sup>15</sup> In the ACS, respondents are considered U.S. citizens if they indicated “they were born in the United States, Puerto Rico, a U.S. Island Area (such as Guam), or abroad of American (U.S. citizen) parent or parents” or indicated “they were U.S. citizens through naturalization” (Census Bureau 2006a, 31).

<sup>16</sup> The 2005 ACS PUMS does not provide beneficiary and recipient information for persons under age 15. ACS data also do not allow for detailed analysis by beneficiary or recipient type. In addition to retirement benefits, Social Security provides disability, spouse, survivor, and child benefits. SSI provides payments to eligible blind, disabled, and aged persons.

<sup>17</sup> The ACS definition of disability is not intended to match the definition of disability used in the Supplemental Security Income or Social Security Disability Insurance programs. Rather, its use in this article is to simply illustrate the prevalence of self-reported health problems in various populations.

<sup>18</sup> The ACS lists White, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and “Some Other Race” race categories. Persons who select “Some Other Race” are asked to write in the race. The write in entries include general responses such as “interracial,” as well as responses related to origin (for example, “Mexican”).

## References

- Census Bureau. 1993. We, the American... Hispanics. Available at <http://www.census.gov/apsd/wepeople/we-2r.pdf>.
- . 2001. Total population in households and group quarters by sex and selected age groups, for the United States: 2000. Available at <http://www.census.gov/population/cen2000/grpqr/grpqr01.pdf>.
- . 2002. Demographic trends in the 20th century. Census 2000 Special Reports (November), Figure 1-1. Total Population: 1900-2000. Available in 2006 at <http://www.census.gov/prod/2002pubs/censr-4.pdf>.
- . 2004. U.S. interim projections by age, sex, race, and Hispanic origin. Available at <http://www.census.gov/ipc/www/usinterimproj/>.
- . 2006a. American Community Survey 2005 subject definitions. Available at [http://www.census.gov/acs/www/Downloads/2005/usedata/Subject\\_Definitions.pdf](http://www.census.gov/acs/www/Downloads/2005/usedata/Subject_Definitions.pdf).
- . 2006b. Annual estimates of the population by sex, race and Hispanic or Latino origin for the United States: April 1,

- 2000 to July 1, 2005. Available at <http://www.census.gov/popest/national/asrh/NC-EST2005-srh.html>.
- . 2006c. PUMS accuracy of the data (2005). Available at <http://www.census.gov/acs/www/Downloads/2005/AccuracyPUMS.pdf>.
- Downs, Barbara. 2003. Fertility of American women, June 2002. Current Population Reports, P-20-548 (October). Also available at <http://www.census.gov/prod/2003pubs/p20-548.pdf>.
- Gibson, Campbell, and Kay Jung. Historical census statistics on population totals by race, 1790 to 1990, and by Hispanic origin, 1970 to 1990, for the United States, regions, divisions, and states. Available at <http://www.census.gov/population/www/documentation/twps0056.html>.
- Haines, Dawn E., and Brian Greenberg. 2005. Statistical uses of Social Security administrative data. ASA proceedings of the Joint Statistical Meetings, pp. 1138-1145. American Statistical Association (Alexandria, VA). Available at <http://www.oecd.org/dataoecd/58/13/36237686.pdf>.
- Immigration and Naturalization Service, Office of Policy and Planning. 2003. Estimates of the unauthorized immigrant population residing in the United States: 1990 to 2000. Available at <http://www.uscis.gov/graphics/shared/statistics/publications/index.htm#population>.
- Ramirez, Roberto R. 2004. We the people: Hispanics in the United States. Census 2000 Special Reports. Available at <http://www.census.gov/prod/2004pubs/censr-18.pdf>.
- Sears, James, and Kalmann Rupp. 2003. Exploring Social Security payment history matched with the Survey of Income and Program Participation. Federal Committee on Statistical Methodology Research Conference. Available at <http://www.fcsm.gov/03papers/SearsRupp.pdf>.
- Smith, Karen E., David Cashin and Melissa Favreault. 2005. Modeling income in the near term 4: Revised projections of retirement income through 2020 for the 1931–1960 birth cohorts. Urban Institute, Washington, DC. Available at: <http://www.urban.org/publications/411191.html>.
- Social Security Administration. 2001. Annual Statistical Supplement to the Social Security Bulletin, 2001. Washington, DC: Social Security Administration.
- . 2005. Annual Statistical Supplement to the Social Security Bulletin, 2005. Washington, DC: Social Security Administration.
- United Nations. 2005. World Population Prospects, 2005. New York: United Nations, Population Division, Department of Economic and Social Affairs.

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## ***How Postsecondary Education Improves Adult Outcomes for Supplemental Security Income Children with Severe Hearing Impairments***

*by Robert R. Weathers II, Gerard Walter, Sara Schley, John Hennessey, Jeffrey Hemmeter, and Richard V. Burkhauser*

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### ***Summary***

The rapid growth in the number of children participating in the Supplemental Security Income (SSI) program before the age of 18 has led policymakers to consider new methods of assisting children with disabilities in their transition from school to work. Postsecondary education represents one path that SSI children may take to acquire the skills necessary to enter employment and reduce dependency on the SSI disability program as adults. Yet little is known about SSI children's experience with postsecondary education, let alone their ability to increase their labor market earnings and reduce their time on SSI as adults in the long term. This lack of information on long-term outcomes is due in part to a lack of longitudinal data.

This article uses a unique longitudinal data set to conduct a case study of SSI children who applied for postsecondary education at the National Technical Institute for the Deaf (NTID) within the Rochester Institute of Technology. The data set was created by merging NTID administrative data on the characteristics and experiences of its applicants to Social Security Administration (SSA) longitudinal

data on earnings and program participation. We used this data file to estimate the likelihood that an SSI child will graduate from NTID relative to other hearing-impaired NTID applicants, and we estimated the influence of graduation from NTID on participation in the SSI adult program and later success in the labor market.

The results of our analysis show that the percentage of NTID applicants who were SSI children increased over time, from a low of 10 percent in 1982 to more than 41 percent in 2000. However, the differences in the probability of graduation from NTID between deaf SSI children and deaf applicants who were not SSI children did not change accordingly. The probability of graduation for SSI children who applied to NTID was 13.5 percentage points lower than for those who were not SSI children. The estimated disparity indicates that targeting college retention programs toward SSI children may be an effective way to improve overall graduation rates.

Our results also show that SSI children who graduated from NTID spent less time in the SSI adult program and had higher earnings than SSI children who did not gradu-

ate. Compared with SSI children who were accepted to NTID but chose not to attend, SSI children who graduated from NTID left the SSI program 19 months earlier, were less likely to reenter the program, and at age 30 had increased their earnings by an estimated 49 percent. Our findings demonstrate that SSI children need not be relegated to a lifetime of SSI participation as adults, despite the poor overall labor market experience of this population since the creation of the SSI program in 1974.

## **Introduction**

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The Supplemental Security Income (SSI) program is the largest federal means-tested cash assistance program in the United States. It is administered by the Social Security Administration (SSA) and provides assistance to children with disabilities, working-age adults with disabilities, and the aged, as long as they meet the income and resource requirements necessary for eligibility.<sup>1</sup> In 2005, approximately 1 million children under the age of 18 received disability payments through the SSI program. The number of children receiving SSI has tripled over the past 15 years, far outpacing the growth of working-age adults and the aged receiving it (Social Security Administration 2006). Many of these children are likely to participate in the SSI disability program for a majority of their lifetime (Rupp and Scott 1995) because they are unlikely to reach the income or resource levels, either through work or through other means, to make a long-term exit from the SSI program. The rapid growth in the number of children receiving disability payments and the evidence that suggests that many of them will depend on these benefits for most of their lives has prompted policymakers to consider new methods to assist children in the transition from school to work. SSA program administrators have referred to these efforts as “managing against the risk of disability.”<sup>2</sup>

Postsecondary education represents one path that SSI children (that is, those who enter the SSI program before age 18) may take to acquire the skills necessary to enter employment and reduce dependency on the adult SSI disability program. Yet little is known about SSI children’s experience with postsecondary education, let alone its ability to increase their labor market earnings and reduce their time on SSI as adults in the long term. This lack of information on the long-term outcomes is due in part to the absence of longitudinal data on them.<sup>3</sup>

The findings reported here are from a unique longitudinal data set we created. The data set consists of

administrative records from the Rochester Institute of Technology’s National Technical Institute for the Deaf (NTID) linked to data from SSA’s Supplemental Security Record, the Master Earnings File, and the Numident file. We use these data to conduct a case study of the subsequent educational and labor market success of SSI children as well as their SSI program participation as adults, relative to other deaf children who apply for postsecondary education.

The case study followed persons with severe hearing impairments who applied to NTID, one of two federally supported postsecondary schools that serve the population with severe hearing impairments. The postsecondary education programs offered at NTID include vocational degree programs that provide specific training for particular occupations. They also include professional degree programs that may lead to an associate of science, bachelor of arts, or master of arts degree. Almost all NTID applicants have hearing impairments that meet the medical criteria used to determine eligibility for the Social Security disability programs, and so they also are eligible to receive SSI adult benefits if they meet the income and resource tests.

We found that SSI children who graduated from NTID spent less time in the SSI adult program and had higher earnings than SSI children who did not graduate. However, we also found that SSI children who applied to NTID had a greater risk of not graduating than their fellow deaf students who did not participate in the SSI program as children. Our findings suggest that greater effort may be necessary to prepare SSI children for postsecondary education and that the currently SSA-funded youth transition demonstration projects may contribute to our understanding of how such efforts can improve adult outcomes for SSI children with disabilities.

## **Literature Review**

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There is a significant body of research on the transition from secondary school to postsecondary education and employment for youth with disabilities. (See Wittenburg and Maag [2002] for a review of this literature.) We contribute to this literature by examining a subgroup of SSI recipients—SSI children. We describe their experiences during the transition to postsecondary education and quantify their economic outcomes as young adults. Our study is unique in that the longitudinal data on Social Security participation and earnings allowed us to examine outcomes over a relatively long period after the completion of postsec-

ondary education. Here we summarize research related to this study and describe its contribution to the larger body of research.

### ***Postsecondary Education for Youth with Disabilities***

As of 2003, participation in postsecondary education among youth with disabilities was estimated to be about half of the participation rate for the general population of youth (Wagner and others 2005). This research, which used the National Longitudinal Transition Survey (NLTS) and the National Longitudinal Transition Survey 2 (NLTS-2), also showed increased participation in postsecondary education for youth with disabilities from 1987 to 2001 and that this increase was greater than the increase for the general population (Wagner and others 2005). This finding indicates that the gap between the two groups has declined over time and that the transition from secondary education to postsecondary education is becoming more prevalent among youth with disabilities.

Data on postsecondary education completion rates show that youth with disabilities are less likely to complete postsecondary education than other youth. Horn and Berkold (1999) used the Beginning Postsecondary Students Longitudinal Study (BPS: 90/94) to support this finding; the BPS: 90/94 was a survey of undergraduates who enrolled in postsecondary education for the first time in the 1989–1990 period and were interviewed for the last time in 1994. Their results show that, at the time of the last interview, 53 percent of students with disabilities had completed postsecondary education or were still enrolled, compared with 64 percent of those without disabilities. Horn and Berkold state that this difference may have been partly due to differences in attributes that correlate with lower completion rates. For example, persons with disabilities were more likely to have General Educational Development (GED) degrees rather than standard high school diplomas, and persons with GED degrees are less likely to complete postsecondary education.

Research on the benefits of postsecondary education is limited to outcomes immediately following completion of postsecondary education. Horn and Berkold (1999) used the BPS: 90/94 to show that the gap between postsecondary education graduates with and without disabilities is small in terms of postgraduation employment, participation in graduate school, and participation in employment related to their postsecondary degree. They concluded that postsecondary education graduates with disabilities fare relatively well when

compared with those without disabilities. This finding is in stark contrast to the experience of the general population with disabilities, which does not fare nearly as well with respect to both employment and earnings compared with the general population. However, the postsecondary education outcomes considered by Horn and Berkold focused only on the year immediately following graduation; the study did not examine employment and earnings in subsequent years. Thus, these studies may have missed differences that arise in terms of earnings growth and long-term employment prospects.

The only study that examines long-term employment outcomes among persons with disabilities was performed by Walter, Clarcq, and Thompson (2002), who used data from a 1998 version of the NTID/SSA matched data to examine employment outcomes for all NTID applicants. Their analysis suggests that a postsecondary education from NTID yields significant economic gains for persons with severe hearing impairments. However, their analysis was based on a single cross section of data and hence did not follow the individuals over time; nor did it examine whether there are differences in these outcomes between those who are former SSI children and those who are not.

### ***SSI Children***

Research on SSI children shows that they are likely to spend a significant portion of their adult life collecting SSI benefits and that they are less likely to enroll in postsecondary education compared with the general population.

Rupp and Scott (1995) provide evidence of the length of stay in the program for SSI children. The authors used sample cohorts of persons awarded SSI as children from 1974 through 1982 and examined a 10-year follow-up period using administrative records from 1974 through 1992. They found that the mean length of the first spell of SSI participation was 11.3 years for SSI children. By the time SSI children turn 65, it is estimated that more than half of them will have spent over 25 years in the program; the mean length of stay for all children was 26.7 years.<sup>4</sup>

The postsecondary education enrollment rates for former SSI children aged 19–23 are described in Loprest and Wittenburg (2005). To examine the transition process, they used data from the National Survey of SSI Children and Families (NSCF), an SSA-funded nationally representative survey of current and former SSI children, fielded from August 2001 through July 2002.<sup>5</sup> Part of their study examined the

educational attainment of a posttransition cohort of people who were aged 19–23 in 2000 and had received SSI payments as children in 1996. At the time of the interview, they found that an estimated 42.3 percent had graduated from secondary school but were not in postsecondary school, while 6.3 percent had graduated from secondary school and made the transition to postsecondary school.<sup>6</sup> The 6.3 percent of SSI children who enrolled in postsecondary education provides some context for our study. Although the rate was not zero, it was small compared with the estimate of 35 percent enrollment rate for youth in the general population who were aged 18–24.<sup>7</sup> The NSCF estimate of 42 percent of SSI children who completed secondary education but did not enroll in postsecondary education may point to additional SSI children who could benefit from postsecondary education.

### ***How the Current Study Contributes to the Literature***

Our study builds on existing research by focusing on SSI children and examining postsecondary education completion rates, as well as on how postsecondary education can influence length of stay in the adult SSI program and long-term employment outcomes. No other study has examined either postsecondary education completion rates for SSI children or long-term outcomes, such as dependency on the adult SSI disability program or adult employment associated with postsecondary education for this population. The few studies that have considered long-term outcomes for youth with disabilities who participate in postsecondary education have not taken full advantage of the longitudinal data. Our analysis used a longitudinal database and used techniques that take advantage of the longitudinal nature of our data to characterize outcomes for SSI children.

### ***Data***

A data file based on administrative data from NTID and SSA was used for the analyses. The data file was created under a Memorandum of Agreement (MOA) whereby NTID paid SSA to create the merged data file for the purpose of conducting research on outcomes for NTID applicants. The two organizations worked together with researchers at Cornell University to design a merged NTID/SSA event history data file that could be used to track NTID applicants' outcomes for Social Security program participation, employment, and labor earnings. SSA staff constructed the file, which is securely stored at SSA; only SSA employ-

ees are allowed to perform analysis on the individual records.<sup>8</sup>

The NTID data contain information on all persons who have applied to the school since it opened in 1968. The data allow NTID applicants to be disaggregated into four groups:

1. those who were not accepted,
2. those who were accepted but chose not to attend,
3. those who attended but withdrew before earning a degree, and
4. those who graduated.

Individual information is available on the age, sex, and race of all applicants. Additional data are collected for those who attended NTID, including information on the age at which the hearing impairment began, the severity of the person's hearing impairment, and family background.

Social Security Administration data come from the Supplemental Security Record, the Master Earnings File, and the Numident file.<sup>9</sup> The Supplemental Security Record contains the complete history of SSI program participation since the program began in 1974. The file is used to identify childhood participation in the SSI program and to construct an event history file of SSI program participation in adulthood. The Master Earnings File contains information on annual earnings that are subject to Federal Insurance Contribution Act (FICA) taxes from 1981 through 2003.<sup>10</sup> It is used to estimate labor earnings for the age/earnings profiles. The Numident file contains information on deaths that occurred before 2004.

The resulting NTID/SSA merged data file has several features that make it superior to all other data sets that describe postsecondary education experiences of and outcomes for persons with disabilities. First, it is the only data set able to track long-term outcomes for youth with disabilities, such as adult SSI participation, employment, and earnings. Second, the NTID data include three different groups of applicants who did not graduate from NTID—those who were not accepted, those who were accepted but chose not to attend, and those who attended but withdrew before earning a degree. By comparing NTID graduates with these applicant groups, we were able to reduce the influence of selection bias associated with comparing them with all other persons who had disabilities. Third, our data were administrative, so we were able to match almost all NTID applicants to their administrative records. In this way, we avoided the usual problems

with survey data that rely on self-reporting and have low response rates, which can affect validity.

We focused on applicants born from 1965 through 1979 who were alive at the time we extracted their SSA administrative records.<sup>11</sup> We restricted our sample to persons born after 1964 because a significant amount of data in the NTID database is missing for earlier cohorts and because by doing so we avoided complications associated with SSI rule changes that occurred in the early 1980s.<sup>12</sup> We restricted our sample to persons born before 1980 to ensure that we would observe graduation from NTID.

A total of 5,638 applicants met our criteria for the analyses. We refer to this group as NTID applicants. In some of our analyses, we used the subset of 1,366 applicants who were SSI children. Finally, we drew a sample of 9,388 SSI children from SSA administrative data who met our selection criteria for the analyses. The latter group was used to show how program participation and earnings outcomes dif-

fer between SSI children in the four NTID applicant groups and all SSI children.

Table 1 describes the variables used in our analysis, organizing them by NTID applicant group, participation in the SSI program as a child, demographic characteristics, age at onset of hearing impairment, severity of impairment, and family background characteristics. The descriptive statistics in Table 2 show how the composition of characteristics differed across the four NTID groups.<sup>13</sup> For example, there are differences in the percentage of each NTID applicant group who were SSI children—16 percent of graduates were SSI children compared with 29 percent of those who withdrew; 24 percent of those who were accepted but chose not to attend; and 32 percent of applicants who were not accepted. The lower percentage of NTID graduates who were SSI children suggests that the former SSI children who applied to NTID had a relatively lower chance of graduating than other NTID applicants. However, there also are sizable differences

**Table 1.**  
**Definition of variables**

| Variable                     | Definition   |
|------------------------------|--|
| Applicant group              |  |
| Graduated                    | Value equals 1 if person graduated from NTID; 0 otherwise.   |
| Withdrew                     | Value equals 1 if person withdrew from NTID; 0 otherwise.  |
| Accepted, did not attend     | Value equals 1 if person was accepted but did not attend NTID; 0 otherwise.  |
| Not accepted                 | Value equals 1 if person was not accepted into NTID; 0 otherwise.  |
| Received SSI as a child      |  |
| SSI child                    | Value equals 1 if person received SSI payments before age 18; 0 otherwise.   |
| Not SSI child                | Value equals 1 if person did not receive SSI payments before age 18; 0 otherwise.  |
| Sex and race                 |  |
| Female                       | Value equals 1 if sex is female; 0 otherwise.  |
| Nonwhite                     | Value equals 1 if race is nonwhite; 0 otherwise.   |
| Age at onset of hearing loss |  |
| Age                          | Value equals age at deaf onset; 99 or "." if missing.  |
| Birth                        | Value equals 1 if age at hearing loss is birth; 0 otherwise.   |
| Ages 0–5                     | Value equals 1 if age at hearing loss is 0–5; 0 otherwise.   |
| Ages 6 or older              | Value equals 1 if age at hearing loss is 6 or older; 0 otherwise.  |
| Missing                      | Value equals 1 if age at hearing loss is missing; 0 otherwise.   |
| Severity of hearing loss     |  |
| Mild                         | Value equals 1 if lowest PTA hearing score is between 0 and 60; 0 otherwise.   |
| Severe                       | Value equals 1 if lowest PTA hearing score is between 61 and 90; 0 otherwise.  |
| Severe spline                | Is a continuous value that is the difference between the PTA score and the score of 60, which is the definition of a severe hearing impairment. It is equal to 0 for those with a PTA score above 89 and below 60. |
| Profound                     | Value equals 1 if lowest PTA hearing score is greater than 90; 0 otherwise.  |
| Profound spline              | Is a continuous value that is the difference between the PTA score and the score of 90, which is the definition of a profound hearing impairment. It is equal to 0 for those with a PTA score below 90.            |

(Continued)

**Table 1.**  
**Continued**

| Variable           | Definition   |
|--------------------|--|
| Father's education |  |
| Elementary         | Value equals 1 if father's education is elementary school; 0 otherwise.          |
| Secondary          | Value equals 1 if father's education is secondary school; 0 otherwise.           |
| College            |  |
| 2 years            | Value equals 1 if father's education is 2 years of college; 0 otherwise.         |
| 4 years            | Value equals 1 if father's education is 4 years of college; 0 otherwise.         |
| 5 or more years    | Value equals 1 if father's education is postgraduate; 0 otherwise.               |
| Missing            | Value equals 1 if father's education is missing; 0 otherwise.                    |
| Mother's education |  |
| Elementary         | Value equals 1 if mother's education is elementary school; 0 otherwise.          |
| Secondary          | Value equals 1 if mother's education is secondary school; 0 otherwise.           |
| College            |  |
| 2 years            | Value equals 1 if mother's education is 2 years of college; 0 otherwise.         |
| 4 years            | Value equals 1 if mother's education is 4 years of college; 0 otherwise.         |
| 5 or more years    | Value equals 1 if mother's education is 5 or more years of college; 0 otherwise. |
| Missing            | Value equals 1 if mother's education is missing; 0 otherwise.                    |
| Deaf parents       |  |
| Neither            | Value equals 1 if neither parent is deaf; 0 otherwise.                           |
| One                | Value equals 1 if one parent is deaf; 0 otherwise.                               |
| Two                | Value equals 1 if two parents are deaf; 0 otherwise.                             |
| Missing            | Value equals 1 if parents' hearing status is missing; 0 otherwise.               |
| Birth year         | Set of indicators equal to 1 for each birth year from 1965 to 1979; 0 otherwise. |

SOURCES: Data file of administrative records from the National Technical Institute for the Deaf linked to data from the Social Security Administration's Supplemental Security Record, Master Earnings File, and Numident file.

NOTE: NTID = National Technical Institute for the Deaf; SSI = Supplemental Security Income; PTA = pure tone average hearing level.

across the four groups in terms of other individual characteristics, and these differences may also explain differences in graduation probabilities. Below, we describe how we accounted for these differences in our analyses.

### **Methods**

Our analyses focused on describing the following three outcomes for SSI children:

1. The probability that an SSI child who applied to NTID would graduate, compared with NTID applicants who did not participate in the SSI program in childhood;
2. Dependency on the SSI adult program for SSI children who graduated from NTID, compared with each of the three groups of SSI children who applied but did not graduate; and
3. Levels and growth of earnings for SSI children who graduated from NTID, compared with each of the three groups of SSI children who applied but did not graduate.

Different methods were required to describe each of the outcomes. Here, we provide an overview of the methods used. The technical details can be found in Appendix A.

### **Educational Outcomes**

The differences in the probability of graduation between SSI children and those who were not SSI children (outcome 1) were used to assess whether the differences between the two groups are large enough for policymakers to consider special programs that specifically target SSI children who apply for postsecondary education. If there are no differences in the probability of graduation between the two groups, then postsecondary education programs specifically targeting SSI children may have a smaller potential for affecting educational success. This information is important to policymakers interested in identifying which programs have the potential to help SSI children make the transition to adult life. We do not attribute the differences to the presence of the SSI program; that is, we do not conclude that if the SSI program did not

**Table 2.**  
**Descriptive statistics for NTID applicants, by outcome of application**  
**(in percent unless otherwise specified)**

| Variable                     | Total  |      | Not accepted |      | Accepted, did not attend |      | Withdrew |      | Graduated |      |
|------------------------------|--------|------|--------------|------|--------------------------|------|----------|------|-----------|------|
|                              | Mean   | SE   | Mean         | SE   | Mean                     | SE   | Mean     | SE   | Mean      | SE   |
| Individual characteristics   |        |      |              |      |                          |      |          |      |           |      |
| Former SSI child             | 24.23  | 0.57 | 31.94        | 1.84 | 23.72                    | 1.39 | 28.68    | 0.94 | 15.84     | 0.87 |
| Female                       | 44.75  | 0.66 | 49.61        | 1.97 | 53.51                    | 1.63 | 38.90    | 1.02 | 45.93     | 1.19 |
| Nonwhite                     | 24.49  | 0.57 | 44.03        | 1.96 | 30.96                    | 1.51 | 21.41    | 0.86 | 17.89     | 0.92 |
| Age at onset of hearing loss |        |      |              |      |                          |      |          |      |           |      |
| Mean age at onset (years)    | --     | --   | --           | --   | --                       | --   | 10.80    | 0.64 | 9.65      | 0.69 |
| Birth                        | --     | --   | --           | --   | --                       | --   | 75.15    | 0.90 | 76.52     | 1.01 |
| Ages 1–5                     | --     | --   | --           | --   | --                       | --   | 10.23    | 0.63 | 10.77     | 0.74 |
| Ages 6 or older              | --     | --   | --           | --   | --                       | --   | 1.00     | 0.21 | 0.68      | 0.20 |
| Missing                      | --     | --   | --           | --   | --                       | --   | 13.62    | 0.72 | 12.02     | 0.78 |
| Severity of hearing loss     |        |      |              |      |                          |      |          |      |           |      |
| Mean hearing loss            | --     | --   | --           | --   | --                       | --   | 93.13    | 0.45 | 94.87     | 0.46 |
| Missing                      | --     | --   | --           | --   | --                       | --   | 2.22     | 0.31 | 1.60      | 0.30 |
| Mild                         | --     | --   | --           | --   | --                       | --   | 4.22     | 0.42 | 2.68      | 0.39 |
| Severe                       | --     | --   | --           | --   | --                       | --   | 27.89    | 0.94 | 25.81     | 1.04 |
| Severe spline (mean)         | --     | --   | --           | --   | --                       | --   | 5.60     | 0.20 | 5.26      | 0.23 |
| Profound                     | --     | --   | --           | --   | --                       | --   | 65.67    | 0.99 | 69.91     | 1.10 |
| Profound spline (mean)       | --     | --   | --           | --   | --                       | --   | 9.52     | 0.21 | 9.87      | 0.23 |
| Father's education           |        |      |              |      |                          |      |          |      |           |      |
| Elementary                   | --     | --   | --           | --   | --                       | --   | 11.88    | 0.68 | 8.60      | 0.67 |
| Secondary                    | --     | --   | --           | --   | --                       | --   | 32.94    | 0.98 | 30.71     | 1.10 |
| College                      |        |      |              |      |                          |      |          |      |           |      |
| 2 years                      | --     | --   | --           | --   | --                       | --   | 17.15    | 0.79 | 15.67     | 0.87 |
| 4 years                      | --     | --   | --           | --   | --                       | --   | 17.93    | 0.80 | 22.22     | 0.99 |
| 5 or more years              | --     | --   | --           | --   | --                       | --   | 9.27     | 0.61 | 14.07     | 0.83 |
| Missing                      | --     | --   | --           | --   | --                       | --   | 10.84    | 0.65 | 8.72      | 0.67 |
| Mother's education           |        |      |              |      |                          |      |          |      |           |      |
| Elementary                   | --     | --   | --           | --   | --                       | --   | 10.36    | 0.64 | 8.15      | 0.65 |
| Secondary                    | --     | --   | --           | --   | --                       | --   | 39.51    | 1.02 | 35.84     | 1.14 |
| College                      |        |      |              |      |                          |      |          |      |           |      |
| 2 years                      | --     | --   | --           | --   | --                       | --   | 22.32    | 0.87 | 21.20     | 0.98 |
| 4 years                      | --     | --   | --           | --   | --                       | --   | 16.45    | 0.77 | 20.97     | 0.97 |
| 5 or more years              | --     | --   | --           | --   | --                       | --   | 5.09     | 0.46 | 7.29      | 0.62 |
| Missing                      | --     | --   | --           | --   | --                       | --   | 6.27     | 0.51 | 6.55      | 0.59 |
| Deaf parents                 |        |      |              |      |                          |      |          |      |           |      |
| Neither                      | --     | --   | --           | --   | --                       | --   | 88.90    | 0.66 | 93.68     | 0.58 |
| One                          | --     | --   | --           | --   | --                       | --   | 1.65     | 0.27 | 1.20      | 0.26 |
| Two                          | --     | --   | --           | --   | --                       | --   | 8.18     | 0.57 | 4.90      | 0.52 |
| Missing                      | --     | --   | --           | --   | --                       | --   | 1.26     | 0.23 | 0.23      | 0.11 |
| Mean birth year              | 1970.9 | 0.1  | 1969.4       | 0.2  | 1970.1                   | 0.1  | 1971.8   | 0.1  | 1970.6    | 0.1  |
| Number of observations       | 5,638  |      | 645          |      | 940                      |      | 2,298    |      | 1,755     |      |

SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTE: NTID = National Technical Institute for the Deaf; SE = standard error; SSI = Supplemental Security Income; -- = not available.

exist there would be no difference in graduation rates. SSI eligibility is based on family income and resource tests, and in the absence of the SSI program these children might have experienced similar differences in the probability of graduation because their families had lower income and resources compared with NTID applicants who were not SSI children.

The method we used to estimate differences in the probability of graduation among all applicants is referred to as a sequential response model. This type of model disaggregates the probability of graduation into a sequence of three events and may be used to show how differences in the probability of graduation are related to the probability that each of the following events will occur:

- an NTID applicant will meet the school’s admission criteria,
- an accepted applicant will choose to attend NTID, and
- for those who attend NTID, whether they will graduate.

Some of those who attend NTID will withdraw from the school before completing the requirements for graduation.

We used multivariate logit models to estimate how participation in the SSI program as a child is related to the probability that each of these events will occur; therefore, our model is referred to as a sequential logit.<sup>14</sup> The motivation for using the sequential logit is based on the descriptive statistics in Table 2, which show substantial differences in sex and race for those who are admitted to NTID, those who choose to attend, and attendees who graduate from NTID. Therefore, differences between SSI children and those who are not SSI children could be driven by differences in sex or race.<sup>15</sup> The sequential logit model allows us to estimate how the probability that a particular event will occur and differs for those who participate in the SSI program as children, compared with those who do not, after accounting for differences in sex, race, and birth year across the two groups. It also allows us to examine differences in graduation that may be related to sex or race.

The estimates from the sequential logit may be used to show how individual characteristics have different effects on the overall probability of graduation at each event within the sequence of events leading to graduation.<sup>16</sup> This information is important because it can show policymakers how each of the three events—NTID admission among those who apply, NTID

attendance among those accepted, and NTID graduation among those who attend—is related to differences in the probability of graduation for particular types of applicants. For example, if lower graduation rates among SSI children occur because they decide not to attend NTID, efforts to improve graduation rates might consist of providing better information on how SSI children can get financial assistance. However, other efforts would be called for—such as improvements to college retention programs—if lower graduation rates occur because SSI children are withdrawing from NTID before earning a degree.

### ***Program Dependency and Earnings Outcomes***

SSI children who graduate from NTID (outcome 1) may experience reduced dependency on the adult program (outcome 2) and increased earnings (outcome 3). Our strategy for identifying the potential impact of NTID graduation was to compare these outcomes for SSI children who graduate from NTID with the outcomes for the following groups of applicants:

- SSI children who were accepted to NTID but chose not to attend, and
- SSI children who withdrew before earning a degree.

To attribute the entire difference in these outcomes to graduation from NTID, we need to assume that the NTID graduates would have experienced the same outcomes as the comparison groups if they had not graduated from NTID. We refer to our estimates as “potential impacts” because we are not able to verify that this assumption is valid.

We used two other comparison groups to provide further context to our estimates of these outcomes:

- SSI children who applied to NTID but who did not meet the admission standard. Our hypothesis is that this comparison group spent more time in the SSI program as adults and earned less than those who were accepted to NTID because they did not meet the NTID admission standard.
- former SSI children who qualified on the basis of a primary diagnosis of deafness and were similar in age to the NTID sample.

These comparison groups place our results in the context of the SSI program. We hypothesize that the full population of deaf SSI children spent the most time in the SSI program and had the lowest earnings.

We measured adult dependency on the SSI program using survival analysis, which provides estimates of

the timing of exit from and reentry into the SSI program after reaching age 19. Survival analysis entails following individuals from one particular event (for example, entering the adult SSI program) to another (for example, exiting the adult SSI program), and comparing the amount of time between events across groups. We estimated the potential effect of NTID graduation by comparing SSI children who graduated from NTID with each of our comparison groups using the following measures:

- the estimated probability of remaining in the program for each year over a 10-year period,
- the probability of leaving the program at the end of the 10-year period, and
- the estimated median number of months spent in the adult SSI program.

#### **Dependency on the SSI Program as an Adult.**

For this analysis, we confined our sample to NTID applicants who were SSI children receiving SSI adult benefits at age 19.<sup>17</sup> The event history file contains the month that the person turns 19 and either the month that the person exits the adult SSI program or the last month available in our data. Months are a natural time unit for the measurement of SSI participation because an SSI recipient's payment status is determined on a monthly basis. For presentation purposes, we grouped months into yearly intervals. Some people in our data set were still participating in the SSI program as of the last time period we recorded; that is, we never observed a transition from the SSI program for some persons. These cases are referred to as censored cases, and we accounted for them by using standard statistical techniques (described in Appendix B).

We used a similar approach to examine the timing of reentry into the adult program after a first exit. In this case, the first event was the month that a person first exited the adult SSI program, and the second event was the month that a person first reentered the SSI program. Like the analysis of first exit from the adult SSI program, we grouped months into yearly intervals for presentation and used standard techniques to account for censored cases in the analysis. Because of data limitations, we focused on the probability of reentry into the program within 5 years of first exit as another measure of SSI dependency.

**Earnings.** To describe the third outcome, earnings, we used age/earnings profiles to examine differences in earnings from ages 18–30 across the four groups of NTID applicants. For each person in the data set, earnings were observed for each age up to 2002, the

final year that annual earnings are available in our data. A data set that contains an observation for each person at each age was created, and the dollar values were adjusted to 2004 dollars using the consumer price index for all urban consumers (CPI-U). We used three key statistics to describe the age/earnings profiles:

- the percentage of persons with at least \$1 of earnings at a particular age,
- the mean earnings for those with at least \$1 of earnings at a particular age, and
- the mean earnings for all persons at a particular age.

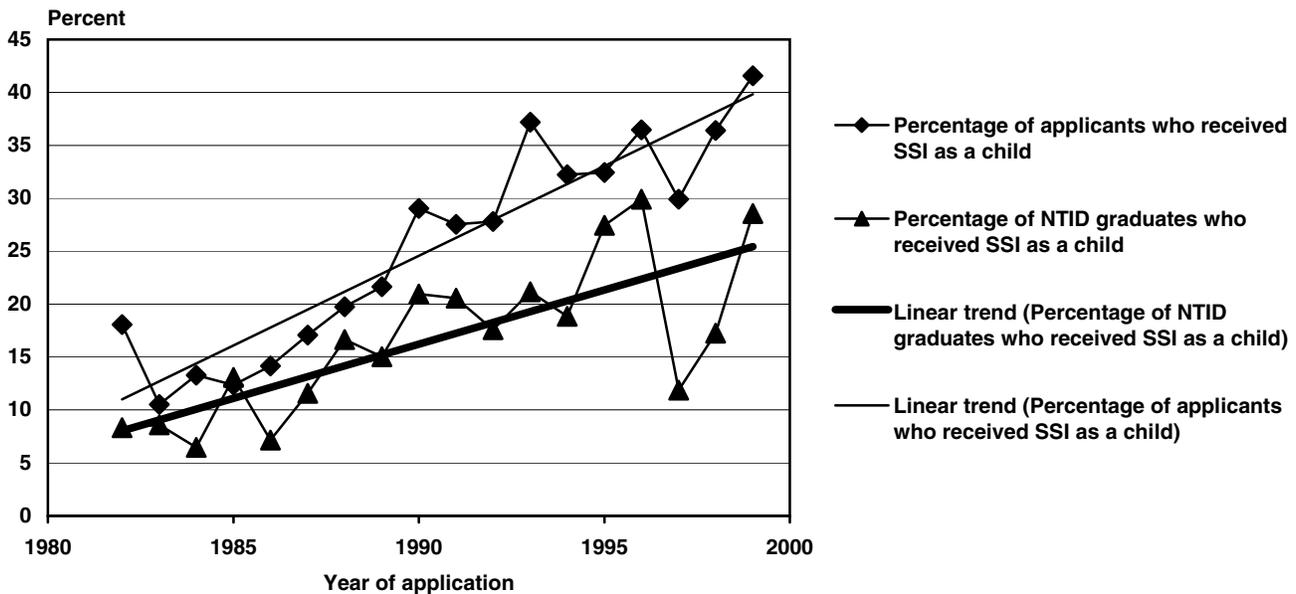
Appendix B contains data for each of the three statistics. Separate profiles were estimated for each of the four NTID applicant groups using mean earnings for all persons. Mean earnings for each age were plotted in an age/earnings graph, and a third-order polynomial trend line was fit to the means to illustrate the pattern for the various groups. The analysis allowed us to examine differences in both the level and growth in earnings from ages 18–30 and to describe the potential effects of an NTID education on earnings during this period.

## **Results**

From 1982 to 2000, the percentage of both NTID applicants and graduates who were SSI children steadily increased. These two trends are illustrated in Chart 1, which organizes NTID applicants and graduates by the year they first applied, so that there is a common basis of comparison. The chart shows that the percentage of all NTID applicants who were SSI children increased from 10 percent in 1983 to 43 percent in 1999. It also shows that the fraction of NTID graduates who were SSI children increased from 8 percent of those who applied in 1982 to 28 percent in 1999. These results indicate that SSI children with hearing impairments accounted for a significant share of applicants and graduates during this period and that they were willing and able to participate in postsecondary education.

The position of the trend lines in Chart 1 also shows that, for each application year, the fraction of eventual graduates who were SSI children was smaller than the fraction of all applicants who were SSI children. For the 1999 application-year cohort, 42 percent of applicants were SSI children, compared with only 28 percent of eventual graduates. Overall, the percentage of those who graduated and were classified as SSI children was lower than the percentage who graduated

**Chart 1.**  
**Time series of the percentage of NTID applicants and graduates who were SSI children, by year of application**



SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTE: NTID = National Technical Institute for the Deaf; SSI = Supplemental Security Income.

and were not in the SSI program in childhood. Hence, SSI children who applied were less likely to graduate, compared with other applicants. The chart shows that this finding existed for almost every application year from 1982 to 1999.

Finally, the slopes of the two trend lines are different.<sup>18</sup> This difference indicates that even though both trends increased, the fraction of NTID applicants who were SSI children increased at a faster rate. As a result, the likelihood that an SSI child who applies to NTID will eventually graduate has decreased over time. More SSI children are applying to NTID, but the rate of graduation among these applicants has declined slightly over time. The estimates below more precisely measure the exact relationship between participation in SSI as a child and educational success as an adult.

### **Probability of Graduation**

The results of our multivariate logit model show some substantial and statistically significant differences in the characteristics of applicants who were not admitted to NTID, were admitted and chose to attend NTID, and attended and completed degree requirements. Table 3 shows the differences in the probability for each of these events between SSI children and those who were

not SSI children. Compared with non-SSI children, the probability that SSI children who applied to NTID would be admitted was 4.8 percentage points lower, the probability that SSI children who were admitted would attend NTID was not statistically different, and the probability that SSI children who attended NTID would graduate was 16 percentage points lower. The difference in the graduation rate among those who attend NTID is large; after adjusting for differences in sex and race, we estimate that 47 percent of NTID attendees who were not SSI children graduated compared with only 31 percent of those who were SSI children. The difference suggests that college preparation and retention programs that target SSI children may have the potential to substantially improve their graduation rates.

The results for females and nonwhite applicants are remarkably different from those described for SSI children. Females who applied were less likely to be admitted, and those who were admitted were less likely to attend. However, the probability of graduation for females who attended NTID was 8.1 percentage points higher than that of their male counterparts. Compared with whites, nonwhites were less likely to meet the admission criteria, and those who met the

**Table 3.**  
**Sequential logit model results of relationship between SSI participation as a child and graduation from NTID: Estimated impact on the probability that each event will occur (in percentage points)**

| Variable                        | Difference in probability of being admitted to NTID among applicants | Difference in probability of attending NTID among those admitted | Difference in probability of graduation among those who attend NTID |
|---------------------------------|--|--|---|
| Former SSI child                | -4.81 ***<br>[1.09]  | -0.76<br>[1.34]  | -16.07 ***<br>[1.81]  |
| Female                          | -1.93 ***<br>[0.83]  | -7.27 ***<br>[1.11]  | 8.11 ***<br>[1.55]  |
| Nonwhite                        | -12.42 ***<br>[1.19]   | -11.28 ***<br>[1.50]   | -0.69<br>[1.98]   |
| Birth year indicators           | Yes  | Yes  | Yes   |
| Predicted probability (percent) | 88.6   | 81.2   | 42.7  |
| Number of observations          | 5,638  | 4,993  | 4,053   |

SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTES: The sequential model is based on a sequential logit specification as described in Appendix A. Logit coefficients, odds ratios, and marginal effects for the entire model are in Table A-2.

Standard errors are in brackets.

SSI = Supplemental Security Income; NTID = National Technical Institute for the Deaf.

\* significant at .10 level; \*\* significant at .05 level; \*\*\* significant at .01 level.

**Table 4.**  
**Sequential logit model results of relationship between SSI participation as a child and graduation from NTID: Decomposition of each event's impact on the overall probability of graduation among applicants (in percentage points)**

| Variable         | Difference in probability of graduation among all NTID applicants | Difference in probability of graduation due to NTID admission decision | Difference in probability of graduation due to decision to attend NTID | Difference in probability of graduation due to decision to complete an NTID degree |
|------------------|---|--|--|--|
| Former SSI child | -13.5   | -1.7   | -0.3   | -11.5  |
| Female           | 2.4   | -0.7   | -2.7   | 5.8  |
| Nonwhite         | -9.1  | -4.3   | -4.3   | -0.5   |

SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTES: The sequential model is based on a sequential logit specification as described in Appendix A. Logit coefficients, odds ratios, and marginal effects for the entire model are in Table A-2.

SSI = Supplemental Security Income; NTID = National Technical Institute for the Deaf.

criteria were less likely to choose to attend NTID. However, the differences in graduation rates between whites and nonwhites who attended NTID were not statistically different.

We also looked at the relationship between individual characteristics and the overall probability of graduation among NTID applicants at each stage of the process.<sup>19</sup> As shown in Table 4, the probability of graduation for all SSI children who applied to NTID was 13.5 percentage points lower than that for NTID applicants who were not SSI children. The lower probability was spread over the three separate events that lead to graduation for applicants—with 1.7 percentage points attributed to the admittance step, 0.3 percentage points attributed to the attendance step, and 11.5 percentage points attributed to the graduation step. Thus, the final step was responsible for most of the disparity in the overall graduation rates for SSI children who applied to NTID compared with the rate for those who were not SSI children.

Given the importance of the graduation step, we estimated a multivariate logit model of the probability of graduation for those who attended NTID that includes the additional characteristics available for those attendees. The results are in Table 5 and are comparable with those shown in Table 3. The inclusion of the additional characteristics slightly reduces the estimated difference in the probability of graduation between former SSI children and those who had not been in the SSI program as children. However, the difference is still large and statistically significant. The probability that former SSI children who attended NTID would graduate was 13.5 percentage points lower than for those who were not SSI children. To put this result in perspective, the probability of graduation for those who were not SSI children was 46 percent, compared with an estimated 32.5 percent for former SSI children. Thus, even after controlling for sex, race, severity of hearing impairment, family background characteristics, and birth cohort, former SSI children

**Table 5.**  
**Logit model results of the probability of graduation for NTID attendees**

| Variable                     | Coefficient             | Effect on probability of graduation<br>(percentage points) |
|------------------------------|-------------------------|--|
| Individual characteristic    |                         |  |
| Former SSI child             | -0.5887 ***<br>[0.0873] | -13.5<br>[1.92]  |
| Female                       | 0.3653 ***<br>[0.0668]  | 8.5<br>[1.54]  |
| Nonwhite                     | -0.0158<br>[0.0873]     | -0.4<br>[2.01]   |
| Age at onset of hearing loss |                         |  |
| Birth                        | -0.0049<br>[0.1086]     | -0.1<br>[2.52]   |
| Ages 1–5 (reference)         | ...                     | ...  |
| Ages 6 or older              | -0.4722<br>[0.3797]     | -10.7<br>[8.16]  |
| Missing                      | -0.2385<br>[0.1503]     | -5.5<br>[3.4]  |
| Severity of hearing loss     |                         |  |
| Mild                         | 0.1989<br>[0.2492]      | -4.5<br>[5.5]  |
| Severe (reference)           | ...                     | ...  |
| Severe spline                | 0.0034<br>[0.0077]      | 0.1<br>[0.18]  |
| Profound                     | 0.2314<br>[0.1866]      | 5.4<br>[4.28]  |
| Profound spline              | -0.0009<br>[0.0050]     | 0<br>[0.12]  |
| Missing                      | 0.5797 *<br>[0.3399]    | 13.4<br>[7.84]   |

(Continued)

**Table 5.**  
**Continued**

|                     |                         |                 |
|---------------------|-------------------------|-----------------|
| Father's education  |                         |                 |
| Primary             | -0.0707<br>[0.1470]     | -1.6<br>[3.3]   |
| Secondary           | 0.0831<br>[0.1038]      | 1.9<br>[2.4]    |
| College             |                         |                 |
| 2 years (reference) | ...                     | ...             |
| 4 years             | 0.2016 *<br>[0.1113]    | 4.8<br>[2.65]   |
| 5 or more years     | 0.2923 **<br>[0.1345]   | 7.0<br>[3.21]   |
| Missing             | -0.3107<br>[0.1977]     | -6.9<br>[4.29]  |
| Mother's education  |                         |                 |
| Primary             | 0.0741<br>[0.1467]      | 1.7<br>[3.35]   |
| Secondary           | -0.0117<br>[0.0930]     | -0.3<br>[2.14]  |
| College             |                         |                 |
| 2 years (reference) | ...                     | ...             |
| 4 years             | 0.2 *<br>[0.1072]       | 4.7<br>[2.53]   |
| 5 or more years     | 0.3513 **<br>[0.1591]   | 8.3<br>[3.75]   |
| Missing             | 0.6418 ***<br>[0.2372]  | 14.8<br>[5.42]  |
| Deaf parents        |                         |                 |
| Neither (reference) | ...                     | ...             |
| One                 | -0.1507<br>[0.2871]     | -3.5<br>[6.59]  |
| Two                 | -0.3507 **<br>[0.1409]  | -8.0<br>[3.12]  |
| Missing             | -1.9819 ***<br>[0.5822] | -34.0<br>[5.49] |
| Constant            | 0.4382 *<br>[0.2350]    | ...<br>...      |

SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTES: Birth cohort dummy variables are included. Number of observations was 4,053. Standard errors are in brackets.

NTID = National Technical Institute for the Deaf; SSI = Supplemental Security Income; . . . = not applicable.

\* significant at .10 level; \*\* significant at .05 level; \*\*\* significant at .01 level.

were significantly less likely to graduate than their non-SSI counterparts.

In summary, the result of a lower probability of graduation for SSI children was partly due to the admission standard (that is, SSI children were less likely to be accepted to NTID), but most of it was due to the lower probability of graduation for SSI children who attended NTID. Devoting efforts to improving retention rates among SSI children who attend NTID

appears to be necessary to reduce the differences in graduation rates.

### ***Relationship Between NTID Graduation and Participation in the Adult SSI Program***

Almost all of the SSI children who applied to NTID participated in the SSI program when they turned 19. After age 19, the patterns of exiting the program differed substantially between NTID graduates and each

of the comparison groups: SSI children who graduated were more likely to have left the program within 10 years following age 19 and were less likely to reenter the program.

Using the survival probability for each year following age 19 as a measure, we examined the changes in the probability of remaining on the SSI program for SSI children who graduated from NTID compared with each of our comparison groups. Chart 2 shows that SSI children who graduated were more likely to remain in the program during the first 4 years following their 19th birthday—the years that many of them were attending NTID—and that after the 4th year there was a relatively sharp decline in the probability of remaining in the SSI program. By the 10th year, there was only a 34 percent chance that they would remain in the SSI program, which was significantly lower than the probability for each of the other comparison groups.

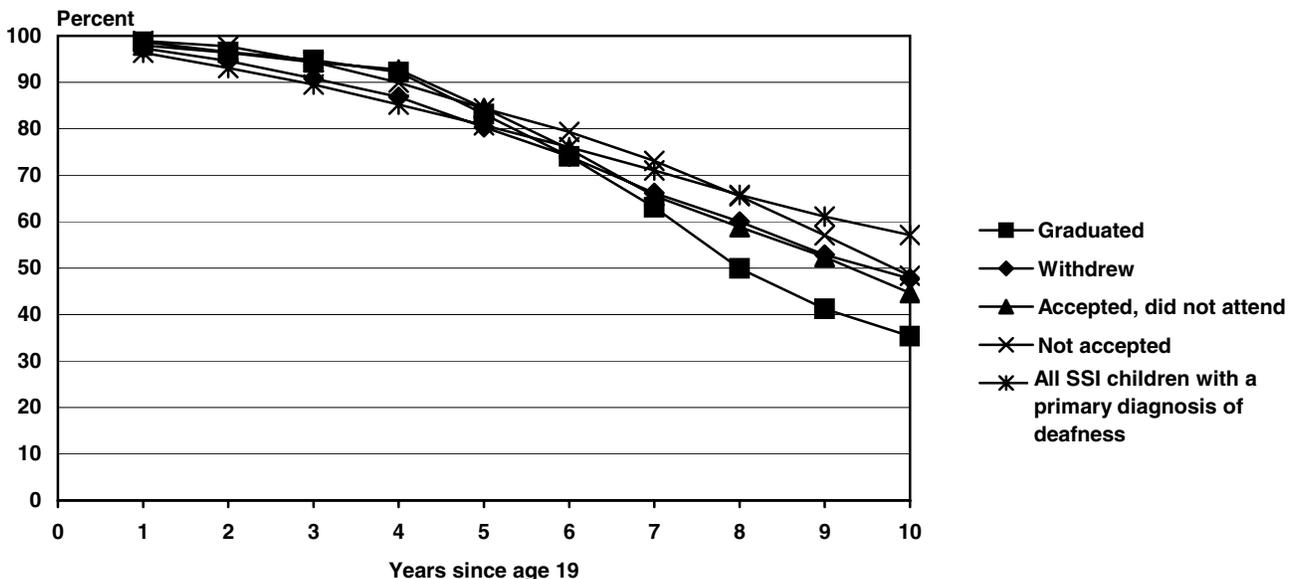
The potential impact of NTID graduation on the likelihood that SSI children will leave the program within 10 years following their 19th birthday and the median amount of time they spend in the program are shown in Table 6. We estimated that there was a 64.7 percent chance that SSI children who graduated

from NTID would leave the program within 10 years, which was larger than and statistically different from the estimates of 52.2 percent for those who withdrew from NTID, 55.3 percent for those who did not attend, 51.6 percent for those who were not accepted, and 42.9 percent for the group of all SSI children with a primary diagnosis of deafness.

We also found that NTID graduation may increase the probability of SSI children leaving the program within 10 years following their 19th birthday. That probability increased by 12.5 percentage points compared with SSI children who withdrew from NTID and by 9.4 percentage points compared with SSI children who were accepted but chose not to attend. SSI children who graduated from NTID fared even better when compared with each of the other two groups; the probability of leaving the program within 10 years was 13.1 percentage points higher for SSI children who were not admitted and 21.8 percentage points higher for the group of all SSI deaf children.

The potential impact measured as the difference in the median time spent in the SSI program before leaving is also shown in Table 6. For the group of NTID graduates, the median expected time spent in the SSI program before leaving it was 95 months—substan-

**Chart 2.**  
Probability that SSI children will remain in the adult SSI program for 1–10 years after age 19, by NTID status



SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTE: SSI = Supplemental Security Income; NTID = National Technical Institute for the Deaf.

**Table 6.**  
**Estimates of first exit from SSI program for children receiving SSI at age 19, by NTID status**

| NTID status   | Probability of leaving SSI program within 10 years |   | Median number of months to first exit from SSI |   |
|---|--|---|--|---|
|   | Estimate (percent)                                 | Potential impact of NTID graduation (percentage points) | Estimate (percent)                             | Potential impact of NTID graduation (percentage points) |
| Graduated   | 64.7<br>[3.29]                                     | ...   | 95<br>[1.44]                                   | ...   |
| Withdrew  | 52.2<br>[2.28]                                     | 12.5 ***  | 116<br>[3.34]                                  | -21 ***   |
| Accepted, did not attend  | 55.3<br>[3.71]                                     | 9.4 *   | 114<br>[2.58]                                  | -19 ***   |
| Not accepted  | 51.6<br>[3.84]                                     | 13.1 **   | 118<br>[2.61]                                  | -23 ***   |
| All SSI children awarded benefits on the basis of a hearing impairment <sup>a</sup> | 42.9<br>[0.57]                                     | 21.8  | 145<br>[2.38]                                  | -50   |

SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTES: Standard errors are in brackets.

SSI = Supplemental Security Income; NTID = National Technical Institute for the Deaf; . . . = not applicable.

a. The group of all SSI children awarded benefits on the basis of a hearing impairment is not mutually exclusive from the group of NTID graduates, and we do not calculate statistical tests for this group.

\* significant at .10 level; \*\* significant at .05 level; \*\*\* significant at .01 level.

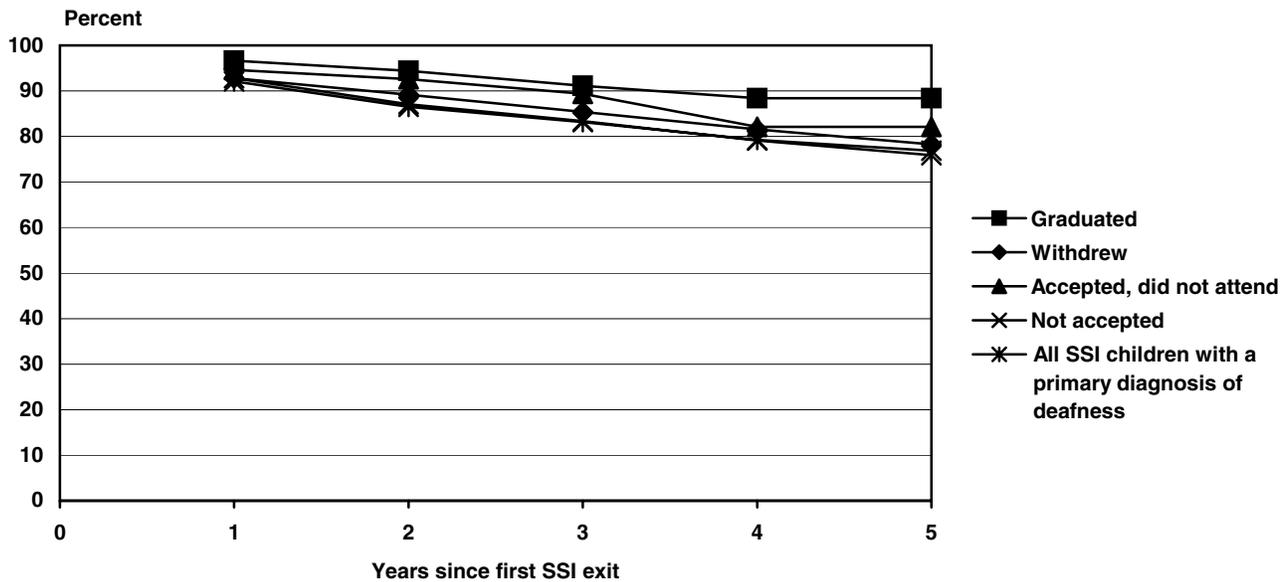
tially less than the 116 months estimated for those who withdrew from NTID, 114 months for those who chose not to attend, 118 months for those who were not accepted, and 145 months for the group of all deaf SSI children. The potential impact for SSI children who graduated was a 21-month reduction in median months spent in the program before leaving when compared with those who withdrew from NTID and a 19-month reduction when compared with those who were accepted but chose not to attend. Again, SSI children who graduated fared even better when compared with the other two groups; the median time before leaving was 23 months less than for those who were not admitted and 50 months less than for the group of all SSI deaf children.

An examination of the first SSI episode does not fully measure the relationship between NTID graduation and dependency on the SSI program. If NTID graduates were less likely to reenter the program after their first exit, then our estimate may have understated the role of an NTID degree on reductions in dependency on the SSI program. Chart 3 shows that the

probability that the person would remain off the program, or survive without the program, was higher for NTID graduates across the 5 years after first exit. The sample sizes declined dramatically after the 5th year (as shown in Table A-5), and our estimates for later years have larger standard errors.

Table 7 shows the probability that an SSI child would reenter the SSI program within 5 and within 10 years following first exit from the program after reaching age 19, using the survival probability as a measure.<sup>20</sup> The probability of reentry within 5 years after leaving the program was only 11.6 percent for SSI children who graduated from NTID, which was smaller than the 21.7 percent estimate for those who withdrew, the 17.9 percent estimate for those who were accepted but chose not to attend, the 24.1 percent for those who were not accepted, and the 23.2 percent for the group of all deaf SSI children. The potential impact of NTID graduation for SSI children was a drop of 10.1 percentage points in the probability of reentering the SSI program when compared with those who withdrew and a drop of 6.3 percentage points when compared with

**Chart 3.**  
**Probability that SSI children will remain off the adult SSI program after first exit, by NTID status**



SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTE: SSI = Supplemental Security Income; NTID = National Technical Institute for the Deaf.

**Table 7.**  
**Probability that SSI children will reenter the SSI program within 5 or 10 years following first exit from the program after reaching age 19, by NTID status**

| NTID status   | Within 5 years     |   | Within 10 years    |   |
|---|--------------------|---|--------------------|---|
|   | Estimate (percent) | Potential impact of NTID graduation (percentage points) | Estimate (percent) | Potential impact of NTID graduation (percentage points) |
| Graduated   | 11.6<br>[2.84]     | ...   | 14.4<br>[3.38]     | ...   |
| Withdrew  | 21.7<br>[2.86]     | -10.1 **  | 27.2<br>[3.67]     | -12.8 ***   |
| Accepted, did not attend  | 17.9<br>[3.99]     | -6.3  | 33.1<br>[6.28]     | -18.7 ***   |
| Not accepted  | 24.1<br>[4.82]     | -12.5 **  | 26.1<br>[5.08]     | -11.7 *   |
| All SSI children awarded benefits on the basis of a hearing impairment <sup>a</sup> | 23.2<br>[0.88]     | -11.6   | 32.2<br>[1.44]     | -17.8   |

SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTES: Standard errors are in brackets.

SSI = Supplemental Security Income; NTID = National Technical Institute for the Deaf; . . . = not applicable.

a. The group of all SSI children awarded benefits based on a hearing impairment is not mutually exclusive from the group of NTID graduates, and we do not calculate statistical tests for this group.

\* significant at .10 level; \*\* significant at .05 level; \*\*\* significant at .01 level.

those who chose not to attend NTID (although the latter result is not statistically significant). The estimates for the other two groups show that the group of all deaf SSI children also fared better. The probability of reentering the program within 10 years shows that the potential impact of NTID graduation is also substantial and statistically significant.

### Age/Earnings Profiles

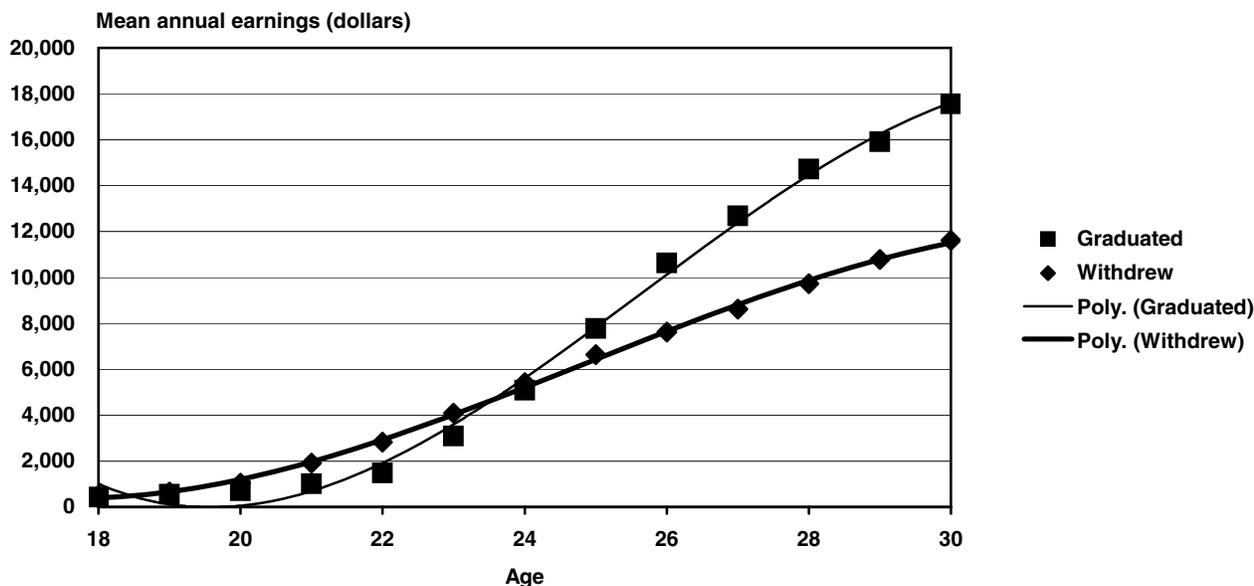
To determine the potential impact of NTID graduation on the labor earnings of SSI children during the early portion of their adult life, we compared the age/earnings profile for SSI children who graduated from NTID with the profile for SSI children who withdrew from NTID (Chart 4).<sup>21</sup> The results show that SSI children who graduated had a mean annual earnings level of less than \$1,000 between the ages of 18 and 21, ages at which most graduates were attending NTID. The trend line shows that their mean annual earnings grew from about \$1,000 at age 21 to \$17,500 by age 30. SSI children who withdrew from NTID experienced very little earnings growth, and by age 30 the mean annual earnings level for the group was a little less than \$11,600 per year. By age 30, the gap between the two groups was almost \$6,000, with SSI

children who graduated earning 51 percent more than those who withdrew.

The potential earnings impact for SSI children who graduated from NTID compared with SSI children who were accepted to NTID but did not attend is shown in Chart 5. The earnings of SSI children who graduated exceeded the earnings of those who chose not to attend at every age after reaching age 24. The earnings of those who did not attend NTID grew to slightly more than \$12,100 by the time they were age 30. By age 30, SSI children who graduated from NTID were earning about \$5,400 (or 44 percent) more than SSI children who were accepted to NTID but chose not to attend.

Comparisons between SSI children who graduated from NTID and those who were not admitted are shown in Chart 6. SSI children who were not accepted to NTID had modest growth in mean annual earnings from age 18 to age 30, with a mean level of earnings of about \$8,800 at age 30. This level was well below the level for SSI children who graduated. At age 30, the earnings gap was about \$8,700; SSI children who graduated from NTID earned about 99 percent more than those who were not accepted.

**Chart 4.**  
**Age/earnings profiles for SSI children who graduated from NTID compared with those who withdrew**



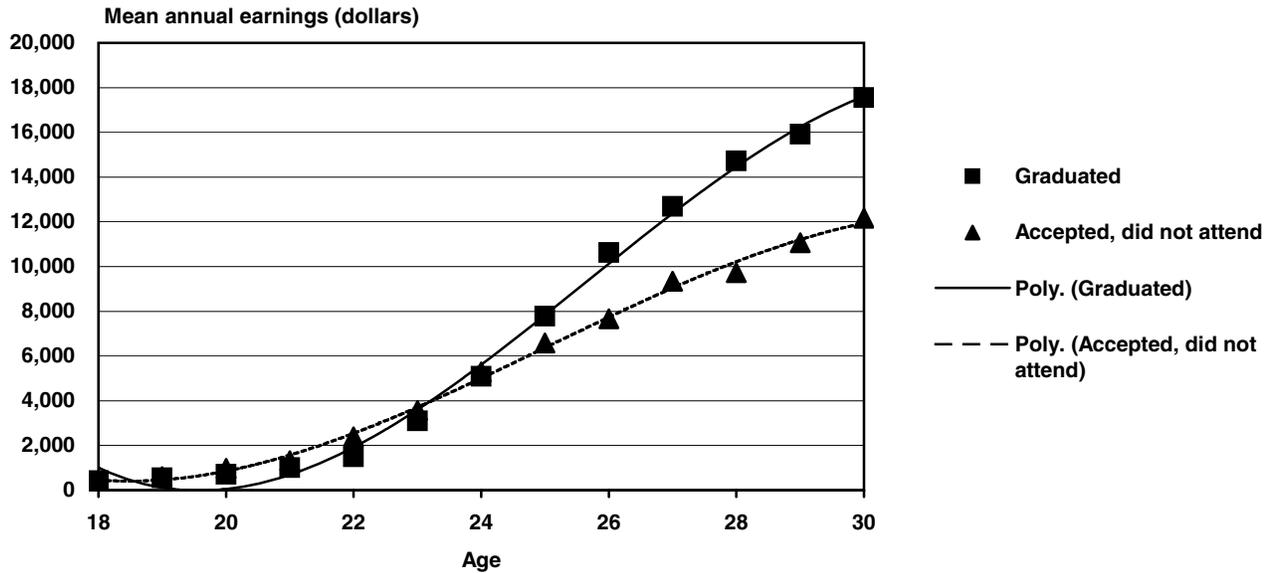
SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTES: Data include zero earners.

SSI = Supplemental Security Income; NTID = National Technical Institute for the Deaf; Poly. = polynomial trend line.

**Chart 5.**

**Age/earnings profiles for SSI children who graduated from NTID compared with those who were accepted but chose not to attend**



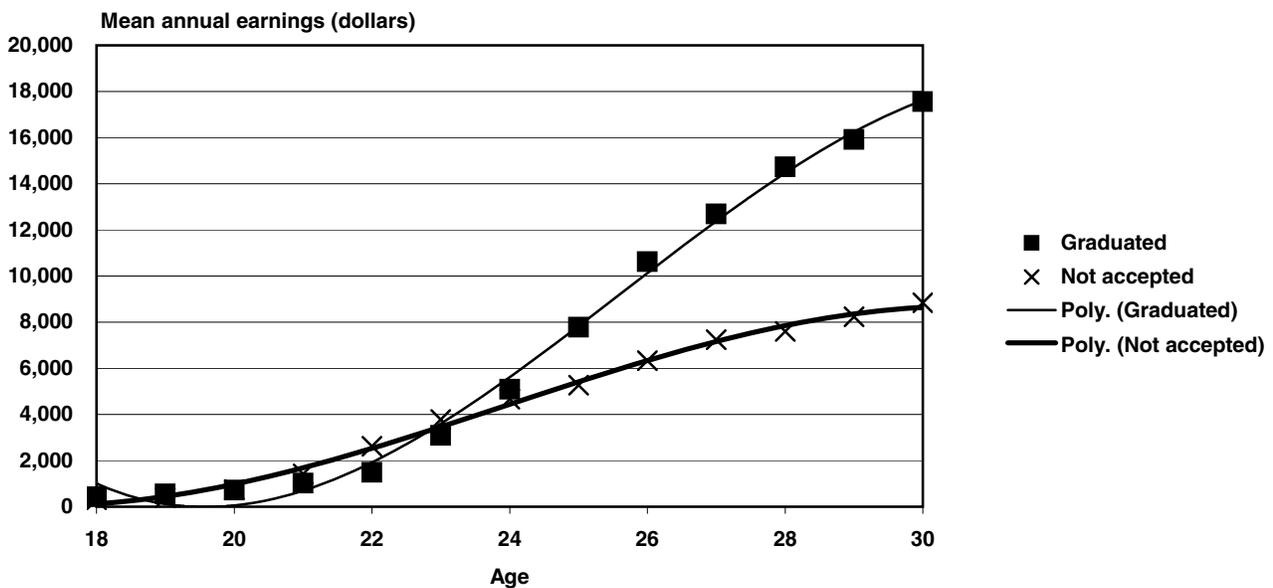
SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTES: Data include zero earners.

SSI = Supplemental Security Income; NTID = National Technical Institute for the Deaf; Poly. = polynomial trend line.

**Chart 6.**

**Age/earnings profiles for SSI children who graduated from NTID compared with those who were not accepted**

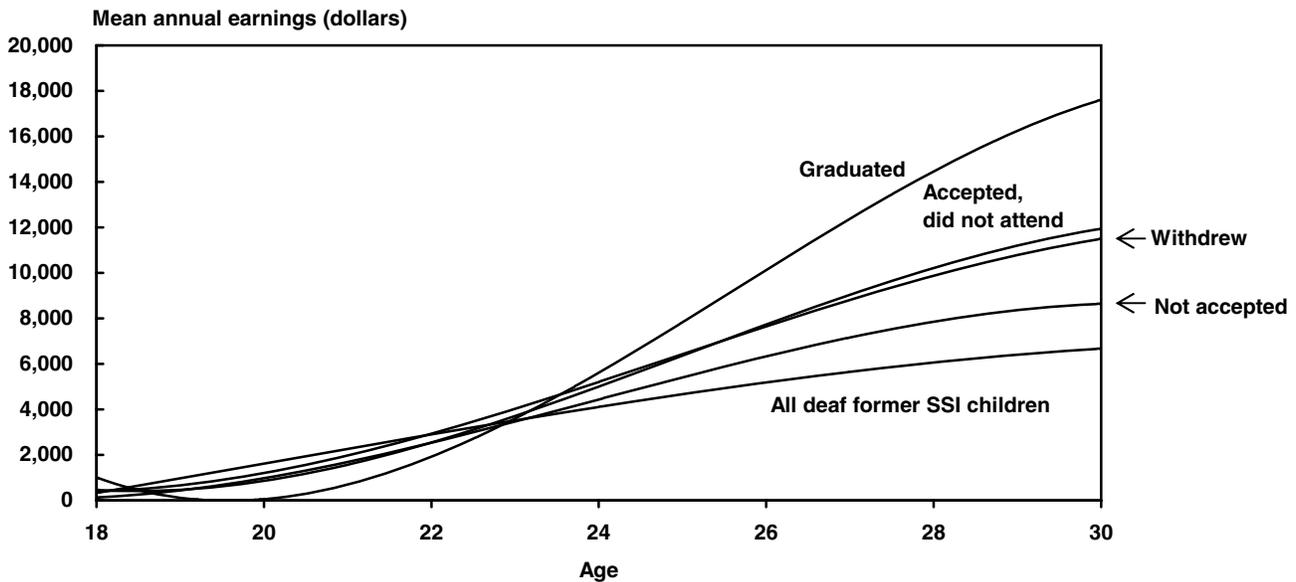


SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTES: Data include zero earners.

SSI = Supplemental Security Income; NTID = National Technical Institute for the Deaf; Poly. = polynomial trend line.

**Chart 7.**  
**Age/earnings profiles for SSI children using polynomial trend lines, by NTID status**



SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTES: Data include zero earners.

SSI = Supplemental Security Income; NTID = National Technical Institute for the Deaf.

In Chart 7, the age/earnings profiles of the four groups of NTID applicants are compared with the broader population of SSI children with a primary diagnosis of deafness. Mean earnings among the group of former SSI children were lower than for all other groups from ages 25–30, and by age 30 their annual earnings were about \$6,800, which was well below the earnings of each of the NTID applicant groups.

### ***Discussion of the Findings and Future Research***

Our analysis focused on the relative success of former SSI children who applied to NTID. We found that the percentage of NTID applicants who were SSI children increased over time, from a low of 10 percent in 1982 to more than 41 percent in 2000. However, the differences in the probability of graduation from NTID between deaf SSI children and deaf NTID applicants who were not SSI children did not change accordingly. The probability of graduation for SSI children who applied to NTID was 13.5 percentage points lower than for those who were not SSI children. Finally, using our most credible comparison group—SSI children who were accepted to NTID but chose not to attend—we found that SSI children who graduated

from NTID left the SSI program early in their adult life (19 months earlier), were less likely to reenter the SSI program, and at age 30 had increased their earnings by an estimated 49 percent. Our findings demonstrate that SSI children need not be relegated to a lifetime of SSI participation as adults, despite the poor overall experience of this population since the creation of the SSI program in 1974. Postsecondary education can increase their earnings and reduce their dependency on SSI as adults.

These key findings—the lower postsecondary graduation rates among deaf SSI children and the potential for successful adult outcomes for deaf SSI children who graduate—suggest that there is a need to carefully examine the current support services for SSI children and identify improvements or new support services that will increase postsecondary graduation rates for SSI children. The Social Security Administration's youth transition demonstration projects are beginning to address these issues, but to date they have not focused on specific support for postsecondary educational achievement.

Our analysis is a case study of deaf persons who apply to NTID, and there are limitations to generalizing our results to the broader population of SSI chil-

dren with disabilities. Children who qualify for the SSI program on the basis of other types of disabilities may face different barriers to postsecondary education and to successful labor market outcomes. NTID is unique in that it is tailored to the needs of the deaf population. SSI children with other types of disabilities generally must rely on postsecondary educational institutions that are not specifically designed to meet their special needs. These children may face different challenges—such as an environment with physical barriers, an inaccessible commuting environment, or social isolation—that may reduce the likelihood of application to and graduation from postsecondary institutions.

To assess the potential for programs that promote postsecondary education to reach SSI children with different impairments, we used 2001–2002 data from the Office of Special Education Programs (OSEP) on high school graduation rates for all children with disabilities, by impairment type.<sup>22</sup> According to OSEP data, 51 percent of children with disabilities graduated from high school. That percentage is similar to the estimate of 48 percent for SSI children reported by Loprest and Wittenburg (2005), which we used as an upper bound of SSI children who may benefit in the short run from such programs.<sup>23</sup> The OSEP data showed substantial differences in high school graduation rates by impairment type: graduation rates were above average for children with visual impairments (71 percent), hearing impairments (67 percent), specific learning disabilities (57 percent), and orthopedic impairments (56 percent); graduation rates were below average for children with mental retardation (39 percent) and children with severe emotional disturbances (32 percent). These data suggest that programs that promote postsecondary education may be more accessible to SSI children with certain types of impairments than with others.

One area for further research is to examine specific barriers in completing postsecondary education for SSI children with different types of impairments and to estimate the impact that such barriers may have on program participation and labor market outcomes.<sup>24</sup> Another area for future research is to extend our analysis by using data from the National Survey of Children and Families (NSCF) linked to Social Security administrative records for the broader population of SSI children who undertake postsecondary education. That study would be limited initially to a short postgraduation follow-up period and a smaller sample size, but over time the data may provide further evidence of the long-term effects of postsecondary education.

Our analysis has two other limitations that could be addressed in future research. First, our analysis does not examine entry and exits from the Social Security Disability Insurance (DI) program.<sup>25</sup> Our analysis of the age earnings/profiles, as well as preliminary analysis of cross-sectional data on DI participation among NTID applicants, suggests that postsecondary education may have the added effect of reducing dependency on the DI program. We are currently constructing an event history file of DI participation, and future research will examine how postsecondary education is related to participation in this program.

Finally, our analysis is based on nonexperimental data, so it is possible that those who graduated from NTID may have experienced better adult outcomes, in part, because of unobserved attributes such as higher levels of motivation or ability. At the same time, our findings show that positive outcomes are possible and suggest that a more rigorous evaluation, such as a randomized experiment, may be worthwhile. In the future, it would be useful to consider a project that includes a rigorous test of interventions promoting postsecondary education and examines the effect of such interventions on postsecondary education outcomes, SSI program participation, and long-term earnings.

### **Appendix A: Estimating the Probability of Graduation for SSI Children**

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The purpose of this section is to provide further details on the estimates and the statistical methodology used to estimate the probability of graduation. Table A-1 shows the time-series estimates used to create Chart 1. Table A-2 shows additional estimates used for the sequential logit model. Table A-3 shows additional logit model estimates of the probability of graduation. In the remainder of this section we provide further details on the statistical methodology used to estimate the probability of graduation.

A sequential logit model was used on the entire set of NTID applicants to estimate the relationship between participation in the SSI program as a child and graduation from NTID.<sup>26</sup> The sequential logit model disaggregates the graduation process into a sequence of three events. The first event is the NTID decision on the application—that is, whether or not an NTID applicant meets the admission criteria. The probability that this event will occur for an individual is not observed; instead we observe the discrete outcome of whether the applicant meets the criteria for admittance to NTID or not. The second event is the

**Table A-1.**  
**Time series data on the composition of NTID applicants and graduates**

| Year of first contact with NTID | Percentage of applicants who received SSI as a child | Percentage of NTID graduates who received SSI as a child |
|---------------------------------|--|--|
| 1982                            | 18.07  | 8.33   |
| 1983                            | 10.53  | 8.60   |
| 1984                            | 13.29  | 6.45   |
| 1985                            | 12.35  | 13.08  |
| 1986                            | 14.15  | 7.14   |
| 1987                            | 17.07  | 11.56  |
| 1988                            | 19.76  | 16.67  |
| 1989                            | 21.65  | 15.04  |
| 1990                            | 29.05  | 20.95  |
| 1991                            | 27.53  | 20.56  |
| 1992                            | 27.81  | 17.58  |
| 1993                            | 37.20  | 21.18  |
| 1994                            | 32.22  | 18.85  |
| 1995                            | 32.42  | 27.45  |
| 1996                            | 36.47  | 29.90  |
| 1997                            | 29.90  | 11.86  |
| 1998                            | 36.41  | 17.24  |
| 1999                            | 41.57  | 28.57  |
| 2000                            | 43.59  | 0  |

SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTE: NTID = National Technical Institute for the Deaf; SSI = Supplemental Security Income.

admitted applicant's decision to attend. The probability that an applicant will choose to attend NTID is not observed; instead we observe the discrete outcome of the decision to attend or not. For those who attend NTID, the final event is graduation. The probability of graduation is not observed; rather those who choose to attend either graduate from NTID or withdraw without earning a degree. An applicant's probability of graduation is the result of outcomes at each of these steps, as shown in Equation A-1.

**Equation A-1**

$$P(\text{Graduate} | \text{Applied} = 1, X) = P(\text{Admitted} = 1 | \text{Applied} = 1, X) \cdot P(\text{Attend} = 1 | \text{Applied} = 1, \text{Admitted} = 1, X) \cdot P(\text{Graduate} = 1 | \text{Applied} = 1, \text{Admitted} = 1, \text{Attended} = 1, X)$$

In Equation A-1, *X* represents a vector of individual characteristics that includes an indicator variable for whether the person received SSI as a child, an indicator variable for nonwhite race, an indicator variable for

female sex, and a set of indicator variables for year of birth. We estimate the conditional probability that each event will occur for the particular population of interest using logit models.<sup>27</sup>

To quantify how individual characteristics are associated with the likelihood of graduation at each point in the sequential process, we use the decomposition of the sequential logit proposed by Heckman and Smith (2004), shown in Equation A-2.

**Equation A-2**

$$\frac{\partial P(\text{Graduate} | \text{Applied} = 1, X)}{\partial X} = \frac{\partial P(\text{Admitted} = 1 | \text{Applied} = 1, X)}{\partial X} \cdot P(\text{Attend} = 1 | \text{Applied} = 1, \text{Admitted} = 1, X) \cdot P(\text{Graduate} = 1 | \text{Applied} = 1, \text{Admitted} = 1, \text{Attended} = 1, X) + P(\text{Admitted} = 1 | \text{Applied} = 1, X) \cdot \frac{\partial P(\text{Attend} = 1 | \text{Applied} = 1, \text{Admitted} = 1, X)}{\partial X} \cdot P(\text{Graduate} = 1 | \text{Applied} = 1, \text{Admitted} = 1, \text{Attended} = 1, X) + \frac{\partial P(\text{Attend} = 1 | \text{Applied} = 1, \text{Admitted} = 1, X)}{\partial X} \cdot P(\text{Graduate} = 1 | \text{Applied} = 1, \text{Admitted} = 1, \text{Attended} = 1, X)$$

This decomposition results from the application of the chain rule to Equation A-1. The first term on the right-hand side of Equation A-2 describes the relationship between the admittance step and the overall probability of graduation; the second term shows the relationship between the attendance step and the overall likelihood of graduation; and the third term shows the relationship between the graduation step and the overall likelihood of graduation.

The NTID/SSA matched data contain additional health and family background information for the two groups—those who graduate or withdraw—who choose to attend NTID. The additional information allows us to examine whether the inclusion of additional characteristics affects our estimate of the relationship between the receipt of SSI as a child and the conditional probability of graduation from NTID for those who choose to attend.

The estimates of the logit parameters do not provide a direct measure of the relationship between individual characteristics and the probability that each event in the graduation process will occur. We use the logit parameters to estimate how individual characteristics are related to the difference in the probability that each event within the sequential graduation process will

**Table A-2.**

**Additional sequential logit results of the relationship between SSI participation as a child and the graduation process**

| Variable         | Accepted                |                        |                         | Attended                |                        |                         | Graduated               |                        |                         |
|------------------|-------------------------|------------------------|-------------------------|-------------------------|------------------------|-------------------------|-------------------------|------------------------|-------------------------|
|                  | Coefficient             | Odds ratio             | Marginal effects        | Coefficient             | Odds ratio             | Marginal effects        | Coefficient             | Odds ratio             | Marginal effects        |
| Former SSI child | -0.4645 ***<br>[0.0980] | 0.6285 ***<br>[0.0616] | -0.0481 ***<br>[0.0109] | -0.0514<br>[0.0906]     | 0.9499<br>[0.0861]     | -0.0076<br>[0.0134]     | -0.6972 ***<br>[0.0831] | 0.4980 ***<br>[0.0414] | -0.1607 ***<br>[0.0181] |
| Female           | -0.2006 **<br>[0.0864]  | 0.8182 **<br>[0.0707]  | -0.0193 **<br>[0.0083]  | -0.4902 ***<br>[0.0744] | 0.6125 ***<br>[0.0455] | -0.0727 ***<br>[0.0111] | 0.3431 ***<br>[0.0659]  | 1.4092 ***<br>[0.0928] | 0.0811 ***<br>[0.0155]  |
| Nonwhite         | -1.0840 ***<br>[0.0904] | 0.3382 ***<br>[0.0306] | -0.1242 ***<br>[0.0119] | -0.6931 ***<br>[0.0848] | 0.5000 ***<br>[0.0424] | -0.1128 ***<br>[0.0150] | -0.0295<br>[0.0845]     | 0.9709<br>[0.0821]     | -0.0069<br>[0.0198]     |
| Birth year       |                         |                        |                         |                         |                        |                         |                         |                        |                         |
| 1966             | 0.2658<br>[0.1692]      | 1.3044<br>[0.2207]     | 0.0357 *<br>[0.0212]    | 0.0817<br>[0.1613]      | 1.0852<br>[0.1750]     | 0.0143<br>[0.0277]      | 0.1516<br>[0.1551]      | 1.1638<br>[0.1805]     | 0.0371<br>[0.0379]      |
| 1967             | 0.3797 **<br>[0.1728]   | 1.4618 **<br>[0.2526]  | 0.0494 **<br>[0.0202]   | 0.1140<br>[0.1605]      | 1.1208<br>[0.1798]     | 0.0199<br>[0.0273]      | 0.0859<br>[0.1541]      | 1.0897<br>[0.1680]     | 0.0211<br>[0.0378]      |
| 1968             | 0.5901 ***<br>[0.1802]  | 1.8042 ***<br>[0.3251] | 0.0728 ***<br>[0.0187]  | 0.1110<br>[0.1600]      | 1.1174<br>[0.1788]     | 0.0194<br>[0.0273]      | 0.0136<br>[0.1541]      | 1.0137<br>[0.1562]     | 0.0033<br>[0.0378]      |
| 1969             | 0.6125 ***<br>[0.1759]  | 1.8451 ***<br>[0.3246] | 0.0749 ***<br>[0.0180]  | 0.5264 ***<br>[0.1674]  | 1.6928 ***<br>[0.2834] | 0.0822 ***<br>[0.0228]  | -0.0369<br>[0.1466]     | 0.9638<br>[0.1413]     | -0.0090<br>[0.0359]     |
| 1970             | 0.6329 ***<br>[0.1837]  | 1.8831 ***<br>[0.3460] | 0.0774 ***<br>[0.0186]  | 0.1960<br>[0.1637]      | 1.2166<br>[0.1991]     | 0.0336<br>[0.0268]      | 0.0398<br>[0.1549]      | 1.0406<br>[0.1612]     | 0.0097<br>[0.0379]      |
| 1971             | 0.7691 ***<br>[0.1897]  | 2.1579 ***<br>[0.4094] | 0.0915 ***<br>[0.0178]  | 0.0930<br>[0.1628]      | 1.0974<br>[0.1786]     | 0.0164<br>[0.0281]      | -0.0197<br>[0.1582]     | 0.9805<br>[0.1551]     | -0.0048<br>[0.0386]     |
| 1972             | 0.7460 ***<br>[0.2115]  | 2.1085 ***<br>[0.4460] | 0.0869 ***<br>[0.0194]  | 0.3340 *<br>[0.1827]    | 1.3965 *<br>[0.2551]   | 0.0551 **<br>[0.0277]   | -0.1330<br>[0.1664]     | 0.8754<br>[0.1457]     | -0.0324<br>[0.0404]     |
| 1973             | 0.9294 ***<br>[0.2073]  | 2.5330 ***<br>[0.5251] | 0.1065 ***<br>[0.0176]  | 0.5124 ***<br>[0.1840]  | 1.6693 ***<br>[0.3071] | 0.0814 ***<br>[0.0255]  | -0.2702<br>[0.1652]     | 0.7632<br>[0.1261]     | -0.0649 *<br>[0.0391]   |
| 1974             | 0.9625 ***<br>[0.2125]  | 2.6182 ***<br>[0.5563] | 0.1088 ***<br>[0.0175]  | 0.0967<br>[0.1719]      | 1.1016<br>[0.1894]     | 0.0171<br>[0.0298]      | -0.3212 *<br>[0.1715]   | 0.7253 *<br>[0.1244]   | -0.0771 *<br>[0.0403]   |
| 1975             | 1.5466 ***<br>[0.2822]  | 4.6953 ***<br>[1.3251] | 0.1445 ***<br>[0.0144]  | 0.7759 ***<br>[0.2117]  | 2.1725 ***<br>[0.4599] | 0.1141 ***<br>[0.0246]  | -0.1904<br>[0.1736]     | 0.8266<br>[0.1435]     | -0.0461<br>[0.0416]     |
| 1976             | 1.9192 ***<br>[0.3176]  | 6.8156 ***<br>[2.1648] | 0.1632 ***<br>[0.0122]  | 1.2038 ***<br>[0.2381]  | 3.3328 ***<br>[0.7934] | 0.1573 ***<br>[0.0206]  | -0.1261<br>[0.1728]     | 0.8815<br>[0.1523]     | -0.0305<br>[0.0416]     |
| 1977             | 1.9381 ***<br>[0.3281]  | 6.9458 ***<br>[2.2788] | 0.1605 ***<br>[0.0120]  | 2.0937 ***<br>[0.3266]  | 8.1147 ***<br>[2.6505] | 0.2081 ***<br>[0.0135]  | -0.3876 **<br>[0.1684]  | 0.6787 **<br>[0.1143]  | -0.0926 **<br>[0.0391]  |
| 1978             | 1.7251 ***<br>[0.2972]  | 5.6129 ***<br>[1.6681] | 0.1539 ***<br>[0.0133]  | 1.4081 ***<br>[0.2522]  | 4.0881 ***<br>[1.0309] | 0.1726 ***<br>[0.0186]  | -0.5450 ***<br>[0.1746] | 0.5799 ***<br>[0.1012] | -0.1281 ***<br>[0.0390] |
| 1979             | 1.3335 ***<br>[0.2544]  | 3.7942 ***<br>[0.9653] | 0.1355 ***<br>[0.0159]  | 0.5186 ***<br>[0.1973]  | 1.6798 ***<br>[0.3314] | 0.0830 ***<br>[0.0274]  | -0.9355 ***<br>[0.1938] | 0.3924 ***<br>[0.0760] | -0.2095 ***<br>[0.0377] |
| Constant         | 1.9054 ***<br>[0.1141]  | ...                    | ...                     | 1.5078 ***<br>[0.1103]  | ...                    | ...                     | -0.1200<br>[0.1043]     | ...                    | ...                     |
| Observations     | 5,638                   | 5,638                  | 5,638                   | 4,993                   | 4,993                  | 4,993                   | 4,053                   | 4,053                  | 4,053                   |

SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTES: Standard errors in brackets.

SSI = Supplemental Security Income; ... = not applicable.

\* significant at .10 level; \*\* significant at .05 level; \*\*\* significant at .01 level.

**Table A-3.**  
**Additional logit model estimates of the probability of graduation**

| Variable                     | Model with only SSI child variable |                        |                                      | Model with variables available for all applicants |                        |                                      | Model with full set of variables for attendees |                        |                                      |
|------------------------------|------------------------------------|------------------------|--------------------------------------|---|------------------------|--------------------------------------|--|------------------------|--------------------------------------|
|                              | Coefficient                        | Odds ratio             | Marginal effects (percentage points) | Coefficient                                       | Odds ratio             | Marginal effects (percentage points) | Coefficient                                    | Odds ratio             | Marginal effects (percentage points) |
| Individual characteristics   |                                    |                        |                                      |   |                        |                                      |  |                        |                                      |
| Former SSI child             | 0.7590 ***<br>[0.0800]             | 2.1362 ***<br>[0.1709] | 17.7 ***<br>[1.74]                   | 0.7639 ***<br>[0.0814]                            | 2.1467 ***<br>[0.1748] | 17.7 ***<br>[1.76]                   | 0.5887 ***<br>[0.0873]                         | 1.8017 ***<br>[0.1574] | 13.5 ***<br>[1.92]                   |
| Female                       | ...                                | ...                    | ...                                  | -0.3224 ***<br>[0.0652]                           | 0.7244 ***<br>[0.0472] | -7.7 ***<br>[1.56]                   | -0.3653 ***<br>[0.0668]                        | 0.6940 ***<br>[0.0463] | -8.5 ***<br>[1.54]                   |
| Nonwhite                     | ...                                | ...                    | ...                                  | 0.0971<br>[0.0828]                                | 1.1019<br>[0.0913]     | 2.3<br>[1.96]                        | 0.0158<br>[0.0873]                             | 1.0159<br>[0.0887]     | 0.4<br>[2.01]                        |
| Age at onset of hearing loss |                                    |                        |                                      |   |                        |                                      |  |                        |                                      |
| Birth                        | ...                                | ...                    | ...                                  | ...   | ...                    | ...                                  | 0.0049<br>[0.1086]                             | 1.0049<br>[0.1091]     | 0.1<br>[2.52]                        |
| Ages 6 or older              | ...                                | ...                    | ...                                  | ...   | ...                    | ...                                  | 0.4722<br>[0.3797]                             | 1.6036<br>[0.6089]     | 10.7<br>[8.16]                       |
| Missing                      | ...                                | ...                    | ...                                  | ...   | ...                    | ...                                  | 0.2385<br>[0.1503]                             | 1.2693<br>[0.1908]     | 5.5<br>[3.4]                         |
| Severity of hearing loss     |                                    |                        |                                      |   |                        |                                      |  |                        |                                      |
| Mild                         | ...                                | ...                    | ...                                  | ...   | ...                    | ...                                  | 0.1989<br>[0.2492]                             | 1.2201<br>[0.3040]     | 4.5<br>[5.5]                         |
| Spline severe                | ...                                | ...                    | ...                                  | ...   | ...                    | ...                                  | -0.0034<br>[0.0077]                            | 0.9966<br>[0.0077]     | -0.1<br>[0.18]                       |
| Profound                     | ...                                | ...                    | ...                                  | ...   | ...                    | ...                                  | -0.2314<br>[0.1866]                            | 0.7934<br>[0.1480]     | -5.4<br>[4.28]                       |
| Profound spline              | ...                                | ...                    | ...                                  | ...   | ...                    | ...                                  | 0.0009<br>[0.0050]                             | 1.0009<br>[0.0050]     | 0.0<br>[0.12]                        |
| Missing                      | ...                                | ...                    | ...                                  | ...   | ...                    | ...                                  | -0.5797 *<br>[0.3399]                          | 0.5600 *<br>[0.1904]   | -13.4 *<br>[7.84]                    |
| Father's education           |                                    |                        |                                      |   |                        |                                      |  |                        |                                      |
| Primary                      | ...                                | ...                    | ...                                  | ...   | ...                    | ...                                  | 0.0707<br>[0.1470]                             | 1.0733<br>[0.1578]     | 1.6<br>[3.3]                         |
| Secondary                    | ...                                | ...                    | ...                                  | ...   | ...                    | ...                                  | -0.0831<br>[0.1038]                            | 0.9203<br>[0.0955]     | -1.9<br>[2.4]                        |
| College                      | ...                                | ...                    | ...                                  | ...   | ...                    | ...                                  | -0.2016 *<br>[0.1113]                          | 0.8174 *<br>[0.0910]   | -4.8 *<br>[2.65]                     |
| 4 years                      | ...                                | ...                    | ...                                  | ...   | ...                    | ...                                  | -0.2923 **<br>[0.1345]                         | 0.7466 **<br>[0.1004]  | -7.0 **<br>[3.21]                    |
| 5 years or more              | ...                                | ...                    | ...                                  | ...   | ...                    | ...                                  | 0.3107<br>[0.1977]                             | 1.3643<br>[0.2698]     | 6.9<br>[4.29]                        |
| Missing                      | ...                                | ...                    | ...                                  | ...   | ...                    | ...                                  | 0.3107<br>[0.1977]                             | 1.3643<br>[0.2698]     | 6.9<br>[4.29]                        |

(Continued)

**Table A-3.  
Continued**

| Variable                                  | Model with only SSI child variable |            |                                      | Model with variables available for all applicants |            |                                      | Model with full set of variables for attendees |                        |                                      |
|---|------------------------------------|------------|--------------------------------------|---|------------|--------------------------------------|--|------------------------|--------------------------------------|
|   | Coefficient                        | Odds ratio | Marginal effects (percentage points) | Coefficient                                       | Odds ratio | Marginal effects (percentage points) | Coefficient                                    | Odds ratio             | Marginal effects (percentage points) |
| Mother's education                        |                                    |            |                                      |   |            |                                      |  |                        |                                      |
| Primary                                   | ...                                | ...        | ...                                  | ...   | ...        | ...                                  | -0.0741<br>[0.1467]                            | 0.9286<br>[0.1362]     | -1.7<br>[3.35]                       |
| Secondary                                 | ...                                | ...        | ...                                  | ...   | ...        | ...                                  | 0.0117<br>[0.0930]                             | 1.0117<br>[0.0941]     | 0.3<br>[2.14]                        |
| College                                   |                                    |            |                                      |   |            |                                      |  |                        |                                      |
| 4 years                                   | ...                                | ...        | ...                                  | ...   | ...        | ...                                  | -0.2000 *<br>[0.1072]                          | 0.8187 *<br>[0.0878]   | -4.7 *<br>[2.53]                     |
| 5 years or more                           | ...                                | ...        | ...                                  | ...   | ...        | ...                                  | -0.3513 **<br>[0.1591]                         | 0.7038 **<br>[0.1119]  | -8.3 **<br>[3.75]                    |
| Missing                                   | ...                                | ...        | ...                                  | ...   | ...        | ...                                  | -0.6418 ***<br>[0.2372]                        | 0.5263 ***<br>[0.1249] | -14.8 ***<br>[5.42]                  |
| Deaf parents                              |                                    |            |                                      |   |            |                                      |  |                        |                                      |
| One                                       | ...                                | ...        | ...                                  | ...   | ...        | ...                                  | 0.1507<br>[0.2871]                             | 1.1626<br>[0.3337]     | 3.5<br>[6.59]                        |
| Two                                       | ...                                | ...        | ...                                  | ...   | ...        | ...                                  | 0.3507 **<br>[0.1409]                          | 1.4201 **<br>[0.2002]  | 8.0 **<br>[3.12]                     |
| Missing                                   | ...                                | ...        | ...                                  | ...   | ...        | ...                                  | 1.9819 ***<br>[0.5822]                         | 7.2564 ***<br>[4.2250] | 34.0 ***<br>[5.49]                   |
| Inclusion of birth cohort dummy variables |                                    | No         |                                      | No  |            |                                      |  | Yes                    |                                      |
| Constant                                  | 0.1041 ***<br>[0.0359]             | ...        | ...                                  | 0.2206 ***<br>[0.0468]                            | ...        | ...                                  | 0.4382 *<br>[0.2350]                           | ...                    | ...                                  |
| Observations                              | 4,053                              | 4,053      | 4,053                                | 4,053   | 4,053      | 4,053                                | 4,053  | 4,053                  | 4,053                                |

SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTES: Standard errors in brackets.

SSI = Supplemental Security Income; ... = not applicable.

\* significant at .10 level; \*\* significant at .05 level; \*\*\* significant at .01 level.

occur, based on the mean of individual-level changes in the probability.<sup>28</sup> For the sequential logit model, we also present the results of the decomposition that shows how individual-level characteristics contribute to the likelihood of graduation at each step in the process. The estimated logit parameters and odds ratios are reported in Tables A-2 and A-3.

## **Appendix B: Technical Description of Survival Analysis**

The purpose of this section is to provide additional details on the estimates and methodology for the analysis of time spent in the SSI program, along with additional details on the estimates of age/earnings profiles. Table B-1 shows the estimates of the time to first exit from the SSI program that are used for Chart 2. Table B-2 shows the estimates of the time to reentry into the SSI program that are used for Chart 3. Table B-3 shows the data used to construct the age/earnings profiles that are used for Charts 4 through 7. In the remainder of this section we provide further details on survival analysis, which is the technique used to construct the estimates of the time spent in the SSI program.

The probability that an exit from the SSI program will occur within 1-year intervals beginning at age 19 may be described using a hazard function or a survival function. Both measures use the probability of failure,  $f_t$ , in time interval  $t$ . The probability of failure is defined as the percentage of persons in the SSI program at the beginning of the time interval who are observed leaving the SSI program within the 12-month interval. The probability of failure is shown in Equation B-1.

### **Equation B-1**

$$f_t = \frac{d_t}{(N_t - \frac{m_t}{2})}$$

In Equation B-1,  $d_t$  is the number of people who leave the program in year  $t$ ,  $N_t$  is the total number of persons observed at the beginning of the year, and  $m_t$

is the number of censored observations within year  $t$ . Censored cases are those for which we do not have data on participation in the program within the time interval and so do not know whether the participants left the program.

The hazard at time  $t$ ,  $\lambda_t$ , is the probability that a person will exit the SSI program within a 1-year interval, given that the person has not left the program at the beginning of the interval (shown in Equation B-2).

### **Equation B-2**

$$\lambda_j = \frac{f_j}{(1 - \frac{f_j}{2}) \cdot (t_{j+1} - t_j)}$$

Where  $t_{j+1} - t_j$  is the length of the interval in months—which is 12 in our case. The denominator is the standard adjustment for censored cases in the interval.<sup>29</sup>

The probability that a person remains on the SSI program until period  $j$ , referred to as survival ( $S_j$ ), is the probability that a person has not left the SSI program within a particular interval (shown in Equation B-3).

### **Equation B-3**

$$S_j = \prod_{k=1}^j (1 - f_k)$$

Equation B-3 is simply the probability that failure will not occur in each time interval from 1 to  $j$ .

Equations B-1 through B-3 are modified to describe the hazard and the survival estimates for reentry into the SSI program within 1-year intervals, beginning at the point when applicants leave the SSI program. In this case, the hazard rate in Equation B-1 represents the probability that an applicant will reenter the program within a 1-year interval, given that he or she has not reentered the program before the interval. The survival rate in Equation B-3 represents the probability that an applicant has not reentered the SSI program within a particular interval.

**Table B-1.  
Lifetable estimates of time to first exit from SSI for adults who received SSI as a child, by NTID status**

| Years following age 19                                   | Graduated       |                            |                    | Withdrawn       |                            |                    | Accepted, did not attend |                            |                    | Not accepted    |                            |                    | All former SSI children with a primary diagnosis of deafness |                            |                    |
|--|-----------------|----------------------------|--------------------|-----------------|----------------------------|--------------------|--------------------------|----------------------------|--------------------|-----------------|----------------------------|--------------------|--|----------------------------|--------------------|
|  | Number eligible | Hazard (multiplied by 100) | Survival (percent) | Number eligible | Hazard (multiplied by 100) | Survival (percent) | Number eligible          | Hazard (multiplied by 100) | Survival (percent) | Number eligible | Hazard (multiplied by 100) | Survival (percent) | Number eligible  | Hazard (multiplied by 100) | Survival (percent) |
| 1  | 231             | 0.11                       | 98.70              | 555             | 0.23                       | 97.30              | 193                      | 0.17                       | 97.93              | 179             | 0.09                       | 98.88              | 9,388  | 0.31                       | 96.34              |
| 2  | 228             | 0.18                       | 96.54              | 540             | 0.23                       | 94.59              | 189                      | 0.13                       | 96.37              | 177             | 0.09                       | 97.77              | 9,037  | 0.29                       | 93.07              |
| 3  | 223             | 0.15                       | 94.81              | 525             | 0.34                       | 90.81              | 186                      | 0.18                       | 94.30              | 175             | 0.29                       | 94.41              | 8,723  | 0.32                       | 89.53              |
| 4  | 219             | 0.23                       | 92.21              | 501             | 0.37                       | 86.85              | 182                      | 0.14                       | 92.75              | 169             | 0.40                       | 89.94              | 8,378  | 0.41                       | 85.18              |
| 5  | 213             | 0.86                       | 83.12              | 482             | 0.65                       | 80.36              | 179                      | 0.78                       | 84.46              | 161             | 0.53                       | 84.36              | 7,958  | 0.45                       | 80.75              |
| 6  | 192             | 0.96                       | 74.03              | 446             | 0.68                       | 74.05              | 163                      | 0.92                       | 75.65              | 151             | 0.51                       | 79.33              | 7,533  | 0.50                       | 76.01              |
| 7  | 171             | 1.33                       | 63.08              | 411             | 0.94                       | 66.17              | 146                      | 1.19                       | 65.53              | 142             | 0.68                       | 73.10              | 6,967  | 0.57                       | 71.02              |
| 8  | 142             | 1.94                       | 49.92              | 336             | 0.82                       | 59.98              | 119                      | 0.90                       | 58.81              | 127             | 0.91                       | 65.49              | 5,645  | 0.64                       | 65.75              |
| 9  | 107             | 1.59                       | 41.23              | 275             | 1.05                       | 52.89              | 103                      | 0.95                       | 52.43              | 110             | 1.15                       | 57.04              | 4,461  | 0.62                       | 61.07              |
| 10   | 82              | 1.29                       | 35.31              | 219             | 0.85                       | 47.77              | 89                       | 1.33                       | 44.69              | 93              | 1.37                       | 48.36              | 3,451  | 0.56                       | 57.09              |
| Cumulative probability of exit within 10 years (percent) |                 | 64.7<br>[3.29]             |                    |                 | 52.2<br>2.28               |                    |                          | 55.3<br>3.71               |                    |                 | 51.6<br>3.84               |                    |  | 42.9<br>0.57               |                    |
| Median months to SSI exit <sup>a</sup>                   |                 | 95<br>[1.44]               |                    |                 | 116<br>[3.34]              |                    |                          | 114<br>[2.58]              |                    |                 | 118<br>[2.61]              |                    |  | 145<br>[2.38]              |                    |

SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTES: Standard errors are in brackets.

SSI = Supplemental Security Income; NTID = National Technical Institute for the Deaf.

a. Rounded to the nearest month.

**Table B-2.  
Lifetable estimates of time to SSI reentry for adults who received SSI as a child, by NTID status**

| Years following first exit                             | Graduated       |                            |                    | Withdrawn       |                            |                    | Accepted, did not attend |                            |                    | Not accepted    |                            |                    | All former SSI children with a primary diagnosis of deafness |                            |                    |
|--|-----------------|----------------------------|--------------------|-----------------|----------------------------|--------------------|--------------------------|----------------------------|--------------------|-----------------|----------------------------|--------------------|--|----------------------------|--------------------|
|  | Number eligible | Hazard (multiplied by 100) | Survival (percent) | Number eligible | Hazard (multiplied by 100) | Survival (percent) | Number eligible          | Hazard (multiplied by 100) | Survival (percent) | Number eligible | Hazard (multiplied by 100) | Survival (percent) | Number eligible  | Hazard (multiplied by 100) | Survival (percent) |
| 1  | 157             | 0.29                       | 96.63              | 295             | 0.62                       | 92.82              | 115                      | 0.46                       | 94.59              | 104             | 0.62                       | 92.82              | 3,315  | 0.69                       | 92.07              |
| 2  | 135             | 0.20                       | 94.39              | 242             | 0.34                       | 89.15              | 101                      | 0.18                       | 92.62              | 84              | 0.53                       | 87.09              | 2,619  | 0.52                       | 86.53              |
| 3  | 120             | 0.29                       | 91.12              | 205             | 0.36                       | 85.39              | 89                       | 0.30                       | 89.35              | 73              | 0.36                       | 83.36              | 2,122  | 0.33                       | 83.17              |
| 4  | 107             | 0.25                       | 88.41              | 166             | 0.39                       | 81.52              | 78                       | 0.70                       | 82.11              | 64              | 0.43                       | 79.12              | 1,764  | 0.40                       | 79.28              |
| 5  | 92              | 0                          | 88.41              | 136             | 0.34                       | 78.26              | 64                       | 0                          | 82.11              | 51              | 0.35                       | 75.86              | 1,371  | 0.26                       | 76.84              |
| 6  | 79              | 0                          | 88.41              | 109             | 0.17                       | 76.68              | 51                       | 0.35                       | 78.72              | 44              | 0.22                       | 73.91              | 994  | 0.22                       | 74.88              |
| 7  | 71              | 0.27                       | 85.58              | 87              | 0.21                       | 74.74              | 44                       | 0.42                       | 74.84              | 33              | 0                          | 73.91              | 710  | 0.22                       | 72.96              |
| 8  | 52              | 0                          | 85.58              | 69              | 0                          | 74.74              | 35                       | 0.56                       | 70.01              | 23              | 0                          | 73.91              | 520  | 0.17                       | 71.51              |
| 9  | 45              | 0                          | 85.58              | 54              | 0                          | 74.74              | 25                       | 0.38                       | 66.90              | 17              | 0                          | 73.91              | 376  | 0.10                       | 70.64              |
| 10   | 36              | 0                          | 85.58              | 44              | 0.22                       | 72.82              | 19                       | 0                          | 66.90              | 15              | 0                          | 73.91              | 280  | 0.34                       | 67.80              |
| Cumulative probability of reentry within— <sup>a</sup> |                 |                            |                    |                 |                            |                    |                          |                            |                    |                 |                            |                    |  |                            |                    |
| 5 years  | 11.60           |                            |                    | 21.70           |                            |                    | 17.90                    |                            |                    | 24.10           |                            |                    | 23.16  |                            |                    |
|  | [2.84]          |                            |                    | [2.86]          |                            |                    | [3.99]                   |                            |                    | [4.82]          |                            |                    | [0.88]   |                            |                    |
| 10 years   | 14.40           |                            |                    | 27.20           |                            |                    | 33.10                    |                            |                    | 26.10           |                            |                    | 32.2   |                            |                    |
|  | [3.38]          |                            |                    | [3.67]          |                            |                    | [6.28]                   |                            |                    | [5.08]          |                            |                    | [1.44]   |                            |                    |

SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTES: Standard errors are in brackets.

SSI = Supplemental Security Income; NTID = National Technical Institute for the Deaf.

a. Median months to reentry not estimated.

**Table B-3.**

**Data used in age/earnings profiles for NTID applicants who received SSI as a child, by age and NTID status**

| Age | Graduated                 |                |                         | Withdrawn                 |                |                         | Accepted, did not attend  |                |                         | Not accepted              |                |                         | Graduated but not a former SSI child |                |                         | All former SSI children with a primary diagnosis of deafness |                |                         |
|-----|---------------------------|----------------|-------------------------|---------------------------|----------------|-------------------------|---------------------------|----------------|-------------------------|---------------------------|----------------|-------------------------|--------------------------------------|----------------|-------------------------|--|----------------|-------------------------|
|     | Percent-age with earnings | Mean (dollars) |                         | Percent-age with earnings | Mean (dollars) |                         | Percent-age with earnings | Mean (dollars) |                         | Percent-age with earnings | Mean (dollars) |                         | Percent-age with earnings            | Mean (dollars) |                         | Percent-age with earnings                                    | Mean (dollars) |                         |
|     |                           | Earners        | Earners and non-earners |                                      | Earners        | Earners and non-earners |  | Earners        | Earners and non-earners |
| 18  | 46.4                      | 934            | 434                     | 53.0                      | 963            | 510                     | 48.4                      | 845            | 409                     | 753                       | 307            | 57.4                    | 1,076                                | 618            | 42.5                    | 1,113  | 473            |                         |
| 19  | 45.0                      | 1,219          | 548                     | 47.6                      | 1,357          | 646                     | 49.3                      | 1,244          | 614                     | 831                       | 387            | 55.2                    | 1,254                                | 692            | 47.3                    | 1,804  | 854            |                         |
| 20  | 50.0                      | 1,425          | 712                     | 51.0                      | 2,042          | 1,041                   | 51.6                      | 1,894          | 977                     | 1,462                     | 738            | 57.8                    | 1,576                                | 910            | 50.8                    | 2,889  | 1,468          |                         |
| 21  | 55.8                      | 1,820          | 1,015                   | 57.5                      | 3,334          | 1,917                   | 54.3                      | 2,429          | 1,318                   | 2,370                     | 1,427          | 62.3                    | 1,932                                | 1,203          | 54.1                    | 4,165  | 2,255          |                         |
| 22  | 57.2                      | 2,603          | 1,489                   | 64.8                      | 4,372          | 2,833                   | 62.3                      | 3,823          | 2,383                   | 4,039                     | 2,627          | 64.0                    | 2,774                                | 1,775          | 55.8                    | 5,277  | 2,946          |                         |
| 23  | 69.4                      | 4,460          | 3,096                   | 66.2                      | 6,188          | 4,094                   | 65.0                      | 5,481          | 3,564                   | 5,117                     | 3,776          | 69.3                    | 4,820                                | 3,341          | 55.1                    | 6,461  | 3,562          |                         |
| 24  | 68.7                      | 7,410          | 5,091                   | 70.4                      | 7,698          | 5,420                   | 66.8                      | 7,925          | 5,295                   | 6,352                     | 4,656          | 74.0                    | 7,724                                | 5,716          | 54.9                    | 7,627  | 4,191          |                         |
| 25  | 76.7                      | 10,140         | 7,774                   | 70.7                      | 9,404          | 6,646                   | 72.2                      | 9,115          | 6,586                   | 7,362                     | 5,269          | 79.9                    | 10,593                               | 8,460          | 54.9                    | 8,650  | 4,745          |                         |
| 26  | 84.6                      | 12,560         | 10,624                  | 72.3                      | 10,544         | 7,618                   | 74.9                      | 10,237         | 7,665                   | 8,697                     | 6,337          | 83.8                    | 13,131                               | 11,003         | 55.2                    | 9,439  | 5,209          |                         |
| 27  | 86.6                      | 14,655         | 12,689                  | 73.1                      | 11,788         | 8,615                   | 74.9                      | 12,490         | 9,351                   | 9,963                     | 7,241          | 86.5                    | 15,619                               | 13,507         | 55.0                    | 10,203   | 5,614          |                         |
| 28  | 86.6                      | 17,003         | 14,725                  | 73.8                      | 13,177         | 9,727                   | 78.9                      | 12,328         | 9,729                   | 11,054                    | 7,596          | 88.6                    | 17,570                               | 15,572         | 55.2                    | 10,797   | 5,956          |                         |
| 29  | 85.2                      | 18,681         | 15,914                  | 75.1                      | 14,371         | 10,788                  | 79.1                      | 13,992         | 11,063                  | 11,895                    | 8,230          | 89.8                    | 20,073                               | 18,019         | 54.8                    | 11,445   | 6,268          |                         |
| 30  | 84.5                      | 20,776         | 17,560                  | 76.2                      | 15,232         | 11,610                  | 81.1                      | 14,996         | 12,159                  | 12,071                    | 8,842          | 90.4                    | 21,748                               | 19,668         | 55.7                    | 12,246   | 6,822          |                         |
| 31  | 81.8                      | 20,689         | 16,915                  | 73.2                      | 16,538         | 12,107                  | 79.4                      | 17,636         | 14,001                  | 12,351                    | 9,218          | 90.1                    | 23,408                               | 21,090         | 56.2                    | 12,525   | 7,037          |                         |
| 32  | 84.8                      | 22,626         | 19,187                  | 75.7                      | 16,882         | 12,787                  | 78.1                      | 18,011         | 14,061                  | 14,480                    | 9,577          | 88.7                    | 25,418                               | 22,556         | 55.2                    | 13,168   | 7,268          |                         |
| 33  | 80.8                      | 25,358         | 20,491                  | 75.5                      | 17,071         | 12,892                  | 82.0                      | 19,529         | 16,014                  | 14,707                    | 10,350         | 87.6                    | 26,818                               | 23,505         | 53.5                    | 14,065   | 7,530          |                         |
| 34  | 80.5                      | 28,815         | 23,202                  | 66.4                      | 18,498         | 12,290                  | 77.1                      | 21,175         | 16,335                  | 16,038                    | 10,398         | 86.2                    | 27,971                               | 24,112         | 53.1                    | 14,949   | 7,943          |                         |
| 35  | 84.7                      | 31,000         | 26,271                  | 66.7                      | 19,552         | 13,035                  | 86.0                      | 20,629         | 17,741                  | 16,878                    | 9,984          | 85.4                    | 28,187                               | 24,078         | 51.9                    | 15,586   | 8,086          |                         |

SOURCES: Social Security Administration (SSA) calculations using the data file of administrative records from the National Technical Institute for the Deaf linked to data from SSA's Supplemental Security Record, Master Earnings File, and Numident file.

NOTE: NTID = National Technical Institute for the Deaf; SSI = Supplemental Security Income.

## Notes

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<sup>1</sup> See Daly and Burkhauser (2003) for an overview of the SSI program.

<sup>2</sup> The term “managing against the risk of disability” in the context of the children and youth remaining in the SSI disability program has been used by the former Deputy Commissioner for Disability and Income Support Programs at SSA (Gerry 2002).

<sup>3</sup> Wittenburg and Maag (2002) identify the lack of data as a limitation to research on the relationship between children’s participation in the SSI program and adult outcomes. The National Council on Disability (2003) also identifies limitations in the data available to examine postsecondary education for youth with disabilities.

<sup>4</sup> Rupp and Scott (1995) do not disaggregate the length of stay in the program by the time spent on SSI as a child and the time spent in the program as an adult. Rather, for children, they estimate the total time spent in the program. Thus, one cannot use their estimates to identify the portion of time spent in the program as a child and the portion of time spent in the program as an adult.

<sup>5</sup> See Davies and Rupp (2006) for further information on the NSCF data.

<sup>6</sup> Of the remaining SSI children, 38.5 percent had dropped out of secondary school and 12.9 percent were still enrolled.

<sup>7</sup> Estimates of enrollment rates vary across sources and subgroups. The 35 percent estimate is based on all persons aged 18–24. The rate is estimated from the Current Population Survey (CPS), as reported in Hurst and Hudson (2005). Estimates from other surveys range from 32 percent to almost 40 percent.

<sup>8</sup> The data merge is possible under the authority of the Privacy Act of 1974 as amended by U.S.C. Section 552a (b) (5), which states, “disclosures may be made with advance adequate written assurance that the record will be used solely as a statistical and reporting record, and transferred in a form that is not individually identifiable.”

<sup>9</sup> The NTID/SSA merged data file contains information on a total of 13,863 persons who applied to NTID. Of these, 1,597 were not accepted to NTID, 2,068 were accepted but chose not to attend, 5,128 withdrew before completing a degree, and 5,070 graduated from NTID.

<sup>10</sup> Although FICA earnings cover most workers, some persons may work in jobs not covered by FICA. Thus, our estimates must be interpreted as employment and earnings within the covered sector.

<sup>11</sup> There were 66 deaths among the 5,704 sample members in our case study. The sample size is too small to treat these cases as separate outcomes in our analysis. We estimated the models with

and without these cases. Although there was a slight difference in magnitude, it did not have a large impact on the results.

<sup>12</sup> In particular, Public Law 96–265 (enacted in 1980) changed the rules regarding parental deeming. Children aged 18 or older were no longer subject to parental deeming for the purposes of program eligibility.

<sup>13</sup> Note that Table 2 does not cover the SSA administrative sample of all former SSI children who had a primary diagnosis of deafness and who were born from 1964 through 1980. The reason is that NTID does not have data on those who do not apply for admission.

<sup>14</sup> The technical details of the sequential logit model are given in Appendix A. It is important to emphasize that this is a reduced form model that describes the NTID graduation process, and not a formal structural model. Nonetheless, the descriptive results can be very informative to policymakers, as shown in Heckman and Smith (2004) and Ruiz-Quintanilla and others (2006).

<sup>15</sup> To illustrate this point, the descriptive statistics show that former SSI children are less likely to graduate. They also show that nonwhites are less likely to graduate. Because SSI children tend to be nonwhite, it is possible that SSI children are less likely to graduate because they tend to be nonwhite, not because they participated in the program as children. Researchers have found lower college graduation rates among minority students and have attributed the findings to the low percentages of minority students on college campuses, which may lead to social isolation, lower social attachment, and, therefore, lower graduation rates (Scott and others 2006). At the same time, it is possible that nonwhites are less likely to graduate because they tend to participate in the SSI program as children. Research by Rupp and others (2006) show that 52.8 percent of all SSI children are nonwhite. The descriptive statistics cannot differentiate between these two alternative explanations. The multivariate models described below provide a measure of the influence of participation in the SSI program as a child, holding race and other characteristics constant.

<sup>16</sup> See Appendix A for details.

<sup>17</sup> We used age 19 because many SSI children have a short period of time around their 18th birthday when they are out of the program. As of their 19th birthday, 1,158 of the 1,366 SSI children were in the program. We also estimated the models for those who we observed collecting SSI adult benefits, beginning in the month they turned 18. The sample sizes were smaller for this analysis, but the results were similar to those described in this article. They are available on request from the corresponding author, Robert.Weathers@ssa.gov.

<sup>18</sup> We tested for the difference in slopes by estimating a regression that allowed for a separate intercept for each series but restricted the slopes to be equal (restricted model) and estimated a regression that allowed separate intercepts and slopes for each trend line (unrestricted model). We computed an  $F$  statistic as follows:

$$F(J, n - K) = \frac{(R_u^2 - R_r^2) / J}{(1 - R_u^2) / (n - K)}$$

Where  $J$  is the number of restrictions, which is equal to 1 in our case,  $n$  is the number of observations (which is equal to 36) and  $K$  is the number of independent variables in the unrestricted model (which is equal to four separate constants and slopes). The

$R$ -squared for the restricted model is 0.776487 and the  $R$ -squared for the unrestricted model is 0.810819. Thus,  $F(1,32) = 5.807 > 4.17$ , which is the 95th percentile of the corresponding  $F$ , and we can reject the hypothesis that the two slopes are the same.

<sup>19</sup> The decomposition is based on estimates from Table 3. For example, the first term in decomposition shows the contribution of the admitted step to the overall probability of graduation. The first term in Equation A-2 in Appendix A shows that this can be estimated by multiplying the change in the probability of being admitted for SSI children by the conditional probability of attending and by the conditional probability of graduating given attendance. Using the values shown in Table 3, the first term of the decomposition is  $.0482 * 0.812 * .427 = -.017$ . We use the term “unconditional probability” to differentiate the probability of graduation among all applicants from the probability of graduation conditional on an applicant being admitted to and choosing to attend NTID.

<sup>20</sup> We are unable to produce credible estimates of the median time to reentry because most of our sample does not reenter the SSI program.

<sup>21</sup> In the comparisons that follow, we focused on former SSI children who graduated from NTID and compared them with SSI children who were in each of the three groups that did not graduate from NTID. As we showed earlier, SSI children are less likely to graduate from NTID compared with those who had not been on SSI as children. SSI children also had age/earnings profiles that were slightly lower than NTID graduates who were not SSI children. The results are available on request from the corresponding author, Robert.Weathers@ssa.gov.

<sup>22</sup> See Table 1-22 from Office of Special Education and Rehabilitative Services, Office of Special Education Programs (2005).

<sup>23</sup> Loprest and Wittenburg (2005) do not disaggregate graduation rates by impairment type, which is why we use the OSEP data on graduation rates for all SSI children, by impairment type.

<sup>24</sup> See Cornell University <http://www.ilr.cornell.edu/edi/p-ccfid.cfm> for a study that assesses the state of Web accessibility in the community college network for students with disabilities. The study focuses on examining problems that prospective students with disabilities may have with the online admissions application process, applying for financial aid via the Web, as well as finding important programmatic information on college Websites.

<sup>25</sup> The DI program covered under Social Security is a social insurance program funded through payroll tax contributions to the Social Security trust funds, whereas the SSI program is a means-tested cash assistance program funded from general revenues. There are several important differences in these two programs that make separate analysis more practical than attempting to model the two together. We plan to conduct future research on the relationship between postsecondary education and dependency on the DI program.

<sup>26</sup> See Madalla (1983) for more information on the sequential logit and Ruiz-Quintanilla and others (2006) for a recent application of the sequential logit to participation in SSA demonstration projects.

<sup>27</sup> The logit for the first step was estimated by using the sample of all applicants to NTID. The logit for the second step used the subset of applicants who were admitted to NTID. The logit for the third step used the subset of applicants who were admitted and chose to attend NTID.

<sup>28</sup> We used the Stata program written by Bartus (2004) to estimate the changes in the probability related to a change in each characteristic in our sequential logit model.

<sup>29</sup> See Allison (1995, 46) for more details on the adjustment for censored observations.

## References

- Allison, Paul D. 1995. *Survival analysis using the SAS system: A practical guide*. Cary, North Carolina: SAS Institute.
- Bartus, Tamus. 2005. Estimation of marginal effects using Margeff. *Stata Journal* 5(3): 309–329.
- Burkhauser, Richard V., and Mary C. Daly. 2002. Policy watch: U.S. disability policy in a changing environment. *Journal of Economic Perspectives* 16(1): 213–224.
- Daly, Mary C., and Richard V. Burkhauser. 2003. The Supplemental Security Income program. In *Means tested transfer programs in the United States*, ed. Robert Moffitt, 79–140. Chicago: University of Chicago Press for the NBER.
- Davies, Paul S., and Kalman Rupp. 2006. An overview of the National Survey of SSI Children and Families and related products. *Social Security Bulletin* 66(2): 7–20.
- Dowrick, Peter W., John Anderson, Katharina Heyer, and Joie Acosta. 2005. Postsecondary education across the U.S.A.: Experiences of adults with disabilities. *Journal of Vocational Rehabilitation* 22(1): 41–47.
- Gerry, Martin. 2002. Transcript from a public presentation at the 2002 National Workforce Inclusion Conference, March 13. (Accessed January 24, 2005.)
- Heckman, James, and Jeffrey Smith. 2004. The determinants of participation in a social program: Evidence from the Job Training Partnership Act. *Journal of Labor Economics* 22(4): 243–298.
- Horn, Laura, and Jennifer Berktold. 1999. *Students with disabilities in postsecondary education: A profile of preparation, participation, and outcomes*. Washington, DC: National Center for Education Statistics.
- Hurst, David, and Lisa Hudson. 2005. *Estimating undergraduate enrollment in postsecondary education using National Center for Education Statistics data* (NCES 2005–063). U.S. Department of Education, National Center for Education Statistics. Washington, DC: Government Printing Office.
- Lancaster, Tony. 1990. *The econometric analysis of transition data*. Cambridge University Press.
- Loprest, Pamela, and David Wittenburg. 2005. *Choices, challenges, and options: Child SSI recipients preparing for the transition to adult life*. <<http://www.urban.org/url.cfm?ID=411168>> (accessed May 5, 2006).
- Madalla, G.S. 1982. *Limited dependent and qualitative variables in econometrics*. Cambridge University Press.
- Office of Special Education and Rehabilitative Services, Office of Special Education Programs. 2005. *26th Annual (2004) report to Congress on the implementation of the Individuals with Disabilities Education Act*, vol. 1, Washington, DC.

- Ruiz-Quintanilla, Antonio, Robert R. Weathers II, Valerie Melburg, Kimberly Campbell, and Nawaf Madi. 2006. Participation in programs designed to improve employment outcomes for persons with psychiatric disabilities: Evidence from the New York WORKS demonstration project. *Social Security Bulletin* 66(2): 49–79.
- Rupp, Kalman, and Charlie Scott. 1995. Length of stay on the Supplemental Security Income Program. *Social Security Bulletin* 58(1): 29–47.
- Rupp, Kalman, Paul S. Davies, Chad Newcomb, Howard Iams, Carrie Becker, Shanti Mulpuru, Stephen Ressler, Kathleen Romig, and Baylor Miller. 2006. A profile of children with disabilities receiving SSI: Highlights from the National Survey of SSI Children and Families. *Social Security Bulletin* 66(2): 21–48.
- Scott, Marc, Thomas Bailey, and Greg Kienzl. 2006. Relative success? Determinants of college graduation rates in public and private colleges in the U.S. *Research in Higher Education* 47(3): 249–279.
- Social Security Administration. 2006. *Children receiving SSI*. Washington, DC: Social Security Administration.
- Wagner, Mary, Lynn Newman, Renee Cameto, and Phyllis Levine. 2005. *Changes over time in the early postschool outcomes of youth with disabilities: A report of findings from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.
- Walter, Gerard G., Jack R. Clarcq, and Wendell S. Thompson. 2002. Effect of degree on improving the economic status of individuals who are deaf. *Journal of the American Deafness and Rehabilitation Association* 35(4): 30–46.
- Wittenburg, David C., and Elaine Maag. 2002. School to where? A literature review on economic outcomes of youth with disabilities. *Journal of Vocational Rehabilitation* 17(4): 265–280.



## Policy Update

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*Policy Update* highlights the latest research, analysis, and statistics from the Social Security Administration's Office of Policy. It includes summaries of all recent products and identifies work done by outside researchers funded through a cooperative agreement with SSA. Information about the availability of the publication is given in each section.

### Publications

Documents from the Office of Policy are available at <http://www.socialsecurity.gov/policy>. To receive e-mail notification of the release of these documents, please visit <http://www.socialsecurity.gov/policy/notify.html>. For more information about the availability of printed copies please e-mail [op.publications@ssa.gov](mailto:op.publications@ssa.gov).

### Retirement

***OASDI Beneficiaries by State and County, 2006***  
(released August 2007)

This annual publication provides data on the Social Security population at the local level. It presents basic program data by type of benefit (retirement, survivors, and disability) and category of beneficiary (retired and disabled workers, wives and husbands, widows and widowers, and children).

Online: [http://www.socialsecurity.gov/policy/docs/statcomps/oasdi\\_sc/2006/index.html](http://www.socialsecurity.gov/policy/docs/statcomps/oasdi_sc/2006/index.html)

### Disability

***Annual Statistical Report on the Social Security Disability Insurance Program, 2006***  
(released August 2007)

Since 1956, the Social Security program has provided cash benefits to people with disabilities. This annual report provides program and demographic information about the people who receive those benefits—disabled

workers, disabled widow(er)s, and disabled adult children. The basic topics covered are beneficiaries in current payment status; benefits awarded, withheld, and terminated; geographic distributions; Social Security beneficiaries who receive Supplemental Security Income; and the income of disabled beneficiaries.

Online: [http://www.socialsecurity.gov/policy/docs/statcomps/di\\_asr/2006/index.html](http://www.socialsecurity.gov/policy/docs/statcomps/di_asr/2006/index.html)

### Earnings

***Earnings and Employment Data for Workers Covered Under Social Security and Medicare, by State and County, 2004***  
(released August 2007)

This annual statistical report presents employment and earnings data by sex, age, and race for people in Social Security-covered employment. The tables include data on workers in the 50 states, the District of Columbia, Puerto Rico, the Virgin Islands, American Samoa, and Guam.

Online: [http://www.socialsecurity.gov/policy/docs/statcomps/eedata\\_sc/2004/index.html](http://www.socialsecurity.gov/policy/docs/statcomps/eedata_sc/2004/index.html)

### International Programs

***Social Security Programs Throughout the World: Africa, 2007***  
(released September 2007)

This report, which is part of a four-volume series, provides a cross-national comparison of the social security systems in 44 countries in Africa. It summarizes the five main social insurance programs in those countries: old-age, disability, and survivors; sickness and maternity; work injury; unemployment; and family allowances. The other regional volumes in the series focus on the social security systems of countries in Europe, Asia and the Pacific, and the Americas. Together, the reports provide important information

for researchers and policymakers who are reviewing different ways of approaching social security challenges and adapting the systems to the evolving needs of individuals, households, and families.

Online: <http://www.socialsecurity.gov/policy/docs/progdesc/ssptw/2006-2007/africa/index.html>

## Papers from the Retirement Research Consortium

The Retirement Research Consortium comprises three multidisciplinary centers that are funded through a cooperative agreement with the Social Security Administration. The centers are located at Boston College, the University of Michigan, and the National Bureau of Economic Research. These centers provide research and policy analysis to inform decisionmakers about issues critical to Social Security's retirement program.

### ***Boston College***

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The following papers are available on the Center for Retirement Research (CRR) Web site (<http://www.bc.edu/crr>) or by email from [crr@bc.edu](mailto:crr@bc.edu).

#### ***Evaluating the Advanced Life Deferred Annuity—An Annuity People Might Actually Buy***

Guan Gong and Anthony Webb  
*CRR Working Paper No. 2007-15 (September 2007)*

#### ***Population Aging, Labor Demand, and the Structure of Wages***

Margarita Sapozhnikov and Robert K. Triest  
*CRR Working Paper No. 2007-14 (August 2007)*

#### ***The Role of Governance in Retirement Investments: Evidence from Variable Annuities***

Richard Evans and Rüdiger Fahlenbrach  
*CRR Working Paper No. 2007-20 (July 2007)*

### ***University of Michigan***

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The following paper is available on the University of Michigan Retirement Research Center (MRRC) Web site (<http://mrrc.isr.umich.edu>) or by e-mail from [mrrc@isr.umich.edu](mailto:mrrc@isr.umich.edu).

#### ***The Effect of Retirement Incentives on Retirement Behavior: Evidence from the Self-Employed in the United States and England***

Julie Zissimopoulos, Nicole Maestas, and Lynn Karoly  
*MRRC Working Paper No. 2007-155 (September 2007)*

### ***National Bureau of Economic Research***

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The following papers are available on the NBER Retirement Research Center Web site (<http://www.nber.org/programs/ag/trc/rrchome.html>) or by online request (<http://www.nber.org/contact>).

#### ***A Tax on Work for the Elderly: Medicare as a Secondary Payer***

Gopi Shah Goda, John B. Shoven, and Sita Nataraj Slavov  
*NBER Working Paper No. 13383 (September 2007)*

#### ***Social Security and the Timing of Divorce***

Gopi Shah Goda, John B. Shoven, and Sita Nataraj Slavov  
*NBER Working Paper No. 13382 (September 2007)*

#### ***The Impact of Employer Matching on Savings Plan Participation Under Automatic Enrollment***

John Beshears, James J. Choi, David Laibson, and Brigitte C. Madrian  
*NBER Working Paper No. 13352 (August 2007)*

#### ***The Welfare Cost of Asymmetric Information: Evidence from the U.K. Annuity Market***

Liran Einav, Amy Finkelstein, and Paul Schrimpf  
*NBER Working Paper No. 13228 (July 2007)*

## ***OASDI and SSI Snapshot and Monthly Statistics***

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Each month, the Social Security Administration's Office of Policy posts key statistics about various aspects of the Old-Age, Survivors, and Disability Insurance (OASDI) and Supplemental Security Income (SSI) programs on its Web site (<http://www.socialsecurity.gov/policy>). The statistics include the number of people who receive benefits, the type of benefit they receive, and the average monthly benefit. Data from the Office of the Chief Actuary on the receipts, expenditures, and assets of the OASI and DI trust funds, which previously appeared in Table 11 of the Monthly Statistics, are available at <http://www.socialsecurity.gov/OACT/ProgData/funds.html>. This issue presents data for September 2006–September 2007.

The Monthly Statistical Snapshot summarizes the information about the programs presented in the more detailed tables and provides a summary table on the trust funds. Data for September 2007 are given on pages 136–137. The more detailed OASDI tables begin on page 139; SSI tables begin on page 157.

### ***Monthly Statistical Snapshot***

Table 1. Number of people receiving Social Security, Supplemental Security Income, or both

Table 2. Social Security benefits

Table 3. Supplemental Security Income recipients

Table 4. Operations of the Old-Age Survivors Insurance and Disability Insurance Trust Funds

The most current edition of Tables 1–3 will always be available at [http://www.socialsecurity.gov/policy/docs/quickfacts/stat\\_snapshot](http://www.socialsecurity.gov/policy/docs/quickfacts/stat_snapshot). The most current data for trust funds (Table 4) are available at <http://www.socialsecurity.gov/OACT/ProgData/funds.html>.

# Monthly Statistical Snapshot, September 2007

**Table 1.**  
**Number of people receiving Social Security, Supplemental Security Income, or both, September 2007**  
**(in thousands)**

| Type of beneficiary                 | Total  | Social Security only | SSI only | Both Social Security and SSI |
|-------------------------------------|--------|----------------------|----------|------------------------------|
| All beneficiaries                   | 54,434 | 47,079               | 4,776    | 2,580                        |
| Aged 65 or older                    | 35,811 | 33,792               | 866      | 1,154                        |
| Disabled, under age 65 <sup>a</sup> | 11,619 | 6,283                | 3,910    | 1,426                        |
| Other <sup>b</sup>                  | 7,004  | 7,004                | ...      | ...                          |

SOURCE: Social Security Administration, Master Beneficiary Record, 100 percent data. Social Security Administration, Supplemental Security Record, 100 percent data.

NOTES: Data are for the end of the specified month. Only Social Security beneficiaries in current-payment status are included.

... = not applicable.

a. Includes children receiving SSI on the basis of their own disability.

b. Social Security beneficiaries who are neither aged nor disabled (for example, early retirees, young survivors).

CONTACT: Art Kahn (410) 965-0186 or ssi.monthly@ssa.gov for further information.

**Table 2.**  
**Social Security benefits, September 2007**

| Type of beneficiary                      | Beneficiaries         |         | Total monthly benefits<br>(millions of dollars) | Average monthly<br>benefit (dollars) |
|--|-----------------------|---------|---|--------------------------------------|
|  | Number<br>(thousands) | Percent |   |                                      |
| All beneficiaries <sup>a</sup>           | 49,659                | 100.0   | 47,823  | 963.00                               |
| Old-Age Insurance                        |                       |         |   |                                      |
| Retired workers                          | 31,456                | 63.3    | 33,082  | 1,051.70                             |
| Spouses                                  | 2,444                 | 4.9     | 1,268   | 518.90                               |
| Children                                 | 487                   | 1.0     | 255   | 523.70                               |
| Survivors Insurance                      |                       |         |   |                                      |
| Widow(er)s and parents <sup>b</sup>      | 4,449                 | 9.0     | 4,431   | 996.00                               |
| Widowed mothers and fathers <sup>c</sup> | 163                   | 0.3     | 124   | 762.20                               |
| Children                                 | 1,862                 | 3.8     | 1,279   | 686.60                               |
| Disability Insurance                     |                       |         |   |                                      |
| Disabled workers                         | 7,012                 | 14.1    | 6,869   | 979.70                               |
| Spouses                                  | 152                   | 0.3     | 40  | 260.00                               |
| Children                                 | 1,633                 | 3.3     | 475   | 291.00                               |

SOURCE: Social Security Administration, Master Beneficiary Record, 100 percent data.

NOTES: Data are for the end of the specified month. Only beneficiaries in current-payment status are included.

Some Social Security beneficiaries are entitled to more than one type of benefit. In most cases, they are dually entitled to a worker benefit and a higher spouse or widow(er) benefit. If both benefits are financed from the same trust fund, the beneficiary is usually counted only once in the statistics, as a retired-worker or a disabled-worker beneficiary, and the benefit amount recorded is the larger amount associated with the auxiliary benefit. If the benefits are paid from different trust funds the beneficiary is counted twice, and the respective benefit amounts are recorded for each type of benefit.

a. Includes special age-72 beneficiaries.

b. Includes nondisabled widow(er)s aged 60 or older, disabled widow(er)s aged 50 or older, and dependent parents of deceased workers aged 62 or older.

c. A widow(er) or surviving divorced parent caring for the entitled child of a deceased worker who is under age 16 or is disabled.

CONTACT: Kevin Kulzer (410) 965-5366 or oasdi.monthly@ssa.gov for further information.

## *Monthly Statistical Snapshot, September 2007*

**Table 3.  
Supplemental Security Income recipients, September 2007**

| Age            | Recipients            |         | Total payments <sup>a</sup><br>(millions of dollars) | Average monthly<br>payment <sup>b</sup> (dollars) |
|----------------|-----------------------|---------|--|---|
|                | Number<br>(thousands) | Percent |  |   |
| All recipients | 7,356                 | 100.0   | 3,648  | 467.10  |
| Under 18       | 1,115                 | 15.2    | 645  | 557.00  |
| 18–64          | 4,221                 | 57.4    | 2,222  | 482.40  |
| 65 or older    | 2,020                 | 27.5    | 780  | 385.50  |

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for the end of the specified month.

a. Includes retroactive payments.

b. Excludes retroactive payments.

CONTACT: Art Kahn (410) 965-0186 or ssi.monthly@ssa.gov for further information.

**Table 4.  
Operations of the Old-Age and Survivors Insurance and Disability Insurance Trust Funds,  
September 2007 (in millions of dollars)**

| Component                        | OASI      | DI      | Combined<br>OASI and DI |
|----------------------------------|-----------|---------|-------------------------|
| <b>Receipts</b>                  |           |         |                         |
| Total                            | 44,797    | 10,379  | 55,176                  |
| Net contributions                | 47,091    | 7,996   | 55,087                  |
| Income from taxation of benefits | 12        | 0       | 12                      |
| Net interest                     | -2,306    | 2,382   | 76                      |
| Payments from the general fund   | 0         | 0       | 0                       |
| <b>Expenditures</b>              |           |         |                         |
| Total                            | 44,291    | 5,540   | 49,831                  |
| Benefit payments                 | 44,026    | 5,327   | 49,353                  |
| Administrative expenses          | 265       | 213     | 478                     |
| Transfers to Railroad Retirement | 0         | 0       | 0                       |
| <b>Assets</b>                    |           |         |                         |
| At start of month                | 1,966,536 | 208,738 | 2,175,274               |
| Net increase during month        | 506       | 4,839   | 5,345                   |
| At end of month                  | 1,967,042 | 213,577 | 2,180,619               |

SOURCE: Data on the trust funds were accessed on November 29, 2007, on the Office of the Chief Actuary's Web site at <http://www.socialsecurity.gov/OACT/ProgData/funds.html>.

NOTE: Totals may not equal the sum of the components because of rounding.



***Old-Age, Survivors, and Disability Insurance  
September 2006–September 2007***

**OASDI Benefits in Current-Payment Status**

- Table 1. All OASDI benefits, by program and type of benefit
- Table 2. OASI retirement benefits, by type of beneficiary
- Table 3. OASI retired-worker beneficiaries, by sex and election of early retirement
- Table 4. OASI survivors benefits, by type of beneficiary
- Table 5. DI benefits, by type of beneficiary
- Table 6. OASDI child benefits, by type of beneficiary and age

**Awards of OASDI Benefits**

- Table 7. All OASDI benefits, by program and type of benefit
  - Table 8. OASI retirement benefits, by type of beneficiary
  - Table 9. OASI survivors benefits, by type of beneficiary
  - Table 10. DI benefits, by type of beneficiary
- The OASDI Monthly Statistics are also available at [http://www.socialsecurity.gov/policy/docs/statcomps/oasdi\\_monthly](http://www.socialsecurity.gov/policy/docs/statcomps/oasdi_monthly).

**OASDI Benefits in Current-Payment Status**

**Table 1.**  
**All OASDI benefits, by program and type of benefit, September 2006–September 2007**

| Month   | Total,<br>OASDI <sup>a</sup> | OASI                           |            | Subtotal, DI <sup>c</sup> |           |
|---|------------------------------|--------------------------------|------------|---------------------------|-----------|
|   |                              | Subtotal,<br>OASI <sup>b</sup> | Retirement |                           | Survivors |
| <i>Number (thousands)</i>                           |                              |                                |            |                           |           |
| 2006  |                              |                                |            |                           |           |
| September   | 48,943                       | 40,412                         | 33,851     | 6,562                     | 8,530     |
| October   | 49,015                       | 40,444                         | 33,879     | 6,566                     | 8,571     |
| November  | 49,091                       | 40,495                         | 33,930     | 6,566                     | 8,596     |
| December  | 49,123                       | 40,503                         | 33,938     | 6,566                     | 8,619     |
| 2007  |                              |                                |            |                           |           |
| January   | 49,247                       | 40,613                         | 34,076     | 6,537                     | 8,634     |
| February  | 49,353                       | 40,694                         | 34,148     | 6,547                     | 8,659     |
| March   | 49,439                       | 40,752                         | 34,193     | 6,559                     | 8,688     |
| April   | 49,537                       | 40,815                         | 34,244     | 6,571                     | 8,722     |
| May   | 49,614                       | 40,866                         | 34,290     | 6,576                     | 8,748     |
| June  | 49,598                       | 40,858                         | 34,329     | 6,529                     | 8,739     |
| July  | 49,552                       | 40,828                         | 34,356     | 6,472                     | 8,724     |
| August  | 49,633                       | 40,889                         | 34,414     | 6,475                     | 8,744     |
| September   | 49,659                       | 40,861                         | 34,387     | 6,474                     | 8,798     |
| <i>Total monthly benefits (millions of dollars)</i> |                              |                                |            |                           |           |
| 2006  |                              |                                |            |                           |           |
| September   | 45,173                       | 38,301                         | 32,621     | 5,680                     | 6,872     |
| October   | 45,253                       | 38,347                         | 32,664     | 5,684                     | 6,906     |
| November  | 45,392                       | 38,460                         | 32,774     | 5,686                     | 6,932     |
| December  | 46,938                       | 39,757                         | 33,882     | 5,875                     | 7,181     |
| 2007  |                              |                                |            |                           |           |
| January   | 47,142                       | 39,946                         | 34,095     | 5,852                     | 7,195     |
| February  | 47,274                       | 40,059                         | 34,195     | 5,864                     | 7,215     |
| March   | 47,377                       | 40,141                         | 34,264     | 5,877                     | 7,236     |
| April   | 47,497                       | 40,233                         | 34,344     | 5,889                     | 7,263     |
| May   | 47,592                       | 40,307                         | 34,409     | 5,897                     | 7,285     |
| June  | 47,643                       | 40,343                         | 34,476     | 5,867                     | 7,300     |
| July  | 47,676                       | 40,364                         | 34,537     | 5,827                     | 7,312     |
| August  | 47,783                       | 40,451                         | 34,618     | 5,833                     | 7,332     |
| September   | 47,823                       | 40,439                         | 34,605     | 5,834                     | 7,384     |

(Continued)

**OASDI Benefits in Current-Payment Status**

**Table 1.  
Continued**

| Month                                    | Total,<br>OASDI <sup>a</sup> | OASI                           |            |           | Subtotal, DI <sup>c</sup> |
|--|------------------------------|--------------------------------|------------|-----------|---------------------------|
|  |                              | Subtotal,<br>OASI <sup>b</sup> | Retirement | Survivors |                           |
| <i>Average monthly benefit (dollars)</i> |                              |                                |            |           |                           |
| 2006                                     |                              |                                |            |           |                           |
| September                                | 923.00                       | 947.80                         | 963.70     | 865.70    | 805.60                    |
| October                                  | 923.30                       | 948.20                         | 964.10     | 865.70    | 805.80                    |
| November                                 | 924.70                       | 949.80                         | 965.90     | 866.00    | 806.50                    |
| December                                 | 955.50                       | 981.60                         | 998.40     | 894.80    | 833.10                    |
| 2007                                     |                              |                                |            |           |                           |
| January                                  | 957.20                       | 983.60                         | 1,000.50   | 895.20    | 833.30                    |
| February                                 | 957.90                       | 984.40                         | 1,001.40   | 895.70    | 833.30                    |
| March                                    | 958.30                       | 985.00                         | 1,002.10   | 896.00    | 832.90                    |
| April                                    | 958.80                       | 985.80                         | 1,002.90   | 896.30    | 832.80                    |
| May                                      | 959.20                       | 986.30                         | 1,003.50   | 896.80    | 832.80                    |
| June                                     | 960.60                       | 987.40                         | 1,004.30   | 898.60    | 835.30                    |
| July                                     | 962.10                       | 988.60                         | 1,005.30   | 900.40    | 838.10                    |
| August                                   | 962.70                       | 989.30                         | 1,005.90   | 900.90    | 838.60                    |
| September                                | 963.00                       | 989.70                         | 1,006.30   | 901.10    | 839.40                    |

SOURCE: Social Security Administration, Master Beneficiary Record, 100 percent data.

NOTES: Data are for the end of the specified month.

Some Social Security beneficiaries are entitled to more than one type of benefit. In most cases, they are dually entitled to a worker benefit and a higher spouse or widow(er) benefit. If both benefits are financed from the same trust fund, the beneficiary is usually counted only once in the statistics, as a retired-worker or a disabled-worker beneficiary, and the benefit amount recorded is the larger amount associated with the auxiliary benefit. If the benefits are paid from different trust funds the beneficiary is counted twice, and the respective benefit amounts are recorded for each type of benefit.

a. Includes special age-72 beneficiaries.

Excludes a number of Railroad Retirement beneficiaries who would have been eligible for Social Security benefits had they applied. The reason they have not applied is that receipt of a Social Security benefit would reduce their Railroad Retirement benefit by a like amount. The number of Railroad Retirement beneficiaries who would be eligible for a Social Security benefit if they applied is not available, but is estimated to be less than 100,000.

b. Benefits paid from the OASI trust fund to retired workers and their spouses and children and to all survivors.

c. Benefits paid from the DI trust fund to disabled workers and their spouses and children.

CONTACT: Kevin Kulzer (410) 965-5366 or oasdi.monthly@ssa.gov for further information.

**OASDI Benefits in Current-Payment Status**

**Table 2.**  
**OASI retirement benefits, by type of beneficiary, September 2006–September 2007**

| Month   | All beneficiaries | Retired workers | Spouses | Children |
|---|-------------------|-----------------|---------|----------|
| <i>Number (thousands)</i>                           |                   |                 |         |          |
| 2006  |                   |                 |         |          |
| September   | 33,851            | 30,879          | 2,489   | 483      |
| October   | 33,879            | 30,908          | 2,485   | 486      |
| November  | 33,930            | 30,959          | 2,483   | 488      |
| December  | 33,938            | 30,971          | 2,476   | 490      |
| 2007  |                   |                 |         |          |
| January   | 34,076            | 31,110          | 2,473   | 493      |
| February  | 34,148            | 31,179          | 2,470   | 498      |
| March   | 34,193            | 31,225          | 2,466   | 502      |
| April   | 34,244            | 31,276          | 2,463   | 506      |
| May   | 34,290            | 31,322          | 2,460   | 508      |
| June  | 34,329            | 31,374          | 2,457   | 499      |
| July  | 34,356            | 31,419          | 2,452   | 485      |
| August  | 34,414            | 31,477          | 2,451   | 487      |
| September   | 34,387            | 31,456          | 2,444   | 487      |
| <i>Total monthly benefits (millions of dollars)</i> |                   |                 |         |          |
| 2006  |                   |                 |         |          |
| September   | 32,621            | 31,135          | 1,246   | 241      |
| October   | 32,664            | 31,178          | 1,243   | 243      |
| November  | 32,774            | 31,286          | 1,244   | 244      |
| December  | 33,882            | 32,346          | 1,282   | 254      |
| 2007  |                   |                 |         |          |
| January   | 34,095            | 32,556          | 1,282   | 257      |
| February  | 34,195            | 32,655          | 1,281   | 259      |
| March   | 34,264            | 32,724          | 1,279   | 262      |
| April   | 34,344            | 32,802          | 1,277   | 264      |
| May   | 34,409            | 32,868          | 1,276   | 266      |
| June  | 34,476            | 32,941          | 1,274   | 261      |
| July  | 34,537            | 33,012          | 1,272   | 253      |
| August  | 34,618            | 33,092          | 1,272   | 255      |
| September   | 34,605            | 33,082          | 1,268   | 255      |

(Continued)

**OASDI Benefits in Current-Payment Status**

**Table 2.**  
**OASI retirement benefits, by type of beneficiary, September 2006–September 2007**

| Month                                    | All beneficiaries | Retired workers | Spouses | Children |
|--|-------------------|-----------------|---------|----------|
| <i>Average monthly benefit (dollars)</i> |                   |                 |         |          |
| 2006                                     |                   |                 |         |          |
| September                                | 963.70            | 1,008.30        | 500.50  | 498.40   |
| October                                  | 964.10            | 1,008.70        | 500.50  | 499.20   |
| November                                 | 965.90            | 1,010.60        | 501.10  | 500.70   |
| December                                 | 998.40            | 1,044.40        | 517.90  | 518.10   |
| 2007                                     |                   |                 |         |          |
| January                                  | 1,000.50          | 1,046.50        | 518.20  | 520.00   |
| February                                 | 1,001.40          | 1,047.30        | 518.40  | 521.00   |
| March                                    | 1,002.10          | 1,048.00        | 518.40  | 521.80   |
| April                                    | 1,002.90          | 1,048.80        | 518.50  | 522.50   |
| May                                      | 1,003.50          | 1,049.40        | 518.50  | 523.00   |
| June                                     | 1,004.30          | 1,050.00        | 518.70  | 523.10   |
| July                                     | 1,005.30          | 1,050.70        | 518.80  | 522.30   |
| August                                   | 1,005.90          | 1,051.30        | 518.90  | 523.10   |
| September                                | 1,006.30          | 1,051.70        | 518.90  | 523.70   |

SOURCE: Social Security Administration, Master Beneficiary Record, 100 percent data.

NOTES: Data are for the end of the specified month.

Some Social Security beneficiaries are entitled to more than one type of benefit. In most cases, they are dually entitled to a worker benefit and a higher spouse or widow(er) benefit. If both benefits are financed from the same trust fund, the beneficiary is usually counted only once in the statistics, as a retired-worker or a disabled-worker beneficiary, and the benefit amount recorded is the larger amount associated with the auxiliary benefit. If the benefits are paid from different trust funds the beneficiary is counted twice, and the respective benefit amounts are recorded for each type of benefit.

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OASDI Benefits in Current-Payment Status

**Table 3.**  
**OASI retired-worker beneficiaries, by sex and election of early retirement, September 2006–September 2007**

| Month   | All beneficiaries |  |                                     |   | Men      |  |                                     | Women                                      |          |  |                                     |  |
|---|-------------------|--|-------------------------------------|---|----------|--|-------------------------------------|--|----------|--|-------------------------------------|--|
|   | Total             | Without reduction for early retirement | With reduction for early retirement | Early retirees as a percentage of total | Subtotal | Without reduction for early retirement | With reduction for early retirement | Early retirees as a percentage of subtotal | Subtotal | Without reduction for early retirement | With reduction for early retirement | Early retirees as a percentage of subtotal |
| <b>Number (thousands)</b>                           |                   |  |                                     |   |          |  |                                     |  |          |  |                                     |  |
| 2006  |                   |  |                                     |   |          |  |                                     |  |          |  |                                     |  |
| September   | 30,879            | 8,344                                  | 22,535                              | 73.0                                    | 15,832   | 4,658                                  | 11,174                              | 70.6                                       | 15,047   | 3,686                                  | 11,361                              | 75.5                                       |
| October   | 30,908            | 8,349                                  | 22,559                              | 73.0                                    | 15,843   | 4,660                                  | 11,182                              | 70.6                                       | 15,065   | 3,689                                  | 11,376                              | 75.5                                       |
| November  | 30,959            | 8,368                                  | 22,591                              | 73.0                                    | 15,862   | 4,668                                  | 11,194                              | 70.6                                       | 15,096   | 3,700                                  | 11,397                              | 75.5                                       |
| December  | 30,971            | 8,373                                  | 22,598                              | 73.0                                    | 15,866   | 4,669                                  | 11,197                              | 70.6                                       | 15,106   | 3,705                                  | 11,401                              | 75.5                                       |
| 2007  |                   |  |                                     |   |          |  |                                     |  |          |  |                                     |  |
| January   | 31,110            | 8,394                                  | 22,716                              | 73.0                                    | 15,941   | 4,677                                  | 11,264                              | 70.7                                       | 15,168   | 3,717                                  | 11,452                              | 75.5                                       |
| February  | 31,179            | 8,400                                  | 22,779                              | 73.1                                    | 15,976   | 4,680                                  | 11,296                              | 70.7                                       | 15,203   | 3,720                                  | 11,483                              | 75.5                                       |
| March   | 31,225            | 8,406                                  | 22,819                              | 73.1                                    | 15,997   | 4,683                                  | 11,314                              | 70.7                                       | 15,227   | 3,722                                  | 11,505                              | 75.6                                       |
| April   | 31,276            | 8,416                                  | 22,859                              | 73.1                                    | 16,022   | 4,689                                  | 11,332                              | 70.7                                       | 15,254   | 3,727                                  | 11,527                              | 75.6                                       |
| May   | 31,322            | 8,426                                  | 22,896                              | 73.1                                    | 16,043   | 4,695                                  | 11,348                              | 70.7                                       | 15,279   | 3,730                                  | 11,548                              | 75.6                                       |
| June  | 31,374            | 8,438                                  | 22,935                              | 73.1                                    | 16,063   | 4,699                                  | 11,364                              | 70.7                                       | 15,310   | 3,739                                  | 11,571                              | 75.6                                       |
| July  | 31,419            | 8,453                                  | 22,966                              | 73.1                                    | 16,080   | 4,705                                  | 11,375                              | 70.7                                       | 15,339   | 3,748                                  | 11,591                              | 75.6                                       |
| August  | 31,477            | 8,466                                  | 23,011                              | 73.1                                    | 16,106   | 4,712                                  | 11,394                              | 70.7                                       | 15,371   | 3,753                                  | 11,617                              | 75.6                                       |
| September   | 31,456            | 8,443                                  | 23,013                              | 73.2                                    | 16,089   | 4,699                                  | 11,389                              | 70.8                                       | 15,367   | 3,743                                  | 11,624                              | 75.6                                       |
| <b>Total monthly benefits (millions of dollars)</b> |                   |  |                                     |   |          |  |                                     |  |          |  |                                     |  |
| 2006  |                   |  |                                     |   |          |  |                                     |  |          |  |                                     |  |
| September   | 31,135            | 9,842                                  | 21,293                              | ...                                     | 17,997   | 6,187                                  | 11,810                              | ...  | 13,138   | 3,655                                  | 9,483                               | ...  |
| October   | 31,178            | 9,852                                  | 21,326                              | ...                                     | 18,017   | 6,192                                  | 11,825                              | ...  | 13,161   | 3,660                                  | 9,501                               | ...  |
| November  | 31,286            | 9,903                                  | 21,383                              | ...                                     | 18,071   | 6,220                                  | 11,851                              | ...  | 13,215   | 3,683                                  | 9,532                               | ...  |
| December  | 32,346            | 10,240                                 | 22,106                              | ...                                     | 18,681   | 6,430                                  | 12,250                              | ...  | 13,666   | 3,810                                  | 9,855                               | ...  |
| 2007  |                   |  |                                     |   |          |  |                                     |  |          |  |                                     |  |
| January   | 32,556            | 10,272                                 | 22,285                              | ...                                     | 18,809   | 6,447                                  | 12,362                              | ...  | 13,747   | 3,825                                  | 9,922                               | ...  |
| February  | 32,655            | 10,283                                 | 22,371                              | ...                                     | 18,866   | 6,453                                  | 12,412                              | ...  | 13,789   | 3,830                                  | 9,959                               | ...  |
| March   | 32,724            | 10,295                                 | 22,429                              | ...                                     | 18,902   | 6,460                                  | 12,442                              | ...  | 13,822   | 3,835                                  | 9,987                               | ...  |
| April   | 32,802            | 10,316                                 | 22,486                              | ...                                     | 18,945   | 6,473                                  | 12,472                              | ...  | 13,857   | 3,843                                  | 10,015                              | ...  |
| May   | 32,868            | 10,333                                 | 22,535                              | ...                                     | 18,980   | 6,484                                  | 12,496                              | ...  | 13,888   | 3,849                                  | 10,040                              | ...  |
| June  | 32,941            | 10,354                                 | 22,587                              | ...                                     | 19,013   | 6,493                                  | 12,520                              | ...  | 13,928   | 3,861                                  | 10,067                              | ...  |
| July  | 33,012            | 10,379                                 | 22,633                              | ...                                     | 19,046   | 6,504                                  | 12,541                              | ...  | 13,966   | 3,874                                  | 10,092                              | ...  |
| August  | 33,092            | 10,401                                 | 22,691                              | ...                                     | 19,088   | 6,518                                  | 12,570                              | ...  | 14,003   | 3,882                                  | 10,121                              | ...  |
| September   | 33,082            | 10,378                                 | 22,703                              | ...                                     | 19,073   | 6,503                                  | 12,570                              | ...  | 14,009   | 3,875                                  | 10,133                              | ...  |

(Continued)

**OASDI Benefits in Current-Payment Status**

**Table 3.  
Continued**

| Month                                    | All beneficiaries |  |                                     |   | Men      |  |                                     | Women                                      |          |  |                                     |  |
|--|-------------------|--|-------------------------------------|---|----------|--|-------------------------------------|--|----------|--|-------------------------------------|--|
|  | Total             | Without reduction for early retirement | With reduction for early retirement | Early retirees as a percentage of total | Subtotal | Without reduction for early retirement | With reduction for early retirement | Early retirees as a percentage of subtotal | Subtotal | Without reduction for early retirement | With reduction for early retirement | Early retirees as a percentage of subtotal |
| <b>Average monthly benefit (dollars)</b> |                   |  |                                     |   |          |  |                                     |  |          |  |                                     |  |
| 2006                                     |                   |  |                                     |   |          |  |                                     |  |          |  |                                     |  |
| September                                | 1,008.30          | 1,179.50                               | 944.90                              | ...                                     | 1,136.70 | 1,328.10                               | 1,057.00                            | ...  | 873.10   | 991.60                                 | 834.70                              | ...  |
| October                                  | 1,008.70          | 1,179.90                               | 945.40                              | ...                                     | 1,137.20 | 1,328.50                               | 1,057.50                            | ...  | 873.60   | 992.20                                 | 835.10                              | ...  |
| November                                 | 1,010.60          | 1,183.40                               | 946.50                              | ...                                     | 1,139.20 | 1,332.50                               | 1,058.70                            | ...  | 875.40   | 995.40                                 | 836.40                              | ...  |
| December                                 | 1,044.40          | 1,223.00                               | 978.20                              | ...                                     | 1,177.40 | 1,377.20                               | 1,094.10                            | ...  | 904.70   | 1,028.60                               | 864.40                              | ...  |
| 2007                                     |                   |  |                                     |   |          |  |                                     |  |          |  |                                     |  |
| January                                  | 1,046.50          | 1,223.70                               | 981.00                              | ...                                     | 1,179.90 | 1,378.30                               | 1,097.50                            | ...  | 906.30   | 1,029.10                               | 866.50                              | ...  |
| February                                 | 1,047.30          | 1,224.20                               | 982.10                              | ...                                     | 1,180.90 | 1,378.90                               | 1,098.80                            | ...  | 907.00   | 1,029.50                               | 867.30                              | ...  |
| March                                    | 1,048.00          | 1,224.70                               | 982.90                              | ...                                     | 1,181.60 | 1,379.40                               | 1,099.70                            | ...  | 907.70   | 1,030.20                               | 868.10                              | ...  |
| April                                    | 1,048.80          | 1,225.70                               | 983.70                              | ...                                     | 1,182.50 | 1,380.40                               | 1,100.50                            | ...  | 908.50   | 1,031.10                               | 868.80                              | ...  |
| May                                      | 1,049.40          | 1,226.30                               | 984.20                              | ...                                     | 1,183.00 | 1,381.00                               | 1,101.10                            | ...  | 909.00   | 1,031.70                               | 869.40                              | ...  |
| June                                     | 1,050.00          | 1,227.10                               | 984.80                              | ...                                     | 1,183.70 | 1,381.70                               | 1,101.80                            | ...  | 909.70   | 1,032.70                               | 869.90                              | ...  |
| July                                     | 1,050.70          | 1,227.80                               | 985.50                              | ...                                     | 1,184.40 | 1,382.50                               | 1,102.50                            | ...  | 910.50   | 1,033.60                               | 870.70                              | ...  |
| August                                   | 1,051.30          | 1,228.60                               | 986.10                              | ...                                     | 1,185.20 | 1,383.30                               | 1,103.20                            | ...  | 911.10   | 1,034.30                               | 871.20                              | ...  |
| September                                | 1,051.70          | 1,229.30                               | 986.50                              | ...                                     | 1,185.50 | 1,383.80                               | 1,103.70                            | ...  | 911.60   | 1,035.30                               | 871.80                              | ...  |

SOURCE: Social Security Administration, Master Beneficiary Record, 100 percent data.

NOTES: Data are for the end of the specified month.

Some Social Security beneficiaries are entitled to more than one type of benefit. In most cases, they are dually entitled to a worker benefit and a higher spouse or widow(er) benefit. If both benefits are financed from the same trust fund, the beneficiary is usually counted only once in the statistics, as a retired-worker or a disabled-worker beneficiary, and the benefit amount recorded is the larger amount associated with the auxiliary benefit. If the benefits are paid from different trust funds the beneficiary is counted twice, and the respective benefit amounts are recorded for each type of benefit.

... = not applicable.

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**OASDI Benefits in Current-Payment Status**

**Table 4.**  
**OASI survivors benefits, by type of beneficiary, September 2006–September 2007**

| Month   | All beneficiaries | Widow(er)s<br>and parents <sup>a</sup> | Widowed mothers<br>and fathers <sup>b</sup> | Children |
|---|-------------------|--|---|----------|
| <i>Number (thousands)</i>                           |                   |  |   |          |
| 2006  |                   |  |   |          |
| September   | 6,562             | 4,518                                  | 172   | 1,872    |
| October   | 6,566             | 4,511                                  | 172   | 1,883    |
| November  | 6,566             | 4,503                                  | 172   | 1,890    |
| December  | 6,566             | 4,496                                  | 171   | 1,899    |
| 2007  |                   |  |   |          |
| January   | 6,537             | 4,472                                  | 159   | 1,906    |
| February  | 6,547             | 4,472                                  | 161   | 1,914    |
| March   | 6,559             | 4,471                                  | 162   | 1,926    |
| April   | 6,571             | 4,471                                  | 164   | 1,936    |
| May   | 6,576             | 4,470                                  | 166   | 1,940    |
| June  | 6,529             | 4,463                                  | 167   | 1,899    |
| July  | 6,472             | 4,455                                  | 166   | 1,850    |
| August  | 6,475             | 4,455                                  | 167   | 1,853    |
| September   | 6,474             | 4,449                                  | 163   | 1,862    |
| <i>Total monthly benefits (millions of dollars)</i> |                   |  |   |          |
| 2006  |                   |  |   |          |
| September   | 5,680             | 4,320                                  | 126   | 1,235    |
| October   | 5,684             | 4,315                                  | 126   | 1,243    |
| November  | 5,686             | 4,310                                  | 126   | 1,249    |
| December  | 5,875             | 4,447                                  | 130   | 1,298    |
| 2007  |                   |  |   |          |
| January   | 5,852             | 4,427                                  | 119   | 1,306    |
| February  | 5,864             | 4,431                                  | 120   | 1,313    |
| March   | 5,877             | 4,434                                  | 122   | 1,322    |
| April   | 5,889             | 4,437                                  | 123   | 1,330    |
| May   | 5,897             | 4,439                                  | 124   | 1,333    |
| June  | 5,867             | 4,436                                  | 126   | 1,305    |
| July  | 5,827             | 4,432                                  | 126   | 1,269    |
| August  | 5,833             | 4,434                                  | 127   | 1,272    |
| September   | 5,834             | 4,431                                  | 124   | 1,279    |

(Continued)

**OASDI Benefits in Current-Payment Status**

**Table 4.  
Continued**

| Month                                    | All beneficiaries | Widow(er)s<br>and parents <sup>a</sup> | Widowed mothers<br>and fathers <sup>b</sup> | Children |
|--|-------------------|--|---|----------|
| <i>Average monthly benefit (dollars)</i> |                   |  |   |          |
| 2006                                     |                   |  |   |          |
| September                                | 865.70            | 956.10                                 | 732.00                                      | 659.70   |
| October                                  | 865.70            | 956.50                                 | 731.70                                      | 660.10   |
| November                                 | 866.00            | 957.10                                 | 733.70                                      | 661.10   |
| December                                 | 894.80            | 989.30                                 | 756.60                                      | 683.70   |
| 2007                                     |                   |  |   |          |
| January                                  | 895.20            | 989.90                                 | 745.90                                      | 685.30   |
| February                                 | 895.70            | 990.90                                 | 747.40                                      | 685.80   |
| March                                    | 896.00            | 991.60                                 | 748.40                                      | 686.30   |
| April                                    | 896.30            | 992.40                                 | 749.30                                      | 686.90   |
| May                                      | 896.80            | 993.10                                 | 750.40                                      | 687.30   |
| June                                     | 898.60            | 994.00                                 | 754.60                                      | 687.10   |
| July                                     | 900.40            | 994.70                                 | 759.70                                      | 685.80   |
| August                                   | 900.90            | 995.40                                 | 761.70                                      | 686.30   |
| September                                | 901.10            | 996.00                                 | 762.20                                      | 686.60   |

SOURCE: Social Security Administration, Master Beneficiary Record, 100 percent data.

NOTES: Data are for the end of the specified month.

Some Social Security beneficiaries are entitled to more than one type of benefit. In most cases, they are dually entitled to a worker benefit and a higher spouse or widow(er) benefit. If both benefits are financed from the same trust fund, the beneficiary is usually counted only once in the statistics, as a retired-worker or a disabled-worker beneficiary, and the benefit amount recorded is the larger amount associated with the auxiliary benefit. If the benefits are paid from different trust funds the beneficiary is counted twice, and the respective benefit amounts are recorded for each type of benefit.

a. Includes nondisabled widow(er)s aged 60 or older, disabled widow(er)s aged 50 or older, and dependent parents of deceased workers aged 62 or older.

b. A widow(er) or surviving divorced parent caring for the entitled child of a deceased worker who is under age 16 or is disabled.

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OASDI Benefits in Current-Payment Status

**Table 5.**  
**DI benefits, by type of beneficiary, September 2006–September 2007**

| Month   | All beneficiaries | Disabled workers | Spouses | Children |
|---|-------------------|------------------|---------|----------|
| <i>Number (thousands)</i>                           |                   |                  |         |          |
| 2006  |                   |                  |         |          |
| September   | 8,530             | 6,750            | 156     | 1,624    |
| October   | 8,571             | 6,780            | 156     | 1,635    |
| November  | 8,596             | 6,796            | 156     | 1,644    |
| December  | 8,619             | 6,812            | 156     | 1,652    |
| 2007  |                   |                  |         |          |
| January   | 8,634             | 6,824            | 154     | 1,657    |
| February  | 8,659             | 6,841            | 154     | 1,664    |
| March   | 8,688             | 6,859            | 154     | 1,675    |
| April   | 8,722             | 6,882            | 154     | 1,686    |
| May   | 8,748             | 6,901            | 153     | 1,693    |
| June  | 8,739             | 6,924            | 153     | 1,662    |
| July  | 8,724             | 6,947            | 152     | 1,624    |
| August  | 8,744             | 6,966            | 152     | 1,626    |
| September   | 8,798             | 7,012            | 152     | 1,633    |
| <i>Total monthly benefits (millions of dollars)</i> |                   |                  |         |          |
| 2006  |                   |                  |         |          |
| September   | 6,872             | 6,379            | 39      | 455      |
| October   | 6,906             | 6,409            | 39      | 458      |
| November  | 6,932             | 6,432            | 39      | 462      |
| December  | 7,181             | 6,661            | 40      | 480      |
| 2007  |                   |                  |         |          |
| January   | 7,195             | 6,674            | 39      | 482      |
| February  | 7,215             | 6,691            | 39      | 485      |
| March   | 7,236             | 6,709            | 39      | 488      |
| April   | 7,263             | 6,733            | 39      | 491      |
| May   | 7,285             | 6,753            | 39      | 493      |
| June  | 7,300             | 6,777            | 39      | 484      |
| July  | 7,312             | 6,800            | 39      | 471      |
| August  | 7,332             | 6,821            | 39      | 472      |
| September   | 7,384             | 6,869            | 40      | 475      |

(Continued)

**OASDI Benefits in Current-Payment Status**

**Table 5.  
Continued**

| Month                                    | All beneficiaries | Disabled workers | Spouses | Children |
|--|-------------------|------------------|---------|----------|
| <i>Average monthly benefit (dollars)</i> |                   |                  |         |          |
| 2006                                     |                   |                  |         |          |
| September                                | 805.60            | 944.90           | 249.20  | 279.90   |
| October                                  | 805.80            | 945.30           | 249.30  | 280.20   |
| November                                 | 806.50            | 946.40           | 249.10  | 280.80   |
| December                                 | 833.10            | 977.90           | 257.00  | 290.50   |
| 2007                                     |                   |                  |         |          |
| January                                  | 833.30            | 978.00           | 256.90  | 291.00   |
| February                                 | 833.30            | 978.10           | 256.50  | 291.20   |
| March                                    | 832.90            | 978.10           | 256.20  | 291.20   |
| April                                    | 832.80            | 978.40           | 256.10  | 291.30   |
| May                                      | 832.80            | 978.50           | 256.20  | 291.40   |
| June                                     | 835.30            | 978.80           | 256.90  | 291.00   |
| July                                     | 838.10            | 979.00           | 258.30  | 290.20   |
| August                                   | 838.60            | 979.10           | 258.30  | 290.50   |
| September                                | 839.40            | 979.70           | 260.00  | 291.00   |

SOURCE: Social Security Administration, Master Beneficiary Record, 100 percent data.

NOTES: Data are for the end of the specified month.

Some Social Security beneficiaries are entitled to more than one type of benefit. In most cases, they are dually entitled to a worker benefit and a higher spouse or widow(er) benefit. If both benefits are financed from the same trust fund, the beneficiary is usually counted only once in the statistics, as a retired-worker or a disabled-worker beneficiary, and the benefit amount recorded is the larger amount associated with the auxiliary benefit. If the benefits are paid from different trust funds the beneficiary is counted twice, and the respective benefit amounts are recorded for each type of benefit.

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OASDI Benefits in Current-Payment Status

**Table 6.**  
**OASDI child benefits, by type of beneficiary and age, September 2006–September 2007**

| Month   | All children | Children of retired workers |                     |                           | Children of deceased workers |                     |                           | Children of disabled workers |                     |                           |
|---|--------------|-----------------------------|---------------------|---------------------------|------------------------------|---------------------|---------------------------|------------------------------|---------------------|---------------------------|
|   |              | Under age 18                | Students aged 18–19 | Disabled aged 18 or older | Under age 18                 | Students aged 18–19 | Disabled aged 18 or older | Under age 18                 | Students aged 18–19 | Disabled aged 18 or older |
| <i>Number (thousands)</i>                           |              |                             |                     |                           |                              |                     |                           |                              |                     |                           |
| 2006  |              |                             |                     |                           |                              |                     |                           |                              |                     |                           |
| September   | 3,979        | 284                         | 7                   | 192                       | 1,327                        | 33                  | 511                       | 1,528                        | 25                  | 71                        |
| October   | 4,004        | 284                         | 10                  | 192                       | 1,326                        | 45                  | 512                       | 1,530                        | 33                  | 72                        |
| November  | 4,022        | 283                         | 13                  | 192                       | 1,322                        | 55                  | 512                       | 1,531                        | 41                  | 72                        |
| December  | 4,041        | 282                         | 16                  | 192                       | 1,321                        | 65                  | 513                       | 1,530                        | 50                  | 72                        |
| 2007  |              |                             |                     |                           |                              |                     |                           |                              |                     |                           |
| January   | 4,056        | 283                         | 18                  | 192                       | 1,319                        | 74                  | 513                       | 1,527                        | 57                  | 72                        |
| February  | 4,076        | 284                         | 21                  | 193                       | 1,318                        | 83                  | 513                       | 1,527                        | 65                  | 72                        |
| March   | 4,102        | 285                         | 24                  | 193                       | 1,319                        | 93                  | 514                       | 1,529                        | 73                  | 73                        |
| April   | 4,128        | 286                         | 26                  | 193                       | 1,320                        | 101                 | 515                       | 1,534                        | 79                  | 73                        |
| May   | 4,141        | 287                         | 28                  | 194                       | 1,318                        | 107                 | 515                       | 1,535                        | 84                  | 74                        |
| June  | 4,060        | 287                         | 18                  | 194                       | 1,318                        | 66                  | 516                       | 1,537                        | 51                  | 74                        |
| July  | 3,960        | 286                         | 5                   | 194                       | 1,315                        | 19                  | 517                       | 1,535                        | 15                  | 74                        |
| August  | 3,965        | 286                         | 6                   | 195                       | 1,311                        | 25                  | 517                       | 1,532                        | 19                  | 75                        |
| September   | 3,983        | 284                         | 8                   | 195                       | 1,309                        | 35                  | 518                       | 1,532                        | 26                  | 75                        |
| <i>Total monthly benefits (millions of dollars)</i> |              |                             |                     |                           |                              |                     |                           |                              |                     |                           |
| 2006  |              |                             |                     |                           |                              |                     |                           |                              |                     |                           |
| September   | 1,930        | 134                         | 4                   | 103                       | 861                          | 24                  | 350                       | 417                          | 10                  | 28                        |
| October   | 1,944        | 134                         | 6                   | 103                       | 861                          | 32                  | 350                       | 417                          | 13                  | 28                        |
| November  | 1,956        | 134                         | 7                   | 103                       | 859                          | 40                  | 351                       | 417                          | 16                  | 29                        |
| December  | 2,032        | 138                         | 9                   | 106                       | 886                          | 49                  | 363                       | 430                          | 20                  | 30                        |
| 2007  |              |                             |                     |                           |                              |                     |                           |                              |                     |                           |
| January   | 2,045        | 139                         | 11                  | 107                       | 887                          | 56                  | 363                       | 429                          | 23                  | 30                        |
| February  | 2,057        | 140                         | 12                  | 107                       | 886                          | 63                  | 364                       | 429                          | 26                  | 30                        |
| March   | 2,071        | 141                         | 14                  | 107                       | 886                          | 71                  | 364                       | 429                          | 29                  | 30                        |
| April   | 2,085        | 141                         | 15                  | 108                       | 888                          | 77                  | 365                       | 429                          | 32                  | 30                        |
| May   | 2,092        | 141                         | 16                  | 108                       | 886                          | 82                  | 366                       | 429                          | 34                  | 30                        |
| June  | 2,049        | 142                         | 11                  | 108                       | 887                          | 51                  | 367                       | 432                          | 21                  | 30                        |
| July  | 1,994        | 142                         | 3                   | 109                       | 888                          | 14                  | 367                       | 435                          | 6                   | 31                        |
| August  | 1,999        | 142                         | 3                   | 109                       | 885                          | 18                  | 368                       | 434                          | 7                   | 31                        |
| September   | 2,009        | 141                         | 5                   | 109                       | 884                          | 26                  | 369                       | 434                          | 10                  | 31                        |

(Continued)

**OASDI Benefits in Current-Payment Status**

**Table 6.  
Continued**

| Month                                    | All children | Children of retired workers |                     |                           | Children of deceased workers |                     |                           | Children of disabled workers |                     |                           |
|--|--------------|-----------------------------|---------------------|---------------------------|------------------------------|---------------------|---------------------------|------------------------------|---------------------|---------------------------|
|  |              | Under age 18                | Students aged 18-19 | Disabled aged 18 or older | Under age 18                 | Students aged 18-19 | Disabled aged 18 or older | Under age 18                 | Students aged 18-19 | Disabled aged 18 or older |
| <i>Average monthly benefit (dollars)</i> |              |                             |                     |                           |                              |                     |                           |                              |                     |                           |
| 2006                                     |              |                             |                     |                           |                              |                     |                           |                              |                     |                           |
| September                                | 485.10       | 472.50                      | 546.30              | 534.90                    | 648.90                       | 711.40              | 684.10                    | 272.70                       | 385.20              | 397.80                    |
| October                                  | 485.50       | 472.80                      | 551.50              | 535.30                    | 648.90                       | 715.60              | 684.50                    | 272.50                       | 386.30              | 396.50                    |
| November                                 | 486.20       | 474.10                      | 556.60              | 536.20                    | 649.40                       | 719.10              | 685.00                    | 272.50                       | 387.20              | 396.90                    |
| December                                 | 502.80       | 490.00                      | 580.00              | 554.40                    | 671.10                       | 747.60              | 708.00                    | 281.30                       | 400.50              | 410.30                    |
| 2007                                     |              |                             |                     |                           |                              |                     |                           |                              |                     |                           |
| January                                  | 504.10       | 491.90                      | 584.80              | 555.30                    | 672.60                       | 752.50              | 708.40                    | 281.20                       | 401.30              | 411.00                    |
| February                                 | 504.60       | 492.50                      | 587.10              | 556.00                    | 672.50                       | 755.60              | 708.80                    | 280.80                       | 401.00              | 411.00                    |
| March                                    | 504.90       | 492.70                      | 589.10              | 556.60                    | 672.20                       | 759.40              | 709.20                    | 280.30                       | 401.00              | 410.80                    |
| April                                    | 505.20       | 492.80                      | 591.80              | 557.30                    | 672.30                       | 762.70              | 709.70                    | 279.90                       | 402.20              | 410.40                    |
| May                                      | 505.30       | 492.80                      | 592.90              | 557.80                    | 672.00                       | 765.30              | 710.10                    | 279.70                       | 402.80              | 410.00                    |
| June                                     | 504.80       | 494.20                      | 601.70              | 558.50                    | 673.50                       | 773.10              | 710.60                    | 281.30                       | 408.30              | 411.20                    |
| July                                     | 503.50       | 496.60                      | 566.10              | 559.30                    | 675.40                       | 718.10              | 711.10                    | 283.30                       | 385.30              | 412.60                    |
| August                                   | 504.00       | 497.30                      | 576.70              | 559.50                    | 675.60                       | 728.50              | 711.30                    | 283.40                       | 389.10              | 412.20                    |
| September                                | 504.40       | 497.40                      | 582.20              | 559.60                    | 675.40                       | 737.30              | 711.60                    | 283.20                       | 397.20              | 411.80                    |

SOURCE: Social Security Administration, Master Beneficiary Record, 100 percent data.

NOTES: Data are for the end of the specified month.

Some Social Security beneficiaries are entitled to more than one type of benefit. In most cases, they are dually entitled to a worker benefit and a higher spouse or widow(er) benefit. If both benefits are financed from the same trust fund, the beneficiary is usually counted only once in the statistics, as a retired-worker or a disabled-worker beneficiary, and the benefit amount recorded is the larger amount associated with the auxiliary benefit. If the benefits are paid from different trust funds the beneficiary is counted twice, and the respective benefit amounts are recorded for each type of benefit.

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**Table 7.**  
**All OASDI benefits, by program and type of benefit, September 2006–September 2007**

| Month                                    | Total,<br>OASDI <sup>a</sup> | OASI                           |            |           | Subtotal, DI <sup>c</sup> |
|--|------------------------------|--------------------------------|------------|-----------|---------------------------|
|  |                              | Subtotal,<br>OASI <sup>b</sup> | Retirement | Survivors |                           |
| <i>Number (thousands)</i>                |                              |                                |            |           |                           |
| 2006                                     |                              |                                |            |           |                           |
| September                                | 379                          | 258                            | 187        | 71        | 122                       |
| October                                  | 385                          | 262                            | 187        | 74        | 124                       |
| November                                 | 398                          | 276                            | 199        | 77        | 122                       |
| December                                 | 283                          | 204                            | 150        | 54        | 79                        |
| 2007                                     |                              |                                |            |           |                           |
| January                                  | 550                          | 455                            | 371        | 84        | 95                        |
| February                                 | 402                          | 299                            | 224        | 75        | 103                       |
| March                                    | 420                          | 303                            | 218        | 85        | 116                       |
| April                                    | 409                          | 290                            | 211        | 79        | 119                       |
| May                                      | 369                          | 259                            | 191        | 68        | 109                       |
| June                                     | 393                          | 280                            | 205        | 75        | 113                       |
| July                                     | 394                          | 285                            | 206        | 79        | 109                       |
| August                                   | 368                          | 265                            | 192        | 73        | 104                       |
| September                                | 354                          | 239                            | 158        | 81        | 115                       |
| <i>Average monthly benefit (dollars)</i> |                              |                                |            |           |                           |
| 2006                                     |                              |                                |            |           |                           |
| September                                | 796.90                       | 839.40                         | 881.80     | 727.10    | 706.90                    |
| October                                  | 801.10                       | 841.10                         | 884.10     | 732.50    | 716.70                    |
| November                                 | 798.60                       | 844.50                         | 888.70     | 730.80    | 694.80                    |
| December                                 | 854.30                       | 899.30                         | 944.50     | 774.50    | 737.90                    |
| 2007                                     |                              |                                |            |           |                           |
| January                                  | 985.40                       | 1,035.10                       | 1,078.00   | 844.50    | 746.30                    |
| February                                 | 869.20                       | 911.00                         | 956.80     | 774.90    | 747.30                    |
| March                                    | 842.90                       | 890.30                         | 938.40     | 766.70    | 719.20                    |
| April                                    | 839.90                       | 885.20                         | 930.90     | 763.20    | 729.00                    |
| May                                      | 838.50                       | 884.60                         | 927.80     | 764.10    | 728.70                    |
| June                                     | 853.10                       | 896.10                         | 939.60     | 777.80    | 746.30                    |
| July                                     | 861.90                       | 903.70                         | 952.40     | 775.80    | 753.10                    |
| August                                   | 855.30                       | 896.10                         | 942.50     | 773.80    | 751.00                    |
| September                                | 807.90                       | 839.80                         | 876.40     | 768.40    | 741.60                    |

SOURCE: Social Security Administration, Master Beneficiary Record, 100 percent data.

NOTES: Award actions are processed not only for new beneficiaries but also for persons already on the rolls whose benefits in one category are terminated but who become entitled to another type of benefit. These actions are called conversions. Benefit conversions are included in the data, except for conversions of benefits for children of retired workers to benefits for children of deceased workers upon the death of the worker.

Beginning with April 2007, individuals whose benefits have been reinstated under the Expedited Reinstatement provisions are no longer included. Therefore, the statistics reported in this publication differ from those reported by the Office of the Chief Actuary.

a. Includes special age-72 beneficiaries.

Excludes a number of Railroad Retirement beneficiaries who would have been eligible for Social Security benefits had they applied. The reason they have not applied is that receipt of a Social Security benefit would reduce their Railroad Retirement benefit by a like amount. The number of Railroad Retirement beneficiaries who would be eligible for a Social Security benefit if they applied is not available, but is estimated to be less than 100,000.

b. Benefits paid from the OASI trust fund to retired workers and their spouses and children and to all survivors.

c. Benefits paid from the DI trust fund to disabled workers and their spouses and children.

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**Table 8.**  
**OASI retirement benefits, by type of beneficiary, September 2006–September 2007**

| Month                                    | All beneficiaries | Retired workers | Spouses | Children |
|--|-------------------|-----------------|---------|----------|
| <i>Number (thousands)</i>                |                   |                 |         |          |
| 2006                                     |                   |                 |         |          |
| September                                | 187               | 151             | 25      | 10       |
| October                                  | 187               | 151             | 25      | 11       |
| November                                 | 199               | 162             | 26      | 11       |
| December                                 | 150               | 125             | 17      | 8        |
| 2007                                     |                   |                 |         |          |
| January                                  | 371               | 320             | 38      | 13       |
| February                                 | 224               | 183             | 29      | 11       |
| March                                    | 218               | 177             | 29      | 12       |
| April                                    | 211               | 172             | 28      | 12       |
| May                                      | 191               | 156             | 25      | 10       |
| June                                     | 205               | 168             | 26      | 10       |
| July                                     | 206               | 171             | 26      | 9        |
| August                                   | 192               | 158             | 25      | 9        |
| September                                | 158               | 126             | 23      | 9        |
| <i>Average monthly benefit (dollars)</i> |                   |                 |         |          |
| 2006                                     |                   |                 |         |          |
| September                                | 881.80            | 996.90          | 375.30  | 454.80   |
| October                                  | 884.10            | 1,000.80        | 374.70  | 458.30   |
| November                                 | 888.70            | 1,002.10        | 373.00  | 458.60   |
| December                                 | 944.50            | 1,045.80        | 400.50  | 515.70   |
| 2007                                     |                   |                 |         |          |
| January                                  | 1,078.00          | 1,182.80        | 381.10  | 528.90   |
| February                                 | 956.80            | 1,077.10        | 374.40  | 506.60   |
| March                                    | 938.40            | 1,061.40        | 368.00  | 496.80   |
| April                                    | 930.90            | 1,050.20        | 374.90  | 483.20   |
| May                                      | 927.80            | 1,047.10        | 372.10  | 478.40   |
| June                                     | 939.60            | 1,054.70        | 380.90  | 480.40   |
| July                                     | 952.40            | 1,065.70        | 386.70  | 480.50   |
| August                                   | 942.50            | 1,054.10        | 397.10  | 493.90   |
| September                                | 876.40            | 995.60          | 380.80  | 487.10   |

SOURCE: Social Security Administration, Master Beneficiary Record, 100 percent data.

NOTES: Award actions are processed not only for new beneficiaries but also for persons already on the rolls whose benefits in one category are terminated but who become entitled to another type of benefit. These actions are called conversions. Benefit conversions are included in the data, except for conversions of benefits for children of retired workers to benefits for children of deceased workers upon the death of the worker.

Beginning with April 2007, individuals whose benefits have been reinstated under the Expedited Reinstatement provisions are no longer included. Therefore, the statistics reported in this publication differ from those reported by the Office of the Chief Actuary.

CONTACT: Kevin Kulzer (410) 965-5366 or oasdi.monthly@ssa.gov for further information.

**Table 9.**  
**OASI survivors benefits, by type of beneficiary, September 2006–September 2007**

| Month                                    | All beneficiaries | Widow(er)s<br>and parents <sup>a</sup> | Widowed mothers<br>and fathers <sup>b</sup> | Children |
|--|-------------------|--|---|----------|
| <i>Number (thousands)</i>                |                   |  |   |          |
| 2006                                     |                   |  |   |          |
| September                                | 71                | 40                                     | 3   | 27       |
| October                                  | 74                | 42                                     | 3   | 29       |
| November                                 | 77                | 44                                     | 3   | 30       |
| December                                 | 54                | 30                                     | 2   | 22       |
| 2007                                     |                   |  |   |          |
| January                                  | 84                | 54                                     | 3   | 27       |
| February                                 | 75                | 45                                     | 3   | 27       |
| March                                    | 85                | 50                                     | 3   | 32       |
| April                                    | 79                | 47                                     | 3   | 29       |
| May                                      | 68                | 40                                     | 3   | 25       |
| June                                     | 75                | 48                                     | 3   | 24       |
| July                                     | 79                | 52                                     | 3   | 24       |
| August                                   | 73                | 47                                     | 3   | 23       |
| September                                | 81                | 49                                     | 3   | 28       |
| <i>Average monthly benefit (dollars)</i> |                   |  |   |          |
| 2006                                     |                   |  |   |          |
| September                                | 727.10            | 779.40                                 | 702.70                                      | 653.70   |
| October                                  | 732.50            | 785.20                                 | 707.80                                      | 659.00   |
| November                                 | 730.80            | 780.70                                 | 716.60                                      | 659.80   |
| December                                 | 774.50            | 826.50                                 | 736.20                                      | 707.90   |
| 2007                                     |                   |  |   |          |
| January                                  | 844.50            | 920.80                                 | 739.00                                      | 700.70   |
| February                                 | 774.90            | 827.70                                 | 726.30                                      | 693.20   |
| March                                    | 766.70            | 816.40                                 | 741.80                                      | 691.00   |
| April                                    | 763.20            | 813.80                                 | 735.20                                      | 685.80   |
| May                                      | 764.10            | 817.00                                 | 728.10                                      | 683.10   |
| June                                     | 777.80            | 836.20                                 | 735.00                                      | 666.60   |
| July                                     | 775.80            | 827.00                                 | 750.30                                      | 667.80   |
| August                                   | 773.80            | 822.80                                 | 749.30                                      | 679.30   |
| September                                | 768.40            | 821.00                                 | 735.20                                      | 680.10   |

SOURCE: Social Security Administration, Master Beneficiary Record, 100 percent data.

NOTES: Award actions are processed not only for new beneficiaries but also for persons already on the rolls whose benefits in one category are terminated but who become entitled to another type of benefit. These actions are called conversions. Benefit conversions are included in the data, except for conversions of benefits for children of retired workers to benefits for children of deceased workers upon the death of the worker.

Beginning with April 2007, individuals whose benefits have been reinstated under the Expedited Reinstatement provisions are no longer included. Therefore, the statistics reported in this publication differ from those reported by the Office of the Chief Actuary.

- Includes nondisabled widow(er)s aged 60 or older, disabled widow(er)s aged 50 or older, and dependent parents of deceased workers aged 62 or older.
- A widow(er) or surviving divorced parent caring for the entitled child of a deceased worker who is under age 16 or is disabled.

CONTACT: Kevin Kulzer (410) 965-5366 or oasdi.monthly@ssa.gov for further information.

**Table 10.**  
**DI benefits, by type of beneficiary, September 2006–September 2007**

| Month                                    | All beneficiaries | Disabled workers | Spouses | Children |
|--|-------------------|------------------|---------|----------|
| <i>Number (thousands)</i>                |                   |                  |         |          |
| 2006                                     |                   |                  |         |          |
| September                                | 122               | 74               | 4       | 43       |
| October                                  | 124               | 76               | 4       | 43       |
| November                                 | 122               | 73               | 4       | 45       |
| December                                 | 79                | 48               | 3       | 28       |
| 2007                                     |                   |                  |         |          |
| January                                  | 95                | 59               | 4       | 32       |
| February                                 | 103               | 64               | 4       | 35       |
| March                                    | 116               | 70               | 4       | 43       |
| April                                    | 119               | 72               | 4       | 42       |
| May                                      | 109               | 66               | 4       | 39       |
| June                                     | 113               | 71               | 4       | 38       |
| July                                     | 109               | 70               | 4       | 36       |
| August                                   | 104               | 66               | 4       | 34       |
| September                                | 115               | 71               | 4       | 40       |
| <i>Average monthly benefit (dollars)</i> |                   |                  |         |          |
| 2006                                     |                   |                  |         |          |
| September                                | 706.90            | 1,001.00         | 263.50  | 252.60   |
| October                                  | 716.70            | 1,001.80         | 256.40  | 259.80   |
| November                                 | 694.80            | 986.40           | 256.30  | 257.50   |
| December                                 | 737.90            | 1,025.20         | 271.30  | 291.30   |
| 2007                                     |                   |                  |         |          |
| January                                  | 746.30            | 1,028.30         | 273.90  | 290.40   |
| February                                 | 747.30            | 1,023.20         | 275.10  | 282.50   |
| March                                    | 719.20            | 1,018.60         | 266.50  | 272.60   |
| April                                    | 729.00            | 1,025.90         | 267.80  | 268.70   |
| May                                      | 728.70            | 1,026.80         | 268.70  | 265.50   |
| June                                     | 746.30            | 1,030.70         | 269.10  | 263.20   |
| July                                     | 753.10            | 1,032.00         | 269.00  | 265.20   |
| August                                   | 751.00            | 1,030.30         | 270.00  | 268.40   |
| September                                | 741.60            | 1,033.70         | 270.00  | 272.90   |

SOURCE: Social Security Administration, Master Beneficiary Record, 100 percent data.

NOTES: Award actions are processed not only for new beneficiaries but also for persons already on the rolls whose benefits in one category are terminated but who become entitled to another type of benefit. These actions are called conversions and are included in the data.

Beginning with April 2007, individuals whose benefits have been reinstated under the Expedited Reinstatement provisions are no longer included. Therefore, the statistics reported in this publication differ from those reported by the Office of the Chief Actuary.

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***Supplemental Security Income  
September 2006–September 2007***

**SSI Federally Administered Payments**

Table 1. Recipients (by type of payment), total payments, and average monthly payment

Table 2. Recipients, by eligibility category and age

Table 3. Recipients of federal payment only, by eligibility category and age

Table 4. Recipients of federal payment and state supplementation, by eligibility category and age

Table 5. Recipients of state supplementation only, by eligibility category and age

Table 6. Total payments, by eligibility category, age, and source of payment

Table 7. Average monthly payment, by eligibility category, age, and source of payment

**Awards of SSI Federally Administered Payments**

Table 8. All awards, by eligibility category and age of awardee

The SSI Monthly Statistics are also available at [http://www.socialsecurity.gov/policy/docs/statcomps/ssi\\_monthly/index.html](http://www.socialsecurity.gov/policy/docs/statcomps/ssi_monthly/index.html).

**SSI Federally Administered Payments**

**Table 1.**  
**Recipients (by type of payment), total payments, and average monthly payment,**  
**September 2006–September 2007**

| Month       | Number of recipients |                      |   |                            | Total payments <sup>a</sup><br>(thousands of dollars) | Average monthly payment <sup>b</sup><br>(dollars) |
|-------------|----------------------|----------------------|---|----------------------------|---|---|
|             | Total                | Federal payment only | Federal payment and state supplementation | State supplementation only |   |   |
| <b>2006</b> |                      |                      |   |                            |   |   |
| September   | 7,228,911            | 4,960,544            | 1,972,575                                 | 295,792                    | 3,433,854   | 453.50  |
| October     | 7,267,526            | 4,989,972            | 1,980,985                                 | 296,569                    | 3,486,391   | 452.80  |
| November    | 7,243,035            | 4,971,677            | 1,974,043                                 | 297,315                    | 3,391,912   | 452.40  |
| December    | 7,235,583            | 4,967,004            | 1,971,686                                 | 296,893                    | 3,499,569   | 454.80  |
| <b>2007</b> |                      |                      |   |                            |   |   |
| January     | 7,278,616            | 5,001,693            | 1,982,999                                 | 293,924                    | 3,558,160   | 466.70  |
| February    | 7,289,764            | 5,010,594            | 1,985,260                                 | 293,910                    | 3,566,305   | 465.60  |
| March       | 7,286,345            | 5,007,291            | 1,984,953                                 | 294,101                    | 3,591,053   | 468.00  |
| April       | 7,324,892            | 5,035,947            | 1,994,253                                 | 294,692                    | 3,654,231   | 467.80  |
| May         | 7,312,686            | 5,026,449            | 1,990,699                                 | 295,538                    | 3,599,541   | 466.60  |
| June        | 7,314,027            | 5,025,486            | 1,992,529                                 | 296,012                    | 3,625,876   | 467.70  |
| July        | 7,346,122            | 5,048,420            | 2,000,801                                 | 296,901                    | 3,665,925   | 466.70  |
| August      | 7,335,942            | 5,039,337            | 1,999,139                                 | 297,466                    | 3,645,801   | 466.70  |
| September   | 7,355,596            | 5,053,437            | 2,004,028                                 | 298,131                    | 3,647,862   | 467.10  |

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for the end of the specified month.

a. Includes retroactive payments.

b. Excludes retroactive payments.

CONTACT: Art Kahn (410) 965-0186 or ssi.monthly@ssa.gov for further information.

**SSI Federally Administered Payments**

**Table 2.**  
**Recipients, by eligibility category and age, September 2006–September 2007**

| Month       | Total     | Eligibility category |                    | Age       |           |             |
|-------------|-----------|----------------------|--------------------|-----------|-----------|-------------|
|             |           | Aged                 | Blind and disabled | Under 18  | 18–64     | 65 or older |
| <b>2006</b> |           |                      |                    |           |           |             |
| September   | 7,228,911 | 1,218,015            | 6,010,896          | 1,071,936 | 4,146,873 | 2,010,102   |
| October     | 7,267,526 | 1,219,883            | 6,047,643          | 1,083,657 | 4,170,339 | 2,013,530   |
| November    | 7,243,035 | 1,218,298            | 6,024,737          | 1,078,270 | 4,153,086 | 2,011,679   |
| December    | 7,235,583 | 1,211,656            | 6,023,927          | 1,078,977 | 4,152,130 | 2,004,476   |
| <b>2007</b> |           |                      |                    |           |           |             |
| January     | 7,278,616 | 1,215,149            | 6,063,467          | 1,090,447 | 4,176,511 | 2,011,658   |
| February    | 7,289,764 | 1,213,573            | 6,076,191          | 1,095,222 | 4,183,744 | 2,010,798   |
| March       | 7,286,345 | 1,211,572            | 6,074,773          | 1,091,061 | 4,184,852 | 2,010,432   |
| April       | 7,324,892 | 1,212,155            | 6,112,737          | 1,105,058 | 4,206,926 | 2,012,908   |
| May         | 7,312,686 | 1,209,531            | 6,103,155          | 1,103,451 | 4,199,204 | 2,010,031   |
| June        | 7,314,027 | 1,208,766            | 6,105,261          | 1,102,812 | 4,200,005 | 2,011,210   |
| July        | 7,346,122 | 1,210,261            | 6,135,861          | 1,112,881 | 4,217,655 | 2,015,586   |
| August      | 7,335,942 | 1,209,640            | 6,126,302          | 1,106,044 | 4,213,591 | 2,016,307   |
| September   | 7,355,596 | 1,210,708            | 6,144,888          | 1,115,317 | 4,220,609 | 2,019,670   |

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for the end of the specified month.

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**SSI Federally Administered Payments**

**Table 3.**  
**Recipients of federal payment only, by eligibility category and age, September 2006–September 2007**

| Month       | Total     | Eligibility category |                    | Age      |           |             |
|-------------|-----------|----------------------|--------------------|----------|-----------|-------------|
|             |           | Aged                 | Blind and disabled | Under 18 | 18–64     | 65 or older |
| <b>2006</b> |           |                      |                    |          |           |             |
| September   | 4,960,544 | 626,529              | 4,334,015          | 852,006  | 2,983,867 | 1,124,671   |
| October     | 4,989,972 | 627,002              | 4,362,970          | 862,107  | 3,001,785 | 1,126,080   |
| November    | 4,971,677 | 625,660              | 4,346,017          | 858,145  | 2,989,092 | 1,124,440   |
| December    | 4,967,004 | 621,081              | 4,345,923          | 858,917  | 2,989,045 | 1,119,042   |
| <b>2007</b> |           |                      |                    |          |           |             |
| January     | 5,001,693 | 623,434              | 4,378,259          | 868,577  | 3,009,150 | 1,123,966   |
| February    | 5,010,594 | 621,840              | 4,388,754          | 872,744  | 3,015,191 | 1,122,659   |
| March       | 5,007,291 | 620,032              | 4,387,259          | 869,362  | 3,016,061 | 1,121,868   |
| April       | 5,035,947 | 619,544              | 4,416,403          | 880,820  | 3,032,833 | 1,122,294   |
| May         | 5,026,449 | 617,410              | 4,409,039          | 879,684  | 3,027,104 | 1,119,661   |
| June        | 5,025,486 | 616,075              | 4,409,411          | 879,074  | 3,027,082 | 1,119,330   |
| July        | 5,048,420 | 616,218              | 4,432,202          | 887,162  | 3,040,043 | 1,121,215   |
| August      | 5,039,337 | 615,064              | 4,424,273          | 881,580  | 3,037,019 | 1,120,738   |
| September   | 5,053,437 | 614,705              | 4,438,732          | 889,387  | 3,042,388 | 1,121,662   |

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for the end of the specified month.

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**Table 4.**  
**Recipients of federal payment and state supplementation, by eligibility category and age,**  
**September 2006–September 2007**

| Month     | Total     | Eligibility category |                    | Age      |           |             |
|-----------|-----------|----------------------|--------------------|----------|-----------|-------------|
|           |           | Aged                 | Blind and disabled | Under 18 | 18–64     | 65 or older |
| 2006      |           |                      |                    |          |           |             |
| September | 1,972,575 | 489,569              | 1,483,006          | 217,346  | 1,015,385 | 739,844     |
| October   | 1,980,985 | 490,748              | 1,490,237          | 218,977  | 1,020,390 | 741,618     |
| November  | 1,974,043 | 490,349              | 1,483,694          | 217,498  | 1,015,406 | 741,139     |
| December  | 1,971,686 | 487,844              | 1,483,842          | 217,437  | 1,015,345 | 738,904     |
| 2007      |           |                      |                    |          |           |             |
| January   | 1,982,999 | 490,703              | 1,492,296          | 219,437  | 1,020,363 | 743,199     |
| February  | 1,985,260 | 490,351              | 1,494,909          | 220,176  | 1,021,869 | 743,215     |
| March     | 1,984,953 | 490,150              | 1,494,803          | 219,375  | 1,021,950 | 743,628     |
| April     | 1,994,253 | 491,065              | 1,503,188          | 222,006  | 1,026,855 | 745,392     |
| May       | 1,990,699 | 490,614              | 1,500,085          | 221,421  | 1,024,130 | 745,148     |
| June      | 1,992,529 | 491,001              | 1,501,528          | 221,409  | 1,024,834 | 746,286     |
| July      | 2,000,801 | 492,067              | 1,508,734          | 223,385  | 1,029,047 | 748,369     |
| August    | 1,999,139 | 492,359              | 1,506,780          | 222,026  | 1,027,961 | 749,152     |
| September | 2,004,028 | 493,533              | 1,510,495          | 223,619  | 1,029,251 | 751,158     |

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for the end of the specified month.

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**SSI Federally Administered Payments**

**Table 5.**  
**Recipients of state supplementation only, by eligibility category and age, September 2006–September 2007**

| Month       | Total   | Eligibility category |                    | Age      |         |             |
|-------------|---------|----------------------|--------------------|----------|---------|-------------|
|             |         | Aged                 | Blind and disabled | Under 18 | 18–64   | 65 or older |
| <b>2006</b> |         |                      |                    |          |         |             |
| September   | 295,792 | 101,917              | 193,875            | 2,584    | 147,621 | 145,587     |
| October     | 296,569 | 102,133              | 194,436            | 2,573    | 148,164 | 145,832     |
| November    | 297,315 | 102,289              | 195,026            | 2,627    | 148,588 | 146,100     |
| December    | 296,893 | 102,731              | 194,162            | 2,623    | 147,740 | 146,530     |
| <b>2007</b> |         |                      |                    |          |         |             |
| January     | 293,924 | 101,012              | 192,912            | 2,433    | 146,998 | 144,493     |
| February    | 293,910 | 101,382              | 192,528            | 2,302    | 146,684 | 144,924     |
| March       | 294,101 | 101,390              | 192,711            | 2,324    | 146,841 | 144,936     |
| April       | 294,692 | 101,546              | 193,146            | 2,232    | 147,238 | 145,222     |
| May         | 295,538 | 101,507              | 194,031            | 2,346    | 147,970 | 145,222     |
| June        | 296,012 | 101,690              | 194,322            | 2,329    | 148,089 | 145,594     |
| July        | 296,901 | 101,976              | 194,925            | 2,334    | 148,565 | 146,002     |
| August      | 297,466 | 102,217              | 195,249            | 2,438    | 148,611 | 146,417     |
| September   | 298,131 | 102,470              | 195,661            | 2,311    | 148,970 | 146,850     |

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for the end of the specified month.

CONTACT: Art Kahn (410) 965-0186 or ssi.monthly@ssa.gov for further information.

**Table 6.**  
**Total payments, by eligibility category, age, and source of payment, September 2006–September 2007**  
**(in thousands of dollars)**

| Month                   | Total     | Eligibility category |                    | Age      |           |             |
|-------------------------|-----------|----------------------|--------------------|----------|-----------|-------------|
|                         |           | Aged                 | Blind and disabled | Under 18 | 18–64     | 65 or older |
| <b>All sources</b>      |           |                      |                    |          |           |             |
| 2006                    |           |                      |                    |          |           |             |
| September               | 3,433,854 | 452,851              | 2,981,003          | 597,952  | 2,084,138 | 751,765     |
| October                 | 3,486,391 | 454,275              | 3,032,117          | 606,005  | 2,126,343 | 754,043     |
| November                | 3,391,912 | 453,480              | 2,938,432          | 590,079  | 2,048,628 | 753,206     |
| December                | 3,499,569 | 453,529              | 3,046,040          | 610,874  | 2,134,335 | 754,360     |
| 2007                    |           |                      |                    |          |           |             |
| January                 | 3,558,160 | 465,101              | 3,093,060          | 626,086  | 2,156,920 | 775,154     |
| February                | 3,566,305 | 463,945              | 3,102,360          | 627,032  | 2,165,106 | 774,167     |
| March                   | 3,591,053 | 464,588              | 3,126,465          | 633,981  | 2,180,788 | 776,284     |
| April                   | 3,654,231 | 465,465              | 3,188,766          | 646,540  | 2,229,592 | 778,099     |
| May                     | 3,599,541 | 463,653              | 3,135,888          | 632,874  | 2,190,607 | 776,060     |
| June                    | 3,625,876 | 463,582              | 3,162,294          | 640,116  | 2,208,751 | 777,009     |
| July                    | 3,665,925 | 464,155              | 3,201,770          | 647,979  | 2,239,112 | 778,834     |
| August                  | 3,645,801 | 463,747              | 3,182,055          | 639,088  | 2,227,682 | 779,031     |
| September               | 3,647,862 | 464,238              | 3,183,624          | 645,054  | 2,222,415 | 780,394     |
| <b>Federal payments</b> |           |                      |                    |          |           |             |
| 2006                    |           |                      |                    |          |           |             |
| September               | 3,069,498 | 351,679              | 2,717,819          | 580,209  | 1,889,573 | 599,716     |
| October                 | 3,117,929 | 352,689              | 2,765,240          | 587,957  | 1,928,534 | 601,439     |
| November                | 3,025,977 | 351,190              | 2,674,787          | 572,508  | 1,854,097 | 599,373     |
| December                | 3,130,803 | 351,915              | 2,778,887          | 592,877  | 1,936,436 | 601,490     |
| 2007                    |           |                      |                    |          |           |             |
| January                 | 3,189,631 | 363,156              | 2,826,474          | 608,101  | 1,959,936 | 621,594     |
| February                | 3,196,882 | 361,966              | 2,834,916          | 608,997  | 1,967,385 | 620,499     |
| March                   | 3,220,577 | 362,448              | 2,858,129          | 615,963  | 1,982,334 | 622,281     |
| April                   | 3,279,825 | 363,048              | 2,916,777          | 628,175  | 2,028,018 | 623,632     |
| May                     | 3,228,738 | 361,547              | 2,867,191          | 614,754  | 1,992,028 | 621,956     |
| June                    | 3,253,877 | 361,379              | 2,892,498          | 621,978  | 2,009,269 | 622,630     |
| July                    | 3,291,113 | 361,617              | 2,929,496          | 629,561  | 2,037,639 | 623,913     |
| August                  | 3,271,808 | 361,166              | 2,910,642          | 620,948  | 2,026,925 | 623,935     |
| September               | 3,273,668 | 361,412              | 2,912,256          | 626,806  | 2,021,979 | 624,884     |

(Continued)

**SSI Federally Administered Payments**

**Table 6.  
Continued**

| Month                        | Total   | Eligibility category |                    | Age      |         |             |
|------------------------------|---------|----------------------|--------------------|----------|---------|-------------|
|                              |         | Aged                 | Blind and disabled | Under 18 | 18-64   | 65 or older |
| <b>State supplementation</b> |         |                      |                    |          |         |             |
| 2006                         |         |                      |                    |          |         |             |
| September                    | 364,356 | 101,172              | 263,184            | 17,743   | 194,565 | 152,049     |
| October                      | 368,462 | 101,585              | 266,877            | 18,049   | 197,810 | 152,604     |
| November                     | 365,935 | 102,290              | 263,645            | 17,571   | 194,531 | 153,833     |
| December                     | 368,767 | 101,614              | 267,153            | 17,997   | 197,900 | 152,870     |
| 2007                         |         |                      |                    |          |         |             |
| January                      | 368,530 | 101,944              | 266,585            | 17,985   | 196,985 | 153,560     |
| February                     | 369,423 | 101,979              | 267,444            | 18,035   | 197,721 | 153,668     |
| March                        | 370,476 | 102,140              | 268,336            | 18,018   | 198,455 | 154,004     |
| April                        | 374,406 | 102,417              | 271,989            | 18,364   | 201,574 | 154,467     |
| May                          | 370,803 | 102,106              | 268,698            | 18,120   | 198,580 | 154,103     |
| June                         | 371,999 | 102,203              | 269,796            | 18,138   | 199,482 | 154,379     |
| July                         | 374,812 | 102,538              | 272,273            | 18,418   | 201,473 | 154,921     |
| August                       | 373,994 | 102,581              | 271,413            | 18,140   | 200,758 | 155,096     |
| September                    | 374,194 | 102,826              | 271,368            | 18,248   | 200,436 | 155,510     |

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for the end of the specified month and include retroactive payments.

CONTACT: Art Kahn (410) 965-0186 or ssi.monthly@ssa.gov for further information.

SSI Federally Administered Payments

**Table 7.**  
**Average monthly payment, by eligibility category, age, and source of payment,**  
**September 2006–September 2007 (in dollars)**

| Month                   | Total  | Eligibility category |                    | Age      |        |             |
|-------------------------|--------|----------------------|--------------------|----------|--------|-------------|
|                         |        | Aged                 | Blind and disabled | Under 18 | 18–64  | 65 or older |
| <b>All sources</b>      |        |                      |                    |          |        |             |
| 2006                    |        |                      |                    |          |        |             |
| September               | 453.50 | 371.40               | 470.20             | 542.90   | 469.30 | 373.50      |
| October                 | 452.80 | 371.60               | 469.20             | 538.50   | 468.80 | 373.70      |
| November                | 452.40 | 371.70               | 468.70             | 536.50   | 468.70 | 373.80      |
| December                | 454.80 | 373.10               | 471.20             | 541.90   | 470.60 | 375.10      |
| 2007                    |        |                      |                    |          |        |             |
| January                 | 466.70 | 382.10               | 483.60             | 555.60   | 482.90 | 384.60      |
| February                | 465.60 | 381.30               | 482.40             | 552.20   | 482.00 | 384.00      |
| March                   | 468.00 | 382.40               | 485.00             | 561.10   | 483.60 | 385.00      |
| April                   | 467.80 | 382.60               | 484.70             | 559.80   | 483.10 | 385.20      |
| May                     | 466.60 | 382.60               | 483.30             | 554.20   | 482.60 | 385.30      |
| June                    | 467.70 | 382.70               | 484.50             | 560.10   | 482.90 | 385.40      |
| July                    | 466.70 | 382.50               | 483.30             | 555.90   | 482.10 | 385.20      |
| August                  | 466.70 | 382.70               | 483.40             | 556.10   | 482.30 | 385.40      |
| September               | 467.10 | 382.70               | 483.70             | 557.00   | 482.40 | 385.50      |
| <b>Federal payments</b> |        |                      |                    |          |        |             |
| 2006                    |        |                      |                    |          |        |             |
| September               | 421.80 | 314.90               | 442.30             | 528.50   | 440.20 | 321.40      |
| October                 | 420.90 | 314.90               | 441.20             | 524.00   | 439.60 | 321.30      |
| November                | 420.60 | 314.90               | 440.80             | 522.10   | 439.60 | 321.40      |
| December                | 423.10 | 316.50               | 443.40             | 527.40   | 441.60 | 322.90      |
| 2007                    |        |                      |                    |          |        |             |
| January                 | 435.10 | 325.60               | 455.90             | 541.00   | 454.10 | 332.40      |
| February                | 434.10 | 324.80               | 454.70             | 537.60   | 453.30 | 331.90      |
| March                   | 436.50 | 325.80               | 457.40             | 546.60   | 454.80 | 332.80      |
| April                   | 436.30 | 325.90               | 457.10             | 545.20   | 454.40 | 332.90      |
| May                     | 435.20 | 325.80               | 455.70             | 539.70   | 453.90 | 333.00      |
| June                    | 436.30 | 325.90               | 457.00             | 545.60   | 454.20 | 333.10      |
| July                    | 435.20 | 325.60               | 455.70             | 541.40   | 453.40 | 332.90      |
| August                  | 435.30 | 325.70               | 455.80             | 541.70   | 453.60 | 333.00      |
| September               | 435.70 | 325.70               | 456.20             | 542.60   | 453.80 | 333.00      |

(Continued)

**Table 7.**  
**Average monthly payment, by eligibility category, age, and source of payment,**  
**September 2006–September 2007 (in dollars)**

| Month                        | Total  | Eligibility category |                    | Age      |        |             |
|------------------------------|--------|----------------------|--------------------|----------|--------|-------------|
|                              |        | Aged                 | Blind and disabled | Under 18 | 18–64  | 65 or older |
| <b>State supplementation</b> |        |                      |                    |          |        |             |
| 2006                         |        |                      |                    |          |        |             |
| September                    | 155.80 | 170.00               | 150.80             | 76.90    | 159.40 | 170.70      |
| October                      | 156.20 | 170.50               | 151.10             | 76.90    | 159.80 | 171.20      |
| November                     | 156.20 | 170.60               | 151.20             | 77.00    | 159.70 | 171.20      |
| December                     | 156.20 | 170.60               | 151.20             | 77.00    | 159.80 | 171.30      |
| 2007                         |        |                      |                    |          |        |             |
| January                      | 156.60 | 171.10               | 151.40             | 76.90    | 160.10 | 171.90      |
| February                     | 156.40 | 171.00               | 151.30             | 76.80    | 159.90 | 171.80      |
| March                        | 156.70 | 171.30               | 151.50             | 77.00    | 160.10 | 172.00      |
| April                        | 156.50 | 171.20               | 151.30             | 76.80    | 160.00 | 171.90      |
| May                          | 156.50 | 171.30               | 151.30             | 76.90    | 160.00 | 172.00      |
| June                         | 156.50 | 171.30               | 151.30             | 76.80    | 160.00 | 172.00      |
| July                         | 156.40 | 171.30               | 151.20             | 76.60    | 159.90 | 172.00      |
| August                       | 156.50 | 171.40               | 151.30             | 76.70    | 159.90 | 172.00      |
| September                    | 156.40 | 171.40               | 151.20             | 76.60    | 159.80 | 172.00      |

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for the end of the specified month and exclude retroactive payments.

CONTACT: Art Kahn (410) 965-0186 or ssi.monthly@ssa.gov for further information.

**Awards of SSI Federally Administered Payments**

**Table 8.**  
**All awards, by eligibility category and age of awardee, September 2006–September 2007**

| Month                  | Total  | Eligibility category |                    | Age      |        |             |
|------------------------|--------|----------------------|--------------------|----------|--------|-------------|
|                        |        | Aged                 | Blind and disabled | Under 18 | 18–64  | 65 or older |
| <b>2006</b>            |        |                      |                    |          |        |             |
| September              | 72,069 | 9,445                | 62,624             | 14,340   | 48,141 | 9,588       |
| October                | 79,983 | 8,831                | 71,152             | 16,256   | 54,769 | 8,958       |
| November               | 53,859 | 8,411                | 45,448             | 10,575   | 34,781 | 8,503       |
| December               | 73,498 | 8,126                | 65,372             | 15,180   | 50,072 | 8,246       |
| <b>2007</b>            |        |                      |                    |          |        |             |
| January                | 64,483 | 7,710                | 56,773             | 13,353   | 43,313 | 7,817       |
| February               | 65,894 | 9,005                | 56,889             | 13,341   | 43,419 | 9,134       |
| March                  | 66,217 | 7,828                | 58,389             | 13,593   | 44,664 | 7,960       |
| April                  | 79,277 | 9,019                | 70,258             | 16,293   | 53,812 | 9,172       |
| May                    | 69,940 | 8,553                | 61,387             | 14,191   | 47,071 | 8,678       |
| June                   | 65,342 | 8,489                | 56,853             | 13,366   | 43,362 | 8,614       |
| July                   | 75,000 | 8,638                | 66,362             | 15,935   | 50,285 | 8,780       |
| August <sup>a</sup>    | 69,989 | 8,829                | 61,160             | 13,840   | 47,188 | 8,961       |
| September <sup>a</sup> | 68,887 | 9,130                | 59,757             | 13,355   | 46,283 | 9,249       |

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for all awards made during the specified month.

a. Preliminary data. In the first 2 months after their release, numbers may be adjusted to reflect returned checks.

CONTACT: Art Kahn (410) 965-0186 or ssi.monthly@ssa.gov for further information.



# Instructions for Authors Writing for the “Perspectives” Section of the *Social Security Bulletin*

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The *Social Security Bulletin's* “Perspectives” section welcomes rigorous, clearly written manuscripts from persons in the social and behavioral sciences, as well as from those in the humanities and in other professions, particularly manuscripts that may have implications for social policy. We are especially interested in receiving scholarly research that contributes to an improved understanding of the Old-Age and Survivors Insurance (OASI), Disability Insurance (DI), and the Supplemental Security Income (SSI) programs and issues related to their beneficiaries and contributors. We will interpret these subjects broadly and will also consider for publication articles on other countries’ social insurance experiences.

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Therefore, when writing for the *Bulletin*, keep in mind that your audience will include readers who may not be familiar with existing academic literature. Present your material in a clear manner, without jargon. Articles should be factual and analytical, not polemical. You may include technical or mathematical exposition where relevant: findings and conclusions, however, must be written in a straightforward, nontechnical style. And the relevance of your conclusions to public policy should be explicitly stated.

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**Title Page.** Include the title of the article, the name of the author(s), the author’s affiliation(s), and the author’s address; include the name, postal address, e-mail address, fax, and telephone number of the person to whom correspondence should be directed. The Acknowledgments paragraph should also be on this page. In a separate paragraph within the acknowledgments, reveal the source of any financial or research support received in connection with the preparation of the article. Because manuscripts will undergo a double-blind review, remove all other identifying information from the rest of the manuscript before it is submitted. (Once the manuscript has been accepted for publication, you will be responsible for reinserting self-identifying citations and references when you prepare the manuscript for final submission.)

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**Text.** The actual text of the article should begin on a new page. The text should be prepared in Microsoft Word, printed in 12-point type, and double-spaced. Account for all table, chart, and graphic citations, but do not include actual placement within the text.

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## Program Highlights, 2007

### Old-Age, Survivors, and Disability Insurance

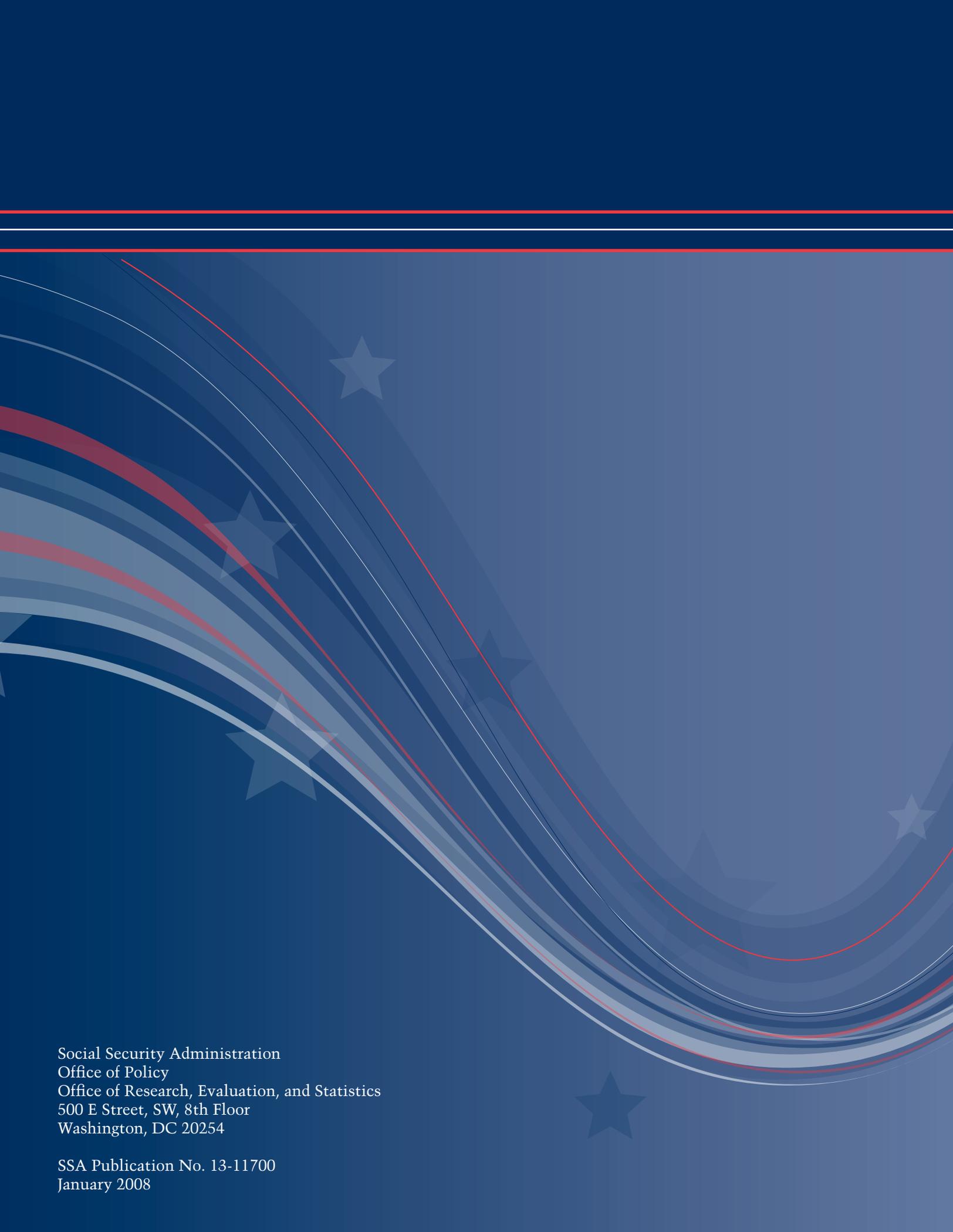
|  |                  |
|--|------------------|
| Tax Rates for Employers and Employees, Each <sup>a</sup> (percent)                               |                  |
| Social Security  |                  |
| Old-Age and Survivors Insurance  | 5.30             |
| Disability Insurance   | 0.90             |
| Subtotal, Social Security  | 6.20             |
| Medicare (Hospital Insurance)  | 1.45             |
| Total  | 7.65             |
| Maximum Taxable Earnings (dollars)   |                  |
| Social Security  | 97,500           |
| Medicare (Hospital Insurance)  | No limit         |
| Earnings Required for Work Credits (dollars)   |                  |
| One Work Credit (One Quarter of Coverage)  | 1,000            |
| Maximum of Four Credits a Year   | 4,000            |
| Earnings Test Annual Exempt Amount (dollars)   |                  |
| Under Full Retirement Age for Entire Year  | 12,960           |
| For Months Before Reaching Full Retirement Age<br>in Given Year                                  | 34,440           |
| Beginning with Month Reaching Full Retirement Age  | No limit         |
| Maximum Monthly Social Security Benefit for<br>Workers Retiring at Full Retirement Age (dollars) |                  |
|  | 2,116            |
| Full Retirement Age for Those Who Turn 65 in 2007  | 65 and 10 months |
| Cost-of-Living Adjustment (percent)  | 3.3              |

a. Self-employed persons pay a total of 15.3 percent—10.6 percent for OASI, 1.8 percent for DI, and 2.9 percent for Medicare.

### Supplemental Security Income

|   |       |
|---|-------|
| Monthly Federal Payment Standard (dollars)                                      |       |
| Individual  | 623   |
| Couple  | 934   |
| Cost-of-Living Adjustment (percent)   | 3.3   |
| Resource Limits (dollars)   |       |
| Individual  | 2,000 |
| Couple  | 3,000 |
| Monthly Income Exclusions (dollars)   |       |
| Earned Income <sup>a</sup>  | 65    |
| Unearned Income   | 20    |
| Substantial Gainful Activity (SGA) Level for<br>the Nonblind Disabled (dollars) |       |
|   | 900   |

a. The earned income exclusion consists of the first \$65 of monthly earnings, plus one-half of remaining earnings.



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