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Sample Loss and Survey Bias in Estimates of Social Security Beneficiaries: A Tale of Two Surveys

Final Report

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EXECUTIVE SUMMARY

The Office of Research, Evaluation, and Statistics (ORES) within the Social Security Administration (SSA) relies on data from the Census Bureau's Survey of Income and Program Participation (SIPP) and the Current Population Survey (CPS) as a source of information on current and potential beneficiaries served by the programs that SSA administers. In addition to using these surveys directly, SSA links administrative records to the records of survey respondents who provide Social Security numbers (SSNs). These matched data expand the content of the SIPP and CPS files to fields available only through SSA and Internal Revenue Service (IRS) records—such as lifetime earnings histories and aspects of SSA program participation not collected in the surveys. The matched data also allow SSA to conduct validation studies of survey items that are duplicated in the administrative records or to substitute the generally more accurate administrative items for their survey counterparts, thereby creating composite records.

The continuing usefulness of these surveys for this wide range of applications is being undercut by growing sample loss. One source of sample loss is survey nonresponse, which for the SIPP includes both initial nonresponse and attrition. Both have increased since the early 1990s. Another source of sample loss affecting SSA's linked data is the reluctance of respondents to provide their SSNs, which prevents the Census Bureau from attempting a match between the survey records and the SSA and IRS administrative records. The growing reluctance of respondents to provide their SSNs is reflected in a declining match rate in the CPS. In the SIPP, match rates plunged between the 1996 and 2001 panels when the request for SSNs was moved from the initial or "first wave" interview, which is conducted in person, to the second wave interview, which is frequently conducted by telephone. Growth in both forms of sample loss raises questions about the continued representativeness of linked data from the two surveys—or even unmatched survey data from a three or four-year SIPP panel.

This report examines sample loss in the SIPP and CPS with an eye to telling SSA what to do about it. Successive chapters document the growth in sample loss due to nonresponse and nonmatching; provide estimates of match bias and attrition bias; examine discontinuities between consecutive SIPP panels in estimates of beneficiary characteristics as well as poverty rates for the broader population; and examine the comparative strengths of the SIPP and CPS in describing the economic well-being of the population in general and elderly and lower-income persons in particular. A concluding chapter summarizes our major findings and presents a number of recommendations that follow from these findings.

Sample Loss in the SIPP and CPS

When measured in terms of the proportion of wave 1 respondents who were missing any months of data and, therefore, could not be assigned full panel weights, attrition got no worse between the 1996 and 2001 panels. Among older social security beneficiaries and older persons generally, attrition of this type was actually lower in the 2001 panel than the 1996 panel. Furthermore, because of an operational change to retain sample members who missed consecutive interviews, the proportion of the wave 1 sample failing to complete the wave 9 interview declined markedly between the 1996 and 2001 panels, to the point where the 2001

panel resembled the 1993 panel more closely than it resembled the 1996 panel with respect to this alternative measure of attrition. These developments imply that the upturn in attrition between the 1993 and 1996 panels did not continue through the 2001 panel. If concerns about increased attrition were a major factor in SSA staff's reluctance to use the 2001 panel, these concerns would appear to be misplaced.

Unit nonresponse to the CPS ASEC supplement has grown very modestly since the mid-1990s, but it is important to divide the unit nonresponse into two components. In ASEC months, CPS households are first administered the monthly labor force questionnaire followed by the ASEC supplement. About one in nine households that complete the brief labor force questionnaire do not complete the supplement. Historically, nonresponse to the monthly labor force survey has been very low. Noninterview rates deviated little from 4 to 5 percent of eligible households between 1960 and 1994 but then began a gradual rise coinciding with the introduction of a redesigned survey instrument using computer-assisted interviewing. By March 1997 the noninterview rate had reached 7 percent, but it rose by just another percentage point over the next seven years. Over this same period, nonresponse to the March supplement among respondents to the labor force survey ranged between 8 and 9 percent, with no distinct trend, yielding a combined sample loss that varied between 14 and 16 percent of the eligible households. Defined in this way, overall nonresponse to the March or ASEC supplement is 2 to 3 percentage points higher than nonresponse to the first wave of the 2001 SIPP panel.

While attrition may not have grown between the 1996 and 2001 panels, the rate at which respondents could be matched to administrative records dropped sharply. Excluding the 15 percent of respondents who were dropped from the sample after the first wave, only 60 percent of the initial respondents to the 2001 panel could be matched to administrative records compared to 83 percent of the respondents to the 1996 panel. When combined with the sample loss due to attrition, this meant that only 50 percent of the 2001 panel had both matched data and survey data through wave 9, and only 42 percent had both matched data and full panel data. In the 1996 panel these figures were 62 percent and 55 percent, respectively.

Between March 1996 and March 2001, match rates in the CPS declined from 84 percent to 74 percent over the sample as a whole, but they remained close to 90 percent for children under 15, who were matched using a methodology that was implemented for all CPS and SIPP respondents in 2006. As a result, we anticipate match rates approaching 90 percent for CPS ASEC supplements in 2006 and later and for the next SIPP panel. While this is a positive development, the possibility that the new record linkage methods might introduce new forms of match bias must be acknowledged and examined when data linked with the new methodology become available.

Match Bias in the SIPP and CPS

While the proportion of SIPP respondents who could be matched to SSA administrative records dropped precipitously between the 1996 and 2001 panels, this appears to have occurred without increasing the bias of the matched sample. When we calibrated the matched and total sample members who responded to both waves 1 and 2 of the 2001 panel to the same wave 1 demographic controls that the Census Bureau used to calibrate the full wave 1 sample, we found little evidence of bias in estimates of a wide range of characteristics, much less an increase relative to the 1996 panel. Analyses of three illustrative applications of matched data defined by

SSA provided stronger evidence of bias in the matched subsample. Simulations of elderly SSI eligibility based on income alone as well as income combined with assets showed somewhat fewer persons eligible for SSI in the matched sample than the full sample. Yet even here we found no evidence that this possible bias increased between the 1996 and 2001 panels. Furthermore, it is possible that the differences we observe between the matched subsample and full sample can be attributed to full sample members who lack SSNS and, therefore, are not included in the population that the matched sample represents. If so, the differences do not reflect bias in the matched subsample at all but, rather, our inability to identify and restrict our comparisons to the "matchable universe" within the full sample.

Our more limited evaluation of match bias in the CPS focused on retired workers and obtained results for that subpopulation that were very similar to what we found with the SIPP. For personal, family and household demographic characteristics the matched subsample mirrored the full sample. Small differences were observed for economic characteristics, with matched cases having slightly more income and being marginally less reliant on their Social Security benefits. These findings held when we restricted our analysis to those respondents who completed the annual supplement (as opposed to those whose data from the supplement were entirely imputed). As with the SIPP, the small bias that we detected would appear to be inconsequential for SSA's potential uses of CPS data.

Attrition Bias in the SIPP

Comparative analysis of SIPP full panel and cross-sectional sample estimates of a wide variety of characteristics measured in wave 1 of the 1996 and 2001 SIPP panels for the total population and four subpopulations of Social Security and SSI beneficiaries provides evidence that the Census Bureau's full panel weights are highly effective in eliminating the effects of differential attrition on the full panel estimates of cross-sectional characteristics. Further analysis using subsamples of the full panel and cross-sectional samples matched to IRS earnings records and Social Security benefit records provides further evidence that the full panel sample with the Census Bureau's panel weights can support largely unbiased estimates for characteristics and subpopulations of interest to SSA analysts.

Because it applies to the entire population, rather than just the elderly subpopulation with its lower attrition rates, and because it was not limited to a single point in time, our analysis of IRS annual earnings data records matched to SIPP records is particularly compelling. For the 2001 SIPP panel we found no important differences between the full panel and cross-sectional sample estimates of the proportion of persons with positive earnings, by age, in any of the years 1999 through 2003. Differences in the distribution of earnings among those with positive earnings were generally small and rarely statistically significant. Where there appeared to be a pattern in these differences, among persons 55 to 64, it ran counter to what is known about differential attrition by income—that is, the panel sample had somewhat lower rather than higher earnings than the cross-sectional sample. Estimates of gross changes in earnings also differed little between the full panel and wave 1/wave 2 cross-sectional samples.

We replicated this analysis on the 1996 panel so that we could include cross-sectional sample members who attrited between the first and second waves. As with the 2001 panel we found no important differences in the proportion of persons with positive earnings in any of the five years we examined (1994 through 1998). There was stronger evidence of differential

earnings between the full panel and cross-sectional samples, particularly at ages 55 and up, but the percentile distributions of earnings lined up quite closely through the 80th percentile. At higher income levels the full panel underestimated the number of higher earners (yielded lower percentile values) relative to the cross-sectional sample, but these differences are beyond the level where SSA policy analysts would focus most of their attention.

Estimates of the number and selected characteristics of Social Security and SSI beneficiaries show only small differences between the full panel and cross-sectional samples for both panels. This is particularly striking for estimates of transitions into and out of Social Security beneficiary categories, estimates of payment amounts for retired and disabled workers, and estimates of the proportion of Social Security and SSI beneficiaries' personal income that is provided by their respective programs.

Cross-sectional Representativeness over Time

In order to maintain full cross-sectional representativeness, a panel survey requires two elements in its design. First, the survey must have a viable mechanism for adding new sample members to represent additions to the population from which the panel was originally selected. Second, the survey must have an effective means of compensating for nonrandom attrition. If a panel survey lacks either of these elements, it will become increasingly less representative of the full population over time. New entrants are represented in the SIPP only to the extent that they move in with persons who were included in the SIPP universe at the start of a panel. In addition, the cross-sectional weights are calibrated to population totals that include new entrants. Our research indicates that the SIPP longitudinal weights incorporate a highly effective adjustment for nonrandom attrition, but our findings do not address the adequacy of the cross-sectional weights, which cannot be evaluated by the same methods. We note, however, that the attrition adjustment that is incorporated into the cross-sectional weights is very similar in design to the attrition adjustment that works so well in the longitudinal weights.

Estimates of non-income-related characteristics of disabled workers and SSI recipients show high levels of consistency across the 1996 and 2001 SIPP panels, but this is not true of poverty estimates, which show marked discontinuities that vary by age. These discontinuities have been attributed to the cumulative effects of attrition within a panel. While only one of the last three SIPP panels shows declining poverty estimates over time, each panel has started with a markedly higher poverty rate than the previous one. Upon exploring this phenomenon further, however, we find that we can attribute a substantial portion of the discontinuity to a tendency for SIPP panels since 1996 to obtain high estimates of poverty in the first wave, which then decline sharply in the second wave. Much of the remaining discontinuity could be due to a phenomenon which has been largely overlooked in assessments of the representativeness of panel surveys over time—namely, the bias arising from the general lack of representation of new entrants to the population. Our evidence of the potential bias resulting from this source is indirect at best, but we establish the more general point that the new entrants who are excluded from a panel over time constitute a distinctive group that is large enough and potentially unique enough to induce marked shifts in poverty when they are suddenly represented in full by a new panel.

Measurement of Economic Well-being in the SIPP and CPS

A comparison of SIPP and CPS estimates of the proportion of their personal and family income that retired workers obtain from Social Security raises serious concerns about using the CPS to examine issues related to reliance on Social Security income and, more generally, the sources of financial support among retired workers. The SIPP's greater effectiveness in capturing income from multiple sources among Social Security retired workers demonstrates an important way in which the SIPP appears to provide a better vehicle for policy analysis.

Across all age groups—but particularly children and the elderly—the SIPP has continued to identify more sources of family income than the CPS. Among the elderly, the frequency of multiple reported sources grew over time in the SIPP but not the CPS. At younger ages, however, the frequency of multiple reported sources declined over time in both surveys, although somewhat more so in the CPS than the SIPP.

With respect to income amounts, however, the SIPP has lost ground to the CPS since the initial SIPP panel. From 1993 on, the most significant losses have occurred in the bottom income quintile, where the SIPP has historically performed best relative to the CPS. In 1993 the SIPP captured 20 percent more aggregate income from this income than did the CPS. By 2002, however, the SIPP's advantage had fallen to just 6 percent. These losses were distributed across most income sources. Only for SSI, welfare and pensions did the SIPP maintain or improve its advantage.

The transition to computer-based data collection appears to have been more beneficial to the CPS than the SIPP. The CPS estimate of total income improved by nearly 4 percentage points relative to a benchmark in the year that computer-assisted interviewing was introduced (reference year 1993), and it remained slightly above that level over the next three years. The SIPP estimate of total income improved by a percentage point when computer-assisted interviewing was introduced in 1996, but a Census Bureau evaluation ends in that year, so we cannot tell if the SIPP maintained that level of coverage relative to the benchmark.

The proportion of income that is imputed rose substantially in both surveys between 1993 and 2003. Three sources of income in the SIPP experienced particularly large increases. While there was evidence of a deterioration in the quality of imputations for one or two of these sources in the SIPP, differences in imputation outcomes between the two surveys do not appear to have played a role in the decline in the SIPP's capture of income among families in the bottom quintile of the income distribution.

The SIPP's reduced capture of income among lower-income families, relative to the CPS, appears to have had an impact on comparative poverty estimates between the two surveys. Over the whole population, the SIPP's annual estimates of the proportion of persons in poverty, which once ran 2 to 3 percentage points below the corresponding CPS poverty rates, converged on the CPS rates between the 1992 and 2001 panels. Differences between the two surveys vary by age group, however, and nowhere are the differences more troubling than among the elderly, where trends not only across the two surveys but within each survey's estimates over time.

Finally, a comparison of poverty trends in the two surveys raises a number of concerns about the use of either survey for the measurement of trends in economic well-being. These

concerns are strongest for estimates of the elderly, which makes these findings particularly important for staff in ORES who rely on the SIPP—and, to a lesser extent, the CPS—for a wide range of applications.

Recommendations

Finding no evidence that attrition bias or match bias in the linking of administrative records to survey data has increased in the SIPP since the 1996 panel, we recommend that prospective users of SIPP data at SSA not hesitate to use the 2001 SIPP panel any more than they would hesitate to use the 1996 panel. Neither attrition bias nor match bias provides any more reason to avoid the 2001 panel than the earlier panel.

While we did not find it necessary to develop complex adjustment methodologies to reduce attrition bias and match bias to acceptable levels, we do recommend that SSA analysts make use of the calibration procedures that we applied to reweight matched subsamples of SIPP and CPS records to agree with full sample population totals by selected demographic characteristics. We recommend that SSA analysts apply the calibration procedures to their matched samples before applying any additional controls to meet program administrative totals. Despite the reduced match rate in the 2001 SIPP panel, SSA analysts should not combine matched and unmatched records for analyses of program beneficiaries. The matched records, when properly calibrated, will have sufficiently low bias—certainly no worse than the 1996 panel.

With the Census Bureau undertaking a complete re-engineering of the SIPP, this report is especially timely. It is critically important that the Census Bureau and SIPP users who might be moved to influence the design of the new SIPP understand the current survey's strengths and limitations, or the re-engineering effort will not achieve all that it could achieve. Indeed, if the re-engineering focuses on the wrong features, the new survey could prove to be decidedly inferior to the current survey.

Two areas of concern stand out. The first is the wave 1 effect that we documented in Chapter V. Only the Census Bureau is in a position to explore this further, as the source of the problem may lie in field operations or the survey processing that occurs after the data have come in from the field. If the Census Bureau moves to an annual interview in the re-engineered SIPP, it is critical that the initial interview not reflect the same problem that we are seeing with the wave 1 SIPP interview.

The second area of concern stems from the divergent trends in elderly poverty portrayed in the last chapter. The findings presented therein challenge users to reassess their reliance on either the CPS or the SIPP to measure the material well-being of the elderly either cross-sectionally or over time. We recommend that ORES encourage the Census Bureau to undertake an assessment of how these two surveys can present such inconsistent pictures of changes in elderly poverty over time. Only with a better understanding of the causes of these inconsistencies can users of either survey feel confidence in the information that they are able to extract from SIPP or CPS data.

I. INTRODUCTION

The Office of Research, Evaluation, and Statistics (ORES) within the Social Security Administration (SSA) relies on data from the Census Bureau's Survey of Income and Program Participation (SIPP) and the Current Population Survey (CPS) as a source of information on current and potential beneficiaries served by the programs that SSA administers. For instance, SSA uses the SIPP to obtain detailed, monthly information on employment and income plus periodic data on assets and selected types of expenditures. The SIPP also provides information on monthly participation in programs in addition to the SSA programs, Old Age, Survivors and Disability Income (OASDI) and Supplemental Security Income (SSI). From the CPS, SSA obtains point-in-time information on labor force participation as well as data on annual income and program participation for the previous calendar year.

In addition to using these surveys directly, SSA links administrative records to the records of survey respondents who provide Social Security numbers (SSNs). These matched data expand the content of the SIPP and CPS files to fields available only through SSA and Internal Revenue Service (IRS) records—such as lifetime earnings histories and aspects of SSA program participation not collected in the surveys. The matched data also allow SSA to conduct validation studies of survey items that are duplicated in the administrative records or to substitute the generally more accurate administrative items for their survey counterparts, thereby creating composite records. SSA publishes tabulations based on these matched data, using a mix of items from the survey and administrative records.

An additional application of SIPP data is the construction of microsimulation models that build on the survey files by merging them with data from other sources through "statistical matching" and other mechanisms designed to combine information from the records of similar

people rather than the same people. These models include the Modeling Income in the Near Term (MINT) model, used to project retirement income and the well-being of retirees, and an SSI model, used to simulate income and asset eligibility for the program. SSA uses these models for a variety of analyses extending beyond descriptive tabulations of current or past beneficiary characteristics.

The continuing usefulness of these surveys for this wide range of applications is being undercut by growing sample loss. One source of sample loss is survey nonresponse, which for the SIPP includes both initial nonresponse and attrition.[1] Since the early 1990s, initial response rates in the SIPP have fallen and attrition has risen—the precise magnitudes of these changes being among the topics addressed in this report. CPS response rates have dropped as well, reflecting a secular decline in survey response rates rather than something peculiar to these two surveys. Another source of sample loss affecting SSA's linked data is the reluctance of respondents to provide their SSNs, which prevents the Census Bureau from attempting a match between the survey records and the SSA and IRS administrative records. The growing reluctance of respondents to provide their SSNs is reflected in a declining match rate in the CPS. In the SIPP, match rates plunged between the 1996 and 2001 panels when the request for SSNs was moved from the initial or "first wave" interview, which is conducted in person, to the second wave interview, which is frequently conducted by telephone. While respondents' growing reluctance to provide SSNs was undoubtedly a factor, clearly other forces were at work.

Growth in both forms of sample loss raises questions about the continued representativeness of linked data from the two surveys—or even unmatched survey data from a three or four-year SIPP panel. These concerns are not merely theoretical. In 2001, SSA initiated publication of an

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[1] Attrition occurs in the CPS as well as the SIPP because the monthly labor force survey has a longitudinal design. Because SSA does not make use of the longitudinal features of the CPS sample, however, attrition is not differentiated from initial nonresponse as a source of sample loss.

annual series of descriptive tabulations on disabled workers and SSI recipients, based on SIPP data matched to administrative records. Five years later, SSA ceased publication of the tables, citing growing attrition in the SIPP and increasingly lower match rates to administrative records. ORES staff have also shown a general reluctance to use the 2001 SIPP panel for their analyses of SSA beneficiaries.

In using data from the SIPP and CPS, SSA relies on the Census Bureau's nonresponse adjustments to compensate for initial nonresponse and attrition. While these adjustments may be adequate for general population analysis, SSA is appropriately concerned about their effectiveness for the subpopulations in which the agency is interested—that is, its current and prospective beneficiaries and the comparison groups used in analyses. Furthermore, the Census Bureau's own research on attrition has demonstrated the presence of bias in the data with respect to characteristics of interest to SSA—including employment, earnings, and the incidence of low income (see Weinberg 2003 for a summary).

For the matched data, there are no Census Bureau adjustments that can be used to compensate for possible bias. In using the matched data, therefore, SSA must apply its own adjustments, or use none. SSA has routinely applied ratio adjustments to the weights of its matched records in order to hit program enrollment totals, from which rough estimates of institutionalized beneficiaries have been removed. Typically the control totals are broken down by broad age groups but little else. When match rates are high the ratio adjustments are small, so the simplicity of the adjustments raises few concerns. With the sharp decline in matched rates for the 2001 panel, SSA is less confident in the adequacy of its adjustments. For its published estimates of the characteristics of disability insurance and SSI beneficiaries from the 2001 SIPP panel, SSA used a combination of matched and unmatched records rather than using matched records alone. For the matched records, beneficiary status and monthly benefits from

administrative records were substituted for the values reported in the SIPP. For the unmatched records the values reported in the survey were retained. SSA performed no adjustment to the survey weights, as no records were excluded. Post-stratification to administrative controls was deemed inappropriate in light of the mix of survey and administrative data used to identify program participants.

The objectives of this project as defined by SSA were: (1) to develop a set of adjustments to SIPP and CPS data to compensate for the bias introduced by sample loss from attrition and nonmatching and (2) to provide guidance to SSA analysts, in the form of a manual and computer programs, on the application of these adjustments and use of the adjusted data. In determining the extent of the bias that needed correction and in developing the adjustments to achieve these corrections, we were to focus on the 2001 SIPP panel and the CPS files covering the same reference period.

Since the award of the contract that funded this project, there have been two very significant developments at the Census Bureau with a direct bearing on sample loss in the SIPP and CPS. While these developments did not alter the project objectives nor diminish their importance, they do have implications for how SSA will use the project findings after the next several years. The first development concerns the methods used to match administrative records to survey data and the procedures employed to obtain respondent consent to the match. The second development concerns the fate of the SIPP.

The Census Bureau has taken steps to address the growing reluctance of its survey respondents to provide SSNs. The Census Bureau has abandoned its strategy of asking for SSNs in favor of a less intrusive approach that makes use of the Bureau's improved ability to link survey respondents with administrative records using only the names, demographic information, and addresses obtained by the interviewers. Respondents are given an opportunity to opt out of

consenting to such linkages by returning a post card. According to Census Bureau staff, early experience with the CPS suggests that comparatively few respondents are returning the postcard while those who implicitly consent to the linkage are being matched at a rate approaching or exceeding 90 percent. The new approach was implemented in the CPS in January 2006 and is being used in the American Community Survey as well. The 2004 SIPP panel started with the old approach, which may have produced an even lower match rate then it did with the 2001 panel, but the new approach was introduced in the second or third year of the panel.

Information provided by SSA indicates that the Census Bureau was able to match 78 percent of the 2004 panel sample to SSA administrative records. Roughly 10 percent of the respondents refused to allow their survey data to be matched to administrative records, meaning that the Census Bureau was able to match 87 percent of the records of those for whom permission was granted. We have no details on how permission was requested or how respondents' prior reporting of SSNs—or refusal to do so—may have affected their responses. Nor do we know how the request for permission will be handled in future SIPP panels. Nevertheless, this change has two implications for SSA. First, the low match rate achieved in the 2001 panel is not likely to be repeated. If the CPS experience is relevant, the match rate in the 2008 panel could approach 90 percent. Second, because the match bias of the new methodology may not be the same as that of the old methodology, even when both approach 90 percent, SSA will want to repeat our analyses of match bias on surveys that employ the new methodology.

As noted, the second development involves the very fate of the SIPP. In February 2006, the Census Bureau announced that it was terminating SIPP data collection after September 2006, which meant that the 8th wave of the 2004 SIPP panel would be the final SIPP wave (U.S. Census Bureau 2006). The SIPP was to be replaced be an alternative data collection system, the Data on Economic Well-being System (DEWS), which would rely on event history calendar

methods to collect a mix of monthly and annual data from annual interviews with a panel that would run for three to four years. With only a third as many interviews per year as the current SIPP design, DEWS could be conducted at a fraction of the annual cost of the present survey.

Over the next several months the Census Bureau decided to continue core data collection for a reduced 2004 panel sample—about one-half the number of households that were being interviewed at the time. Early in 2007, the Census Bureau announced that it was reversing its earlier decision to terminate the SIPP before demonstrating that its replacement could collect adequate monthly data. A new SIPP panel will be launched in 2008, and if the funding is sufficient the new panel will include a sample of 45,000 households and will collect not only the core data but all of the topical modules, which were suspended when the 2004 panel was extended with a reduced sample. This new panel will continue to use the old data capture system and processing system rather than the new systems that are being developed for the replacement survey—the "re-engineered SIPP." But the availability of a new panel will provide users with a continuing flow of SIPP data until the new survey is ready to take the field, and the new method of linking administrative records to survey data could yield a match rate that exceeds what was achieved with the 1996 panel. From SSA's perspective, the continuation of SIPP in its present form through 2010 or 2011 will ensure that the findings from this project remain useful to the agency for many years into the future.

In our research to document the bias from attrition and nonmatching, so that we could develop compensating adjustments, we obtained findings that ran counter to what we and SSA had expected. First, attrition in the SIPP is much lower for Social Security beneficiaries population than for the population as a whole. Second, by all measures, attrition in the 2001 SIPP panel is lower than in the 1996 panel and, for cross-sectional estimates, due to a change in survey operations, not appreciably greater than in the 1993 panel. Third, while the match rate to

administrative records plummeted between the 1996 and 2001 panels, this appears to have occurred with no increase in bias. Fourth, calibrating the matched SIPP sample to the same population totals to which the Census Bureau calibrates the full sample provides a very satisfactory correction for match bias in both panels. Fifth, the Census Bureau's longitudinal weights provide a very good correction for attrition bias in the full panel sample, which is used for longitudinal analysis.

Because these findings are both unexpected and important, we have devoted much of this report to documenting our results. At the same time, however, these basic findings do not address one area of concern that was flagged by SSA and that played into the SSA decision to suspend publication of the SIPP-based tabulations on disabled workers and SSI recipients. SIPP users tracking particular statistics or sets of statistics across panels sometimes find inconsistencies or discontinuities between panels. Are these discontinuities a residual effect of attrition, for which the SIPP cross-sectional weights do not provide as effective an adjustment as the longitudinal weights? Or do they have some other cause, which may or may not be amenable to the types of corrections that fall within the scope of this project? Alternatively, would some of the applications for which these discontinuities are a particularly serious problem be better served by data from the CPS, despite the SIPP's acknowledged superiority in collecting particular kinds of data from the subpopulations that are of interest to SSA analysts? We have devoted the later chapters in this report to addressing these discontinuities and their possible causes and to updating our base of information on the income data collected in the SIPP and the CPS. All of our findings tie in to the recommendations presented in the final chapter.

This report is organized as follows. Chapter II documents the growth in sample loss due to nonresponse and nonmatching in both the SIPP and CPS since the early 1990s. Chapter III investigates how the decline in match rates in these two surveys has affected the bias of the

matched subsample. Chapter IV assesses the extent of attrition bias in the SIPP, using both survey data and matched administrative records. Chapter V examines discontinuities between consecutive SIPP panels in estimates of beneficiary characteristics and poverty rates for the broader population and considers the potential contribution of factors other than attrition. Chapter VI examines the comparative strengths of the SIPP and CPS in describing the economic well-being of the population in general and elderly and lower-income persons in particular. Chapter VII summarizes our conclusions and presents a number of recommendations for SSA that follow from these conclusions. Appendix A provides instructions on how SSA analysts would use the computer programs provided separately to replicate our calibration methodology to reweight matched samples to represent the full population. Appendix B details the methods used to calculate standard errors for the SIPP. Appendices C through H present extensive sets of detailed tables that document many of the empirical findings on matched sample bias and attrition bias that are summarized in the main text.

II. SAMPLE LOSS IN THE SIPP AND CPS

For SSA's purposes and the purposes of this project, sample loss includes both survey nonresponse (unit nonresponse at the household and person levels) and failures to link survey respondents to SSA and IRS administrative records. This chapter documents the growth in SIPP and CPS sample loss that motivated ORES to request the research that is detailed in this report and provides additional analysis of sample loss among subpopulations of interest to SSA.

A. NONRESPONSE

In our discussion of sample loss due to nonresponse we begin by examining several aspects of nonresponse in the SIPP, including trends since the early 1990s. We then turn our attention to the CPS, which has much simpler patterns of sample loss due to nonresponse.

1. Nonresponse in the SIPP

In examining nonresponse as a source of sample loss in the SIPP, we begin with an overview of the SIPP design and then consider the forms of nonresponse that are observed in the data. Following that, we present estimates of sample loss due to nonresponse and then look more closely at sample retention and attrition. We conclude this examination of nonresponse in the SIPP by looking at attrition among Social Security beneficiaries and how it has changed since the early 1990s.

a. An Overview of the SIPP Design

The SIPP is a panel survey in which respondents are interviewed every four months (a wave) and asked an extensive set of questions about their sources and monthly amounts of income, labor force activity, participation in a number of government benefit programs, health insurance coverage, and a variety of other recurring topics. Topical modules appended to the core interviews are used to obtain data on special topics—such as assets and debts, child care

expenses, and employment history—on a less frequent basis. Prior to a redesign in 1996, SIPP panels ran about two-and-a-half years, with new panels being started nearly every year. By pooling the samples from overlapping panels, analysts could effectively double the sample size and, over time, obtain estimates with a relatively constant sample loss bias. With the redesign, the overlapping panels were replaced with larger, abutted panels that ran for three to four years. With the extended duration, however, attrition became a more serious problem, and the elimination of the overlapping panel design removed one important option with which analysts could compensate for attrition bias.

The analysis presented in this report focuses on the 2001 SIPP panel, which is the most recent panel to be completed. The 2001 panel ran for nine waves, with the first round of interviews beginning in February 2001 and the final round of interviews concluding in January 2004. Because the sample is divided into four rotation groups, which are interviewed on a staggered schedule, the full 36-month reference period varies. The months shared in common across rotation groups are January 2001 through September 2003. Reference periods for the four rotation groups ranged from October 2000 through September 2003 to January 2001 through December 2003.

b. Forms of Nonresponse in the SIPP

In the SIPP, sample loss due to survey nonresponse occurs through several mechanisms. First, there is initial nonresponse by eligible households, which has been growing in household surveys generally but turned up sharply between the 1996 and 2001 SIPP panels, as we show below. Second, there is attrition—that is, respondents become *permanent* nonrespondents despite remaining within the universe that the SIPP is intended to represent. Third, there is additional nonresponse in each survey wave by sample members who could not be interviewed in that wave but have not left the survey permanently (that is, they have not been classified as

attriters). An implication of this additional form of nonresponse is that there are respondents who completed the first and last interviews but have one or more missing waves of data and, therefore, would not qualify to receive full panel (longitudinal) weights.

If the Census Bureau conducts an interview with a sample household, it *collects* (directly or through proxy) or *imputes* data for every person living in the household in each month of the reference period for that wave. Consequently, there are never partial data for a household-month. Household members who leave the household during the reference period will have data for the months that they were present (proxy or imputed). Data for the months that they are away must be collected by interviewing their separate households at their new locations. If interviews cannot be conducted with any members of a separate household, the missing data are *not* imputed, but another interview with that household will be attempted in the next wave. This can create data gaps for persons whose original households were interviewed in every wave. However, the primary source of data gaps for non-attriters is missed interviews with their regular households. It should be noted, too, that some respondents to the first wave leave the SIPP universe—by dying, becoming institutionalized, joining the military (and/or moving into military-only housing), or moving abroad.[1] Leaving the survey universe is not counted as attrition

c. Estimates of Sample Loss Due to Nonresponse

Because the SIPP collects data for entire households, the Census Bureau defines and measures SIPP sample loss at the household level. Responding households are compared to a projection of the number of original, eligible sample households that remain eligible, with an allowance for households splitting into multiple households. Table II.1 documents the Census

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[1] The Census Bureau also classifies the small number of sample members who move outside of interview range—although still within the U.S. boundaries—as leaving the eligible universe even though they remain part of the population that the survey represents.

Bureau's calculations of the incremental and cumulative sample loss rates, by interview wave, for the 1992, 1993, 1996 and 2001 SIPP panels.[2] First, we note that while the initial household nonresponse rate declined slightly over the first three panels, it jumped nearly 5 percentage points, from 8.4 percent to 13.3 percent, between the 1996 and 2001 panels. Second, the incremental sample loss rate by wave rose between the 1993 and 1996 panels for every wave from two through seven, yielding a cumulative sample loss rate that was six percentage points higher and remained that way through wave nine, the last wave of the 1993 panel. At the end of wave nine the cumulative sample loss rate for the 1996 panel stood at 32.8 percent.versus 26.9 percent in the earlier panel. The 1996 panel ran three additional waves, but the cumulative sample loss grew by less than 3 percentage points—to 35.5 percent—over those three waves.

Concerned with the rising rates of attrition, the Census Bureau modified its strategy with respect to attempting interviews with households that missed consecutive waves. Previously, households with known addresses that missed two consecutive interviews were dropped from further attempts. This practice contributed to sample loss because some of the households that were dropped from the active sample would have consented to subsequent interviews. With the 2001 panel, the Census Bureau changed this policy and continued to attempt interviews with such households. The first wave that could have been affected by this policy was wave four. The impact of the new policy is immediately evident in the incremental sample loss rate, which dropped to 1.2 percent from a level of 3.1 percent in the 1996 panel. By wave seven the cumulative sample loss had dropped below that of the 1996 panel, meaning that the Census Bureau had retained enough sample members to offset both the 5 percentage point higher wave

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[2] All tables appear at the end of the chapter.

one nonresponse rate and higher attrition between waves one and two.[3] This difference in cumulative sample loss persisted through the end of the 2001 panel. Interestingly, the incremental sample loss rates between waves eight and nine were essentially identical across the four panels at about 1.5 percent.

It is important to understand that leaving the survey universe does not constitute attrition and is not counted as sample loss in Table II.1. People who die, become institutionalized, join the military, or move overseas are no longer counted among the eligible population. Indeed, sample members who leave the SIPP universe can receive full panel weights as long as they responded to the survey for all of the waves that they were eligible. The treatment of universe-leavers is important to acknowledge because people who leave the survey universe tend to have very different characteristics than those who remain. These characteristics vary with the reason for leaving the universe. Death and institutionalization are primarily associated with the elderly and persons with disabilities. Military enlistment is concentrated among young and generally lower income men. Outmigration can occur for a variety of reasons and may be temporary or permanent, but a disproportionate share of those who leave the SIPP universe are young and Hispanic, which suggests that outmigration by former immigrants is significant (Czajka and Sykes 2006). Confusing exits from the universe with attrition can lead to erroneous inferences about the magnitude and composition of attrition bias—a point noted by Vaughan and Scheuren (2002) in their study of longitudinal attrition in the Survey of Program Dynamics (SPD).

d. Sample Retention and Attrition

We can measure the magnitude of attrition over the full length of a SIPP panel in different ways, depending on whether our perspective is longitudinal or cross-sectional. We focus on the

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[3] For budgetary reasons, about 15 percent of the households that completed the wave one interview were dropped from the panel. These households were selected at random, and their removal from the sample does not affect the statistics reported in Table II.1.

number of people qualifying to receive longitudinal weights as a measure of sample retention. Specifically, we focus on the full panel weight that is assigned to panel members who responded to all interviews for which they remained in the survey universe. To qualify for a full panel weight, a sample member must be present in the common month of the first wave (January 2001 for the 2001 panel) and have data for all subsequent months through the final reference month of the last wave unless the sample member left the survey universe. Sample members who leave the SIPP universe can qualify for full panel weights if they have data for all of the months in which they remained in the survey universe.[4] Sample members can complete the final interview of a SIPP panel without qualifying for full panel weights, owing to missed interviews along the way. By completing the final interview, or any given interview, respondents qualify for cross-sectional weights for the reference period covered by that interview. The proportion of SIPP panel members qualifying for cross-sectional weights for both the initial wave and final wave is considerably higher than the proportion qualifying for full panel weights.

The upper panel of Table II.2 presents unweighted sample counts and unweighted proportions of wave 1 sample members retained through the end of the 1996 and 2001 SIPP panels, based on alternative definitions of retention. The lower panel presents weighted estimates. The weighted proportions differ little from the unweighted proportions, so we focus on the unweighted estimates.

For the 9-wave 2001 panel, 64.4 percent of the wave 1 respondents present in January 2001 qualified for full panel weights, implying an attrition rate of 35.6 percent (100 minus 64.4). For the 12-wave 1996 panel, 58.3 percent of the wave 1 respondents qualified for full panel weights, which implies an attrition rate of 41.7 percent. To provide a more comparable measure of

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[4] Recall from the discussion of Table II.1 that a respondent's leaving the eligible universe is not counted as sample loss.

attrition for the longer 1996 panel, we determined what proportion of the 1996 panel would have qualified for full panel weights for a 9-wave panel. Altogether, 63.7 percent of the wave 1 respondents met this test. This is not a perfect proxy for retention in a 9-wave panel because the Census Bureau does not assign a full panel weight to everyone who would appear to qualify. Therefore, we applied the same 9-wave panel definition (that we had applied to the 1996 panel) to the 2001 panel and found that 64.8 percent satisfied these marginally broader criteria. By this measure, sample retention was somewhat higher (attrition was somewhat lower) in the 2001 panel than the 1996 panel—64.8 percent versus 63.7 percent.

Cross-sectional and calendar year longitudinal analyses do not require that sample members qualify for full panel longitudinal weights, so it is useful to examine a less restrictive measure of sample retention. Consequently, we compared the 1996 and 2001 panels with respect to the proportion of wave 1 respondents who completed the wave 9 interview, which would allow them to be included in cross-sectional analyses using data from the end of the third year of each panel. By this measure, 72.5 percent of the 1996 panel and 78.5 percent of the 2001 panel were retained through the ninth wave (including those who left the survey universe earlier, having completed all prior interviews), implying attrition rates of 27.5 versus 21.5 percent. The markedly lower attrition in the 2001 panel is due to the previously mentioned operational change initiated with that panel. Beginning with the 2001 panel, sample members were no longer dropped from the active sample if they missed consecutive interviews. While this change had no impact on the proportion qualifying for full panel weights, it had a pronounced impact on the proportion of the original 2001 panel sample that was interviewed in the final (ninth) wave. If we go a step further and include sample members who missed the wave 9 interview but responded to the wave 8 interview—and, therefore, would not have been counted as attriters even in the 1996 panel—the retention rate rises (and the attrition rate declines) by two percentage points in each panel.

e. Attrition Among Social Security Beneficiaries

Attrition rates for Social Security beneficiaries other than SSI recipients are markedly lower than those for the total population. Only 14.3 percent of the Social Security retired workers in the wave 1 sample of the 2001 SIPP panel did not complete the wave 9 interview (excluding those who qualified for full panel weights as universe leavers) while 24.4 percent failed to qualify for full panel weights (Table II.3). If we were to impute the bounded missing waves for those who completed waves 1 and 9 but failed to qualify for full panel weights, we would reduce the proportion who failed to qualify for full panel weights to 17.7 percent.[5] Attrition rates are somewhat higher for disabled workers (ranging from 18.4 percent to 27.9 percent) and all other Social Security beneficiaries (16.8 percent to 27.3 percent). For SSI recipients, the attrition rates range from 20.9 percent to 33.7 percent, which is comparable to the total population. Among persons who were 65 and older in January 2001, however, there is little variation across the beneficiary subpopulations and little difference between beneficiaries and all elderly persons. The range of estimates narrows to less than two percentage points—from 17.6 for retired workers to 19.5 for SSI beneficiaries—if we include as full panel members those who would qualify with imputation of missing waves.

Elderly sample members were more likely to qualify for a nine-wave panel weight in the 2001 panel than the 1996 panel. Therefore, attrition rates based on the assignment of panel weights were a few percentage points lower for Social Security beneficiaries in the 2001 panel than the 1996 panel. For example, 28.8 percent of retired workers failed to qualify for full panel

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[5] With the 1996 panel the Census Bureau ceased production of a longitudinal file and discontinued the imputation of missing waves, which had been initiated with the 1991 panel. MPR has produced its own missing wave imputations for the 1996 and 2001 panel. Our estimates of who would fail to qualify as full panel members with the imputation of missing waves are based on the results of this work. For 1993, the percentages who would not qualify as full panel members with or without imputation of missing waves are based on the Census Bureau's missing wave imputations.

weights in the 1996 panel compared to 24.4 percent in the 2001 panel. Only among SSI beneficiaries did the attrition rate appear to rise between 1996 and 2001 although this is no longer true if bounded missing waves are imputed.

The difference between the two panels is even more pronounced when we compare the proportions of wave 1 respondents who did not respond to wave 9. This comparison reflects the aforementioned change in SIPP practice regarding sample households with consecutive missing waves. By this measure the attrition rate among retired workers in the 1996 panel was 22.4 percent versus 14.3 percent in the 2001 panel. For disabled workers these rates were 23.4 percent (1996) and 18.4 percent (2001), respectively, and for all other Social Security beneficiaries they were 23.3 percent (1996) and 16.8 percent (2001). For SSI recipients, with their broader age range, the comparable figures were 23.3 percent (1996) and 20.9 percent (2001).

Because of the change in operational procedures, the proportion of sample members failing to complete the ninth interview is clearly less of a problem in the 2001 panel than the 1996 panel, and this is true for all beneficiary subpopulations as well as the population as a whole. In fact, by this measure the 2001 panel is more similar to the 1993 panel than to the 1996 panel. The 21.3 percent attrition rate for the full 2001 sample compares to a 19.2 percent attrition rate for the 1993 panel versus 27.5 percent for the 1996 panel. For all Social Security or SSI beneficiaries, the 16.0 percent who failed to complete the wave 9 interview in the 2001 panel compares to 13.5 percent in the 1993 panel versus 23.0 percent in the 1996 panel.

On the whole, attrition is certainly no worse a problem in the 2001 panel than it was in the 1996 panel, and when we take into account the change in survey operational procedures the sample loss due to attrition shows a marked decline between the two panels. If concerns about

increased attrition were a major factor in SSA staff's reluctance to use the 2001 panel, these concerns would appear to be misplaced.

2. Nonresponse in the CPS

The CPS is a monthly survey of labor force activity that includes periodic supplements that address a range of topics outside of employment and unemployment. The data used by SSA are collected in a supplement that, until recently, was administered solely in March of each year. The March supplement, as it became known, collects extensive data on household income and household composition and is the official source of statistics on poverty in the U.S. Over the past decade the March supplement has also become the most widely cited source of data on health insurance coverage despite serious flaws in its measures in this area (see, for example, Rosenbach et al. 2007). As part of a significant expansion in sample size designed to improve the precision of CPS estimates of uninsured children at the state level, the "March" supplement is now being administered to sample households in February and April as well. In light of this change the supplement has been renamed the Annual Social and Economic (ASEC) supplement.

In ASEC months, CPS households are first administered the monthly labor force questionnaire followed by the ASEC supplement. About one in nine households that complete the brief labor force questionnaire do not complete the supplement. The Census Bureau treats the extensive missing data for these households as item nonresponse and replaces them with imputed values. This practice gives users of the supplement access to the labor force data reported by all of the households responding to that portion of the questionnaire. But users have questioned the quality of the imputed data that take the place of responses for about one-tenth of the entire sample (see, for example, Davern et al. 2007). Furthermore, despite the extensive imputations the Census Bureau still provides SSA with links for matching administrative records to the survey records of these "whole person imputes." In the next section of this chapter we

compare the match rate for the imputed records with that of the respondents to the supplement. In Chapter III we consider how the treatment of the supplement nonrespondents affects the overall match bias in the CPS.

Historically, nonresponse to the monthly labor force survey has been very low. Noninterview rates deviated little from 4 to 5 percent of eligible households between 1960 and 1994 but then began a gradual rise coinciding with the introduction of a redesigned survey instrument using computer-assisted interviewing (U.S. Census Bureau 2002). By March 1997 the noninterview rate had reached 7 percent, but it rose by just another percentage point over the next seven years (Table II.4). Over this same period, nonresponse to the March supplement among respondents to the labor force survey ranged between 8 and 9 percent, with no distinct trend, yielding a combined sample loss that varied between 14 and 16 percent of the eligible households. Defined in this way, overall nonresponse to the March or ASEC supplement is 2 to 3 percentage points higher than nonresponse to the first wave of the 2001 SIPP panel.

B. NONMATCHING

Because the matching of SSA administrative records to SIPP and CPS data produces an important enhancement to the data from each survey, the sample loss that occurs when respondents' records cannot be linked to administrative records is of great interest to users of the matched data. Here we examine the magnitude of sample loss associated with survey records that cannot be linked to administrative records. We begin by reviewing the methods used by the Census Bureau to link SIPP and CPS records to IRS and SSA administrative records, including the new methods that have been adopted recently for all Census Bureau surveys that are linked to administrative records. Then we present empirical findings on match rates, beginning with the CPS and continuing with the SIPP. The CPS findings are helpful in understanding what may account for the precipitous drop in match rates with the 2001 SIPP panel. Lastly, we speculate

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about how the new methods of matching survey and administrative records may affect both match rates and match bias.

1. How the Census Bureau Matches Survey and Administrative Records

The Census Bureau's matching of administrative records to survey records is SSN-based. Once a valid SSN is assigned to a survey record, it can be matched to any of the administrative records that the Census Bureau maintains, as these are identified by SSN.[6] Until recently, the Census Bureau relied almost exclusively on the SSNs provided by survey respondents to facilitate matches between survey and administrative records. As the Census Bureau's experience with probabilistic record linkage grew and its processing capacity expanded, this dependence on the SSNs provided by respondents diminished. Today the Census Bureau can work with the names, addresses, and demographic information provided by respondents to identify a very high proportion of their SSNs based on a probabilistic match between these data and the identifying information contained in the SSA database of SSNs.

Before the Bureau can attempt to match a respondent's survey data to any other data source, it requires the respondent's consent. Historically, requests for SSNs have been accompanied by a brief explanation of how the SSNs would be used. By providing an SSN, the respondent consented to the use of that SSN to link the respondent's survey responses to his or her administrative records. If the SSN reported by the respondent turned out to be invalid or otherwise incorrect, the Census Bureau still had the respondent's consent to create a linkage. In this event the Census Bureau attempted to identify the correct SSN through the probabilistic methods described above—and, over time, became increasingly more successful in doing so.

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[6] To enhance data security, the Census Bureau replaces the SSN on all of its files with an alternative personal identification key, which is then used to link records, but this does not change the fact that all record linkages are based, ultimately, on SSNs.

Faced with respondents' growing reluctance to report their SSNs to survey interviewers, the Census Bureau has dispensed with asking respondents for their SSNs. Beginning in 2006, all matches will utilize probabilistic methods to identify the SSNs that were previously obtained from respondents. Consent must still be obtained in some manner, but by eliminating the need for a respondent to provide an SSN in order to grant consent, the Census Bureau has removed a major stumbling block to future cooperation in administrative record linkages.

2. Match Rates in the CPS

Between March 1996 and March 2003, the proportion of CPS records that could be linked to administrative records declined by 10 percentage points, from 83.5 percent to 73.0 percent, implying a growth in sample loss from 16.5 percent to 27.0 (Table II.5). The match rate among children under 15 did not decline at all, remaining close to 90 percent for the entire period. The reason for the stability in the match rates among children is that during this period the CPS did not request SSNs for children under 15 but relied instead on the same probabilistic methods that have been adopted recently for all respondents.[7]

For adults 20 to 49 the match rate decreased by 12 percentage points, from a level of 79 to 83 percent in March 1996, depending on the age group, to between 67 and 71 percent in March 2003. For adults 50 and older, the match rate declined by 16 percentage points, falling to 67.9 percent for persons 50 to 64 and 64.7 percent among adults 65 and older. If the introduction of probabilistic methods of matching raises the match rate among adults to a level approaching that of children under 15, this will represent a substantial improvement among adults, ranging from 19 to 25 percentage points.

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[7] We are not certain how the Census Bureau addressed the consent issue for these children, who are not in fact respondents.

Table II.6 presents estimates of match rates within each age group by income relative to poverty for the March 2001 survey. Except for persons in families reporting incomes under 10 percent of poverty, for whom the overall match rate was 61 percent with a low of 52 percent between the ages of 20 and 39, we find little variation in match rates by relative income for the population as a whole. The match rate for persons between 10 and 50 percent of poverty was 75.1 percent versus 74.8 percent for persons above 600 percent of poverty. Match rates were 1 to 2 percentage points lower than 75 percent for persons between 50 and 300 percent of poverty. Similarly, the age groups between 15 and 64 show little variation in match rates by relative income above 10 percent of poverty.

Among the elderly and among children under 15, however, we see a more marked differential in match rates by poverty level. Among elderly persons, the match rate increases by 7 percentage points between 50 to 100 percent of poverty and the top category. The differential is even greater if we include respondents between 10 and 50 percent of poverty, but this is a very small subgroup among the elderly, and its match rate is more consistent with those reporting family incomes below 10 percent of poverty. Among children under 15 the match rate increases by 10 percentage points between 50 to 100 percent of poverty and 600 percent or more. That the differential should be greatest among children is surprising, given the overall match rate of 90 percent. We wonder if these differential match rates are a byproduct of the probabilistic matching methods used for this population or if children from higher income families are simply more likely to have SSNs. If the answer is the former, we may find that the income differential in match rates among adults is increased when probabilistic matching is extended to that population. For this reason we would encourage SSA to re-estimate Table II.6 when matched data from the March 2006 CPS become available.

Lastly, Table II.7 compares the match rates achieved for respondents to the supplement and those who responded only to the labor force survey. In March 1996 the overall match rate among respondents to the supplement was 85.9 percent versus 64.6 percent among those who responded to the labor force survey but not the supplement. Both match rates declined over the next six years, with barely more than half of the nonrespondents to the supplement being matched to administrative records in March 2001 and 2002 compared to more than three-quarters of the respondents to the supplement. Among the elderly, the match rate among nonrespondents to the supplement fell to 44 percent in March 2002. Among elderly respondents to the supplement the corresponding match rate was 71 percent or 27 percentage points higher. This is the largest differential in any age group, with the next largest differential occuring among respondents 50 to 64. The low match rate among nonrespondents 50 and older, coupled with the fact that all of the survey data for these individuals are imputed and, therefore, may be inconsistent with the matched administrative records, leads us to ask whether these observations should be excluded from SSA analyses of matched CPS records. In the next chapter we look at the implications of restricting the analysis of matched CPS and administrative records to those sample members who responded to the supplement.

3. Match Rates in the SIPP

In the 1996 SIPP panel, the match rate to administrative records was 83.1 percent among wave 1 sample members (Table II.8). This compares to 83.5 percent in the March 1996 CPS, but the CPS match rate was boosted by the use of probabilistic methods among children under 15. The SIPP did not use such methods, and children under 10 had the lowest match rate at 80.1 percent. Match rates among adults 30 to 64 were highest, at 85 percent, which was about 2 percentage points higher than in the March 1996 CPS. As with the CPS, match rates among persons in families below 10 percent of poverty were markedly lower—at 67.7 percent—than at

any income level above 10 percent of poverty. Above that level, match rates ranged from 78.4 percent between 10 and 50 percent of poverty to between 85 and 86 percent above 300 percent of poverty.

Among age groups the elderly had the largest differential in match rates by relative income. Similar to the CPS, the elderly between 10 and 50 percent of poverty had a much lower match rate (67.2 percent) than those above 50 percent of poverty. Match rates ranged from 77.5 percent to 87.3 percent between the next higher and top income categories. At younger ages, down to 10 years old, the differential in match rates between 10 to 50 percent of poverty and 600 percent or greater was only 3 to 4 percentage points. Among children under 10 the range over these same income levels was 6 percentage points.

With the 2001 panel, the overall match rate plunged to 59.7 percent (Table II.9). This decline in the match rate coincided with the Census Bureau's shifting the request for respondents' SSNs from the first wave, which is conducted in person, to the second wave, which is conducted largely by telephone. Given that the 1996 SIPP panel had the same match rate as the March 1996 CPS, the match rate of 74 percent in the March 2001 CPS suggests that 14 percentage points of the decline between the two SIPP panels was due to the movement of the request for SSNs to the second wave. Attrition between waves 1 and 2—10 percent of the wave 1 respondents, less those who later returned—would account for some of the additional decline. Assuming that about half of the attriters would have provided SSNs if asked, perhaps 5 percentage points of the additional decline can be attributed to attrition between the two waves. That leaves perhaps 9 percentage points as the residual impact of the shift in the request for SSNs to the second wave.

Match rates in the 2001 panel still vary by relative income, but the differences are smaller than in the 1996 panel. Even among the elderly the highest and lowest rates (above 50 percent of

poverty) span only 6 percentage points compared to 10 percentage points in the 1996 panel. Below age 40, match rates rise a few percentage points between 50 and 600 percent of poverty but then drop slightly above 600 percent of poverty.

4.   Combined Sample Loss from SIPP Attrition and Nonmatching

While nonmatching compounds the sample loss due to attrition, the combined effect of the two sources of sample loss is less than the sum of their separate effects because respondents who are willing to provide their SSNs are less likely to attrite. Table II.10 shows the separate and combined impact of attrition and nonmatching on both the unweighted and weighted distributions of respondents in the 1996 and 2001 SIPP panels. The weighted percentages are virtually identical to the unweighted percentages, so we focus on the latter.

In the 1996 panel, 83.1 percent of the respondents were matched to administrative records. Of these matched cases, 60.7 percent qualified for a 12-wave full panel weight, 66.0 percent would have qualified for a 9-wave panel weight, and 74.7 percent had either wave 9 data or a full panel weight. The corresponding figures among those without matched data ranged from 46.9 percent to 61.9 percent. As a percentage of the full sample, 50.4 percent had both matched data and a full panel weight, 54.8 percent had matched data and would have qualified for a 9-wave panel weight, and 62.0 percent had matched data and either wave 9 data or a full panel weight. With 16.9 percent of the total sample unable to be matched to administrative records, the additional sample loss due to persons who did not complete the wave 9 interview and did not qualify for a full sample weight was 21.1 percentage points.

In the 2001 panel, only 59.6 percent of the respondents were matched to administrative records, but higher proportions than in the 1996 panel qualified for full panel weights or completed the wave 9 interview. Of the matched cases, 70.8 percent qualified for a 9-wave full panel weight using a measure comparable to what we created for the 1996 panel, and 83.1

percent had either wave 9 data or a full panel weight. As a percentage of the full sample, 42.2

percent had matched data and qualified for a 9-wave full panel weight using the same criteria

that we applied to the 1996 panel, and 49.5 percent had matched data and either wave 9 data or a

full panel weight. Thus the additional sample loss after the 40.4 percent who were not matched

to administrative records was only 10.1 percentage points, based on this latter measure. The

combined sample loss in the 2001 panel was 12.5 percentage points lower than in the 1996 panel

despite a match rate that was 23.5 percentage points lower.

5.   What Can We Expect in the Future?

As of 2006, the Census Bureau is no longer requesting SSNs from CPS respondents and will

rely on the same mechanism used for children under 15 to match CPS survey data to SSA

administrative records, except that respondents will be given an opportunity to opt out of

allowing their survey data to be matched to administrative records by returning a postcard.

Absent the withholding of consent, we might expect the Census Bureau to be able to match

around 90 percent of the adult survey records to SSA administrative records on the assumption

that SSN coverage among adults is about as high as it is among children and match problems are

about the same.

An additional benefit of the new method of matching survey respondents to administrative

records—besides an increase in the match rate—is that the role of the respondent will be largely

removed, assuming that few respondents refuse consent. This implies a reduction in match rate

differentials that were due to people's unwillingness to provide their SSNs. However, people

who are difficult to match because of the similarity of names (and varied spellings) within

particular ethnic groups may show a reduction in their match rate compared to when they could

have volunteered their SSNs. This could introduce a new, systematic bias into the match rates.

The Census Bureau may once again be able to match as high a proportion of survey respondents

as it did when respondent cooperation was greater, but the matched cases will not be exactly the same cases that would have been matched previously. The shift in who gets matched could alter the match bias.

Since the CPS has used probabilistic methods to match administrative records to children under 15, we may be able to learn something about match rate differentials by looking at the match rates among children in the CPS. Table II.11 reports match rates by single year of age and race/Hispanic origin for children under 15 in the March 2003 CPS. Among all children, the overall match rate of 89.3 percent varies little by age. Match rates rise slightly after infancy through age 2, growing from 88.8 percent to 90.2 percent, but then return to the level observed among infants. White non-Hispanics have the highest match rate at 92.4 percent overall. Black non-Hispanics are next with a rate of 86.7 percent. Hispanics have the lowest match rate at 83.1 percent while other non-Hispanics have a match rate of 85.2 percent.

We suspect that the lower match rates among Hispanic and other non-Hispanic children reflect a combination of lower SSN coverage and less successful identification of true matches. Among Hispanic children the match rates are highest below age 3, which may reflect a greater coverage rate among children born in the United States. It is noteworthy, for example, that the match rate among children below age 2 is no worse among Hispanic children than among black non-Hispanic children. There is some indication that other non-Hispanic children may also have their highest match rates at very young ages, but sampling error in the match rates is greatest for this subpopulation.

C. CONCLUSION

When measured in terms of the proportion of wave 1 respondents who could not be assigned full panel weights, attrition got no worse between the 1996 and 2001 panels. Among older Social Security beneficiaries and older persons generally, attrition of this type was actually lower

in the 2001 panel than the 1996 panel. Furthermore, because of an operational change that boosted response rates in waves 4 and later, the proportion of the wave 1 sample failing to complete the wave 9 interview declined markedly between the 1996 and 2001 panels. As a result, the 2001 panel resembled the 1993 panel more closely than it resembled the 1996 panel in this alternative measure of attrition. These developments suggest that the upturn in attrition between the 1993 and 1996 panels did not continue through the 2001 panel. If growing attrition is a concern to SSA analysts, there is actually less reason to hesitate in using the 2001 panel than the 1996 panel.

While attrition may not have grown between the 1996 and 2001 panels, the rate at which respondents could be matched to administrative records dropped sharply. Excluding the 15 percent of respondents who were dropped from the sample after the first wave, only 60 percent of the initial respondents to the 2001 panel could be matched to administrative records compared to 83 percent of the respondents to the 1996 panel. When combined with the sample loss due to attrition, this meant that only 50 percent of the 2001 panel had both matched data and survey data through wave 9, and only 42 percent had both matched data and full panel data. In the 1996 panel these figures were 62 percent and 55 percent, respectively.

Attrition is not an issue in the CPS in the same way that it is in the SIPP, as SSA's uses of the data are strictly cross-sectional. Response rates to the CPS have declined very modestly since the mid-1990s while match rates have declined by 10 percentage points. However, the transition to probabilistic record linkage as the basis for matching the survey records to administrative records should increase the match rate for adults to around 90 percent, approaching or even exceeding the match rate for children under 15, who have been matched by probabilistic methods since at least the mid-1990s. These same methods have been applied, retroactively, to the 2004 SIPP panel and will be applied to the 2008 panel.

Match errors based on the new methodology are likely to be higher than match errors based on reported SSNs because the new approach uses a probabilistic record-linkage approach rather than an exact match. As matched data using the new methodology become available, SSA should plan to conduct analyses of match quality and to devise methods to identify bad matches using the information provided by comparisons between the survey and administrative reports of Social Security beneficiary status. In addition, the possibility that the new record linkage methods will be associated with new differentials in match rates and new sources of match bias must be acknowledged. The findings on match bias in the next chapter reflect the methods of matching that were employed by the Census Bureau prior to 2006. SSA should plan to revisit these findings in a few years, when suitable data become available.

TABLE II.1

INCREMENTAL AND CUMULATIVE HOUSEHOLD SAMPLE LOSS RATES BY WAVE:
1992, 1993, 1996, AND 2001 SIPP PANELS, UNWEIGHTED

Wave	Incremental Sample Loss Rate				Cumulative Sample Loss Rate			
	1992 Panel	1993 Panel	1996 Panel	2001 Panel	1992 Panel	1993 Panel	1996 Panel	2001 Panel
1	9.3 %	8.9 %	8.4 %	13.3 %	9.3 %	8.9 %	8.4 %	13.3 %
2	5.3	5.3	6.1	8.6	14.6	14.2	14.5	21.9
3	1.8	2.0	3.3	2.8	16.4	16.2	17.8	24.7
4	1.6	2.0	3.1	1.2	18.0	18.2	20.9	25.9
5	2.3	2.0	3.7	1.6	20.3	20.2	24.6	27.5
6	1.3	2.0	2.8	0.7	21.6	22.2	27.4	28.2
7	1.4	2.1	2.5	0.7	23.0	24.3	29.9	28.9
8	1.7	1.2	1.4	1.4	24.7	25.5	31.3	30.3
9	1.5	1.4	1.5	1.6	26.2	26.9	32.8	31.9
10	0.4		1.2		26.6		34.0	
11			1.1				35.1	
12			0.4				35.5	

Source: Eargle (2004).

Note: The household sample loss rate expresses the number of noninterviews among eligible households in a given wave as a percentage of the total eligible households in that wave. Eligible households include those that the Census Bureau continues to attempt to interview as well as those that have been dropped from further interview attempts in keeping with SIPP field procedures but remain within the SIPP universe. Households dropped from further interview attempts include nonrespondents to the wave 1 interview as well as households that were interviewed in wave 1 but missed two or three consecutive interviews (depending on the reason) or moved too far from a SIPP primary sampling unit. All noninterviewed households (except those known to have left the survey universe) are multiplied by a growth factor to reflect a crude estimate of households splitting to form multiple households less those leaving the SIPP universe. Beginning with wave 4 of the 2001 panel, households are no longer dropped from further interview attempts because they missed consecutive interviews after the first.

TABLE II.2

SIPP PANEL RETENTION BY ALTERNATIVE DEFINITIONS, UNWEIGHTED AND WEIGHTED ESTIMATES:
1996 AND 2001 SIPP PANELS

Definition of Retention	Sample Counts		Retention Rate		Attrition Rate	
	1996	2001	1996	2001	1996	2001
Persons in wave 1 common month	95,141	77,269	100.0	100.0	0.0	0.0
Number of these with:						
Full panel weight[a]	55,484	49,749	58.3	64.4	41.7	35.6
Pseudo 9-wave panel eligibility	60,641	50,099	63.7	64.8	36.3	35.2
Wave 9 data or full panel weight	68,992	60,620	72.5	78.5	27.5	21.5
Wave 8 or wave 9 data or full panel weight	70,549	62,184	74.2	80.5	25.8	19.5

Definition of Retention	Weighted Estimates (1,000s)		Retention Rate		Attrition Rate	
	1996	2001	1996	2001	1996	2001
Persons in wave 1 common month	264,254	279,185	100.0	100.0	0.0	0.0
Number of these with:						
Full panel weight[a]	154,264	180,352	58.4	64.6	41.6	35.4
Pseudo 9-wave panel eligibility	168,594	181,704	63.8	65.1	36.2	34.9
Wave 9 data or full panel weight	191,472	219,611	72.5	78.7	27.5	21.3
Wave 8 or wave 9 data or full panel weight	195,790	224,615	74.1	80.5	25.9	19.5

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

Note: The 1996 panel included 12 waves; the 2001 panel included only 9 waves. The weighted estimates for 2001 are based on the full January 2001 cross-sectional weight, adjusted for a one-third sample cut after wave 1.

[a] Based on 12 waves for the 1996 panel and 9 waves for the 2001 panel.

TABLE II-3

WEIGHTED ATTRITION RATE (PERCENT) AFTER WAVE 1 AMONG ALL PERSONS AND SOCIAL SECURITY OR SSI BENEFICIARIES
BY AGE, WITH OR WITHOUT MISSING WAVE IMPUTATIONS OR COMPLETE WAVE 9 DATA

| Population | 2001 Panel (Age in January 2001) | | | 1996 Panel (Age in March 1996)[a] | | | 1993 Panel (Age in January 1993) | | |
	Total	Subtotal Under 65	Subtotal 65+	Total	Subtotal Under 65	Subtotal 65+	Total	Subtotal Under 65	Subtotal 65+
Percentage Not Qualifying as Full Panel Members with No Imputation of Missing Waves									
Total Population	35.4	36.9	24.5	36.6	37.6	28.7	28.4	29.8	18.3
Unduplicated Total Beneficiaries	26.5	31.5	24.2	29.9	32.9	28.5	20.5	27.2	17.8
Retired Workers	24.4	27.2	24.0	28.8	30.3	28.6	18.5	23.9	17.8
Disabled Workers	27.9	29.8	21.9	29.7	31.3	25.3	24.6	25.3	22.7
All Other Social Security Beneficiaries	27.3	32.1	24.2	31.1	34.1	29.2	19.8	26.2	17.6
SSI Beneficiaries	33.7	35.9	26.2	30.7	34.1	22.3	25.9	31.1	16.6
Percentage Not Qualifying as Full Panel Members after Imputation of Missing Waves									
Total Population	27.4	28.7	18.1	32.9	33.9	25.8	23.6	25.0	13.4
Unduplicated Total Beneficiaries	19.8	23.9	17.9	27.1	29.8	25.8	15.9	22.9	13.0
Retired Workers	17.7	18.9	17.6	26.0	25.3	26.0	13.6	18.9	12.9
Disabled Workers	22.5	23.9	17.9	28.2	29.0	26.0	20.1	20.8	18.2
All Other Social Security Beneficiaries	20.9	24.5	18.6	27.5	30.5	25.7	15.0	21.8	12.8
SSI Beneficiaries	26.0	27.9	19.5	30.0	33.1	22.3	23.3	28.0	14.8
Percentage Not Qualifying as Full Panel Members and Missing Any Month of Wave 9									
Total Population	21.3	22.2	14.7	27.5	28.3	22.3	19.2	20.1	11.8
Unduplicated Total Beneficiaries	16.0	19.2	14.5	23.0	24.7	22.3	13.5	18.6	11.5
Retired Workers	14.3	14.4	14.3	22.4	22.2	22.5	11.8	15.3	11.4
Disabled Workers	18.4	19.4	15.3	23.4	24.6	20.0	16.8	16.9	16.5
All Other Social Security Beneficiaries	16.8	19.6	15.0	23.3	25.0	22.3	12.8	17.5	11.2
SSI Beneficiaries	20.9	22.8	14.6	23.3	25.9	16.6	19.5	23.5	12.2

Source: Mathematica Policy Research, from the 1993, 1996 and 2001 SIPP panels.

Note: Attrition rates are weighted by the January 2001, March 1996, and January 1993 cross-sectional weights for the 2001, 1996, and 1993 estimates, respectively.

[a] All 1996 estimates are based on a simulated 9-wave panel. See text for details.

TABLE II.4

SAMPLE LOSS DUE TO NONRESPONSE
IN THE MARCH CPS, 1997 TO 2004

Sample Year	Percent of Eligible Households Not Responding to the Labor Force Questionnaire	Percent of Labor Force Respondents Not Responding to the Supplement	Percent of All Eligible Households Not Responding to the Supplement
1997	7.2	9.2	15.7
1998	7.8	7.2	14.4
1999	7.9	8.9	16.1
2000	7.0	8.0	14.4
2001	8.0	8.5	15.9
2002	8.3	8.6	16.2
2003	7.7	8.0	15.0
2004	8.5	8.2	16.0

Source: Current Population Survey Technical Documentation, various years.

Note: March 1997 is the first supplement for which the CPS technical documentation reports rates of nonresponse. The nonresponse rate in column three is the sum of the nonresponse rate in column one and the product of the nonresponse rate in column two (divided by 100) and 100 minus the nonresponse rate in column one.

TABLE II.5

PERCENT OF FULL CPS SAMPLE MATCHED TO ADMINISTRATIVE RECORDS
BY AGE: MARCH 1996, 1997, 2001, 2002 AND 2003

Date of CPS Supplement	Under 15	15 to 19	20 to 29	30 to 39	40 to 49	50 to 64	65 +	Total
March 1996	89.6	81.7	79.0	81.5	83.2	83.1	81.9	83.5
March 1997	90.2	78.3	77.1	78.2	79.6	80.0	77.5	81.1
March 2001	90.0	70.5	67.9	69.3	71.0	70.2	69.3	74.0
March 2002	89.5	73.3	69.7	71.9	74.8	71.2	68.2	75.5
March 2003	89.5	73.3	67.4	69.3	71.0	67.9	64.7	73.0

Source: Mathematica Policy Research, from CPS March and ASEC supplements.

Note: Two March 2001 files were released, the second containing the expanded sample mandated by Congress for the State Children's Health Insurance Program. The Census Bureau matched SSA's administrative records to the smaller 2001 file. Estimates exclude unrelated secondary individuals under 15.

TABLE II.6

PERCENT OF FULL CPS SAMPLE MATCHED TO ADMINISTRATIVE RECORDS
BY RATIO OF FAMILY INCOME TO POVERTY AND AGE IN MARCH 2001

Family Income Relative to The Federal Poverty Level	Under 15	15 to 19	20 to 29	30 to 39	40 to 49	50 to 64	65 +	Total
Under 10 percent	77.9	62.0	52.5	52.1	58.5	60.4	55.4	61.0
10 to under 50 percent	85.3	72.6	66.6	68.7	71.7	69.1	60.2	75.1
50 to under 100 percent	83.8	70.2	65.9	66.0	71.7	67.7	66.1	72.6
100 to under 200 percent	87.9	67.8	68.3	67.4	69.6	68.2	68.0	73.4
200 to under 300 percent	91.0	71.4	67.7	71.0	69.1	66.8	69.4	74.1
300 to under 400 percent	93.3	71.4	69.7	70.2	71.8	70.2	69.7	75.2
400 to under 600 percent	92.8	69.7	68.4	70.2	70.9	71.2	71.1	74.4
600 percent or more	93.6	73.7	69.1	70.1	72.9	72.5	73.2	74.8
Total	90.0	70.5	67.9	69.3	71.0	70.2	69.3	74.0

Source: Mathematica Policy Research, from the 2001 CPS March supplement.

Note: Two March 2001 files were released, the second containing the expanded sample mandated by Congress for the State Children's Health Insurance Program. The Census Bureau matched SSA's administrative records to the smaller 2001 file. Estimates exclude unrelated secondary individuals under 15, for whom relative income is undefined.

TABLE II.7

PERCENT OF CPS SAMPLE MATCHED TO ADMINISTRATIVE RECORDS, BY RESPONSE
TO THE CPS SUPPLEMENT AND AGE: MARCH 1996, 1997, 2001, AND 2002

Response to CPS Supplement And Date of Supplement	Under 10	10 to 19	20 to 29	30 to 39	40 to 49	50 to 64	65 +	Total
Respondents to the Supplement								
March 1996	90.6	87.6	81.7	84.3	86.0	86.0	84.8	85.9
March 1997	91.1	86.3	79.9	80.9	82.5	83.2	80.5	83.6
March 2001	91.3	82.4	71.1	72.5	74.2	73.1	71.6	76.7
March 2002	90.6	84.5	72.2	74.4	77.3	73.9	70.9	77.8
Nonrespondents to the Supplement								
March 1996	79.1	71.4	57.9	58.4	63.3	62.3	62.8	64.6
March 1997	78.0	68.3	54.0	54.7	56.8	56.7	51.4	59.5
March 2001	79.3	62.5	44.2	44.0	45.9	46.6	45.8	51.8
March 2002	78.6	65.2	50.1	50.6	53.4	47.8	43.6	54.9

Source: Mathematica Policy Research, from CPS March and ASEC supplements.

Note: Two March 2001 files were released, the second containing the expanded sample mandated by Congress for the State Children's Health Insurance Program. The Census Bureau matched SSA's administrative records to the smaller 2001 file. Estimates exclude unrelated secondary individuals under 15, for whom relative income is undefined.

TABLE II.8

PERCENT OF PERSONS MATCHED TO ADMINISTRATIVE REOCRDS BY WAVE 1 MONTHLY POVERTY RATE AND AGE
IN MARCH 1996: WAVE 1 SAMPLE MEMBERS

Wave 1 Average Monthly Income Relative to the FPL	Under 10	10 to 19	20 to 29	30 to 39	40 to 49	50 to 64	65 +	Total
Under 10 percent	65.9	68.3	66.8	63.6	72.2	73.9	59.3	67.7
10 to under 50 percent	76.6	77.6	78.6	81.1	82.8	84.6	67.2	78.4
50 to under 100 percent	76.6	80.7	78.7	82.8	82.4	83.1	77.5	79.7
100 to under 200 percent	79.4	79.3	80.5	82.3	82.2	83.5	80.9	80.9
200 to under 300 percent	80.9	82.5	83.3	85.1	87.0	85.1	85.0	84.1
300 to under 400 percent	83.0	84.1	83.1	87.3	85.9	85.1	86.0	85.0
400 to under 600 percent	83.9	85.8	83.9	87.8	87.1	85.0	86.8	86.0
600 percent or more	83.0	81.2	82.3	85.3	86.1	87.5	87.3	85.2
Total	80.1	81.6	81.4	84.7	85.3	85.0	83.2	83.1

Source: Mathematica Policy Research, from the 1996 SIPP Panel.

Note: Estimates are weighted by the March 1996 cross-sectional weight. Estimates exclude unrelated secondary individuals under 15, for whom relative income is undefined.

TABLE II.9

PERCENT OF PERSONS MATCHED TO ADMINISTRATIVE RECORDS BY WAVE 1 MONTHLY POVERTY RATE AND AGE
IN JANUARY 2001: WAVE 1 CROSS-SECTIONAL SAMPLE RETAINED AFTER THE SAMPLE CUT

Wave 1 Average Monthly Income Relative to the FPL	Under 10	10 to 19	20 to 29	30 to 39	40 to 49	50 to 64	65 +	Total
Under 10 percent	55.9	46.4	46.0	48.7	46.1	49.8	56.9	48.9
10 to under 50 percent	60.4	59.1	59.4	60.7	54.5	64.5	35.2	58.5
50 to under 100 percent	55.8	55.6	56.6	58.9	60.5	62.5	57.3	57.8
100 to under 200 percent	58.1	56.9	57.8	57.7	59.2	58.3	57.5	57.8
200 to under 300 percent	56.0	56.3	60.8	59.1	60.5	60.5	59.0	58.8
300 to under 400 percent	58.7	57.6	60.3	63.1	59.7	63.8	61.9	60.8
400 to under 600 percent	59.4	61.7	62.3	63.0	64.3	64.5	63.4	62.9
600 percent or more	59.4	56.3	58.8	60.2	63.3	63.5	62.4	61.3
Total	57.8	57.3	59.0	60.1	61.3	62.3	59.5	59.7

Source: Mathematica Policy Research, from the 2001 SIPP panel.

Note: Estimates are based on the January 2001 cross-sectional sample. The numerator is the weighted number of wave 1 observations with matches (so it includes a few respondents who missed wave 2 but returned in a later wave and provided an SSN). The denominator is the weighted number of wave 1 respondents who were retained after the sample cut, whether or not they responded to a subsequent wave. Attrition of wave 1 respondents before wave 2 contributes to the nonmatches. Estimates exclude unrelated secondary individuals under 15, for whom relative income is undefined.

TABLE II.10

SIPP SAMPLE RETENTION BY PRESENCE OF MATCHED DATA: 1996 AND 2001 SIPP PANELS

	Unweighted Sample Counts			Weighted Estimates		
	Number of Persons	Percent of Subgroup	Percent of Total	Thousands of Persons	Percent of Subgroup	Percent of Total
1996 Panel						
Persons in wave 1 common month	95,141		100.0	264,254		100.0
With matched data	79,017	100.0	83.1	219,419	100.0	83.0
Full panel weight (12-wave)	47,928	60.7	50.4	133,253	60.7	50.4
Pseudo 9-wave panel eligibility	52,152	66.0	54.8	144,994	66.1	54.9
Wave 9 data or full panel weight	59,008	74.7	62.0	163,773	74.6	62.0
Without matched data	16,124	100.0	16.9	44,835	100.0	17.0
Full panel weight (12-wave)	7,556	46.9	7.9	21,011	46.9	8.0
Pseudo 9-wave panel eligibility	8,489	52.6	8.9	23,600	52.6	8.9
Wave 9 data or full panel weight	9,984	61.9	10.5	27,700	61.8	10.5
2001 Panel						
Persons in wave 1 common month	77,269		100.0	281,220		100.0
With matched data	46,024	100.0	59.6	167,288	100.0	59.5
Full panel weight (9-wave)	32,448	70.5	42.0	118,499	70.8	42.1
Pseudo 9-wave panel eligibility (1996)	32,599	70.8	42.2	119,057	71.2	42.3
Wave 9 data or full panel weight	38,238	83.1	49.5	139,432	83.3	49.6
Without matched data	31,245	100.0	40.4	113,932	100.0	40.5
Full panel weight (9-wave)	17,301	55.4	22.4	63,168	55.4	22.5
Pseudo 9-wave panel eligibility (1996)	17,500	56.0	22.6	63,972	56.1	22.7
Wave 9 data or full panel weight	22,382	71.6	29.0	81,779	71.8	29.1

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

Note: Weighted estimates for 2001 use the January 2001 cross-sectional weight, but the sample is restricted to persons who were retained after the 15 percent wave 1 sample cut. Each population estimate has been divided by 0.85 to obtain approximately correct population totals.

TABLE II.11

PERCENTAGE OF CHILDREN UNDER 15 IN MARCH 2003 WITH MATCHED
SOCIAL SECURITY NUMBER BY AGE, RACE AND HISPANIC ORIGIN

Age	White Non-Hispanic	Black Non-Hispanic	Hispanic	Other Non-Hispanic	Total
Under 15	92.4	86.7	83.1	85.2	89.3
0	91.2	84.0	85.4	89.8	88.8
1	94.8	87.4	86.3	88.3	91.6
2	93.1	87.9	85.5	85.9	90.2
3	92.5	83.5	83.4	87.8	88.8
4	93.1	84.3	81.9	81.2	88.7
5	92.3	87.8	80.8	89.5	89.2
6	91.8	87.2	83.5	79.4	88.7
7	91.4	87.6	79.4	82.8	88.0
8	92.6	87.3	82.6	81.6	89.1
9	93.3	87.2	82.5	82.6	89.8
10	91.1	88.8	84.4	84.6	89.2
11	92.4	89.0	83.6	86.3	89.9
12	92.1	85.2	80.4	86.2	88.6
13	92.1	88.3	84.5	86.1	89.8
14	92.1	84.4	82.0	85.2	88.8

Source: Mathematica Policy Research, from the 2003 CPS ASEC supplement.

Note: Unrelated secondary individuals under 15 are included.

III. MATCH BIAS IN THE SIPP AND CPS

The matching of administrative records to the SIPP not only enhances the quality and analytical utility of SIPP and CPS data; it provides an especially powerful tool for evaluating the bias introduced into SIPP data by attrition. Declining match rates between survey records and administrative records, documented in the preceding chapter, raise concerns about the continued representativeness of matched samples from both the SIPP and the CPS. While the Census Bureau has taken steps that will restore match rates to levels that have not been seen for years, these improvements will not benefit SIPP or CPS data collected prior to 2006. The findings presented in Chapter II make clear that recent declines in match rates in both surveys, but particularly the SIPP, are more significant than growth in attrition in the SIPP. Furthermore, before we can assess the impact of the sample loss that accompanies attrition, we need to establish whether matched records provide a biased picture of the population that they are intended to represent. For these reasons we take up matching bias before we turn to attrition bias. This chapter examines evidence of match bias in both the SIPP and the CPS. We begin with a discussion of how we approach the evaluation of match bias and then turn to empirical findings for the two surveys.

A. EVALUATING MATCH BIAS

We confront a fundamental problem in our attempt to evaluate the magnitude of bias due to nonmatching—namely, we do not know which members of a survey sample are actually included in the administrative data and, therefore, *should* match. Thus we do not know what match rate we would observe if all of the survey records represented in the administrative data could be matched; nor do we know how the sample members for whom administrative data exist differ from those for whom it does not. This is important because we have every reason to

believe that the sample members who are not included in the administrative records of SSA are systematically different from the sample members who *are* included. We can speculate that the people who are "outside the system," so to speak, tend to be disproportionately low-income, young and members of minorities, and that many are recent immigrants who lack citizenship.

Nearly all citizens of the U.S. should have SSNs, given tax law requirements implemented in the 1980s. A very substantial proportion of the infants born in the United States receive SSNs through the birth registration system, under a cooperative arrangement between SSA and the states. In March 2001, an estimated 6.7 percent of the CPS universe (and, therefore, the SIPP universe as well) was foreign born and not citizens of the United States. Citizenship is not a requirement for obtaining an SSN. SSNs are issued to noncitizens allowed to work in the U.S., for example. But to obtain SSNs noncitizens must provide legal documentation of their immigration status. This leaves undocumented aliens as the largest group of persons without SSNs—or without their own SSNs and, therefore, not likely to match to SSA's database of SSNs. A recent estimate places the number of undocumented aliens at 11.5 to 12 million or about 4 percent of the U.S. population (Passel 2006).

Other foreign nationals who are in the country temporarily and earning income that is taxable under U.S. law may be required to obtain individual taxpayer identification numbers (ITINs) in lieu of SSNs. These ITINs are issued by the Treasury Department. They resemble SSNs in form, but they always have nine digits and begin with the number 9, which puts them outside the range of numbers reserved for SSNs. Persons who file tax returns with ITINs will be included in the IRS's database of tax returns and information documents (W-2s, 1099s and the like), but because their ITINs are not SSNs, we do not believe that they are included in the records that SSA links to the SIPP and the CPS. The IRS has estimated that in the 2004 tax year the number of ITINs appearing on tax returns as filers or dependents or as nonfilers with

information documents was 5.0 million, which is just under 2 percent of the civilian noninstitutional population.[1]

Drawing inferences from matched data to the broader universe that these data represent is hampered by our inability to identify and characterize that broader universe empirically. Not knowing what fraction of a survey sample *should* match to SSA's administrative records, we cannot determine how complete is the match for any one survey. The estimates cited above provide some help. Putting together the estimates of undocumented aliens and the subset of documented aliens with ITINs instead of SSNs suggests that these groups account for nearly 6 percent of the population. This implies that 94 percent of the population is covered by SSNs and ought to be represented in SSA's administrative records.

While the source of bias in matched samples is the difference between matched records and nonmatched records, the bias that we want to evaluate is the difference between the matched subsample and the full sample, as the matched subsample is what will be used in any analysis. For such a comparison the match rate matters. The higher the match rate, the less important are differences between matched and unmatched records. This is analogous to survey response rates, where the overall bias is a function of both the response rate and how much the nonrespondents differ from the respondents. Because the match rate plunged between the 1996 and 2001 SIPP panels, SSA needs an estimate of match bias that is sensitive to the match rate.

To evaluate bias in the matched subsample, we first calibrated the matched subsample to the same demographic controls to which the Census Bureau had calibrated the full cross-sectional sample.[2] These controls include a cross-classification of sex, detailed age, and race (black versus

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[1] The Statistics of Income Division of the IRS prepared this estimate from its annual sample of tax returns combined with information documents.

[2] The calibration methodology is documented in Appendix A, and MPR's calibration programs are being delivered as part of this report. Calibration is the final operation in assigning sample weights. The Census Bureau's

nonblack); a more limited cross-classification of sex by Hispanic origin and broad age group; and relationship to the householder, by sex and race. Since match rates are known to differ across demographic subgroups, any use of a matched subsample would have to include some form of adjustment to compensate for such differences. Calibrating the matched records to the same population controls used by the Census Bureau is a fundamental first step. It represents the minimum adjustment that we would want to apply to matched data before evaluating their bias. If serious biases are identified, then we would want to develop additional adjustments targeting these biases and then re-evaluate the matched subsample with these new adjustments.

We compared the calibrated matched subsample and the full sample with respect to a wide variety of personal, family and household characteristics as well as the results of several illustrative applications of matched data specified by SSA. Ideally, we would want to compare the matched subsample to what might be termed the "fully matched" subsample, in which every sample record with a corresponding administrative record was identified.[3] Some of the records in the survey sample do not have corresponding administrative records, and, as we have noted, there is good reason to believe that these records differ systematically from the matched records. By comparing our matched subsample to the full survey sample, we risk misinterpreting systematic differences between records that do or do not have representation in the administrative databases as bias in the matching process (or, more specifically, bias in the reporting of correct SSNs). This problem is unavoidable when we attempt to evaluate match bias

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(continued)

weighting procedures also include steps designed to equalize the weights of spouses. We did not include those steps in our calibration of the matched subsample because spouses will not necessarily both be matched. Similarly, when we calibrate a matched sample of panel records, as was done for the analyses presented in the next chapter, we do not attempt to equalize the weights of spouses because they may not both have full panel weights.

[3] In addition to excluding sample members without SSNs from the total population, we would like to be able to calibrate our matched samples to population controls that exclude persons without SSNs. Since neither is possible, we calibrate our matched samples to controls that reflect the total population, and we compare the calibrated matched sample to the total sample.

with respect to estimates of the total population. When we restrict our comparisons to self-reported SSA beneficiaries, however, we would expect that any sample members who are not represented in the SSA administrative databases are largely if not entirely excluded.

For the SIPP evaluation, we calculated standard errors using replicate weights provided by the Census Bureau. The Census Bureau's replicate weights incorporate sample design information that is not released on the public use file, so these weights enable the external user to calculate truer standard errors than is possible with any other method. Furthermore, with replicate weights we can directly estimate the standard error of a difference between an estimate based on a subsample (namely, matched records) and an estimate based on the full sample from which the subsample was taken (matched plus unmatched records). The Census Bureau has produced a set of replicate weights for every SIPP weight, both cross-sectional and longitudinal. To use the Bureau's replicate weights for our various reweightings of matched records, we recalibrated both the sample weights and the associated replicate weights for the matched records. The calibration procedures are detailed in Appendix A. The estimation of standard errors is discussed in Appendix B.

B. MATCH BIAS IN THE SIPP

From SSA's perspective, the most important questions about match bias involve the impact of the low match rate in the 2001 panel. How does the low match rate documented in the previous chapter affect potential uses of matched SIPP and administrative data? Can matched records adequately represent the subpopulations from which they are drawn? What adjustments to survey weights are required, and what are their limits? More generally, what accommodation must be made in using the matched data for analysis? Are the potential benefits worth the effort, or should SSA bypass the 2001 panel altogether?

We address these questions by comparing matched and full sample estimates over a variety of potential applications. SSA uses matched SIPP and administrative records in applications that take advantage of the longitudinal design of the SIPP as well as in strictly cross-sectional, descriptive studies. In our assessment of match bias in the 2001 panel we begin by comparing matched and full sample estimates of a wide range of characteristics for the total population and for subpopulations of SSA beneficiaries. Then we evaluate match bias in estimates of eligibility for SSI—an application of matched data that SSA asked us to include. We compare matched and full sample estimates of income and asset eligibility at multiple points in time using both the 1996 and 2001 SIPP panels. The comparisons include calendar year longitudinal estimates of month-to-month fluctuation in income eligibility. Lastly, we examine the magnitude of match bias in estimates of the pension coverage of divorced women, another application identified by SSA and one that uses longitudinal data spanning six waves and two topical modules.

1. Comparison of Matched Respondents and All Respondents in the 2001 Panel

One consequence of the Census Bureau's moving the request for SSNs from the first wave to the second wave of the 2001 panel, besides the steep drop in SSNs collected, is that sample members who attrited between waves 1 and 2 can have no matched data. Therefore, any comparison of matched and full sample records that includes wave 1 attriters in the full sample will confound match bias with attrition bias. For this reason, we designed our comparisons to exclude wave 1 attriters. Specifically, we compared matched and full sample records within the following subsamples: (1) wave 1 respondents who also responded to all four months of wave 2; (2) respondents to wave 2, which includes not only the wave 1/wave 2 respondents but those additional persons who joined sample households in wave 2 (all of whom were asked for their SSNs); and (3) full panel sample members, who exclude all attriters as well as those who missed only an occasional wave. The wave 1/wave 2 respondents were compared with respect to their

wave 1 characteristics. The wave 2 respondents were compared with respect to their wave 2 characteristics, including topical module data on immigration and citizenship, which were collected only in wave 2. The full panel sample members were compared with respect to both wave 1 and wave 9 characteristics. All of these comparisons were repeated for the 1996 panel so that we could assess whether match bias increased between the two panels.

For each subsample we compared matched respondents and all respondents in the total population and four subpopulations of SSA beneficiaries: (1) retired workers, (2) disabled workers, (3) other Social Security recipients, and (4) SSI recipients. Comparisons were made with respect to a number of personal, family, and household demographic and economic characteristics, by age, using age groups that were specific to each subpopulation. Appendix C contains the results of one set of comparisons, for wave1/wave2 respondents from the 2001 panel. Each table is laid out as follows. The first four columns present full wave 1/wave 2 sample estimates for all persons and three age groups. The next four columns present differences between the matched subsample and full sample estimates, with indicators of statistical significance.

There are 20 tables in all. Table C.1.a compares the calibrated matched and full samples with respect to estimates of the distribution of personal demographic characteristics for the total population. Tables C.1.b through C.1.e repeat these comparisons for the four beneficiary subpopulations. Tables C.2.a through C.2.e provide comparisons for health insurance coverage and personal income. Tables C.3.a through C.3.e provide comparisons with respect to household and family composition and home ownership, and Tables C.4.a through C.4.e present comparisons for household and family economic characteristics.

Looking past statistical significance for the moment, we find that the overwhelming impression that emerges from the 20 pages of comparisons is that the reweighted matched

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sample represents the reweighted full sample, exclusive of wave 1 attriters, exceedingly well. The similarities are striking, especially when we consider that, overall, the matched wave 1/wave 2 sample includes only 63 percent of the full wave 1/wave 2 sample. Calibrating both samples to the SIPP population controls appears to have eliminated, in large part, whatever differences may exist between all wave 1/wave 2 respondents and those who could be matched to administrative records.

As small as they are, many of the differences between the matched and full sample estimates of the total population are statistically significant. Whether this is due to the small population of persons who have no administrative records and, therefore, are represented only by the full sample, or whether it reflects true but very small differences between matched and full sample cases that do have administrative records cannot be resolved with these data. For the four SSA beneficiary subpopulations we find larger differences than for the total population. We attribute the greater magnitudes of these differences to the smaller sample sizes, and, indeed, few of these differences are statistically significant. Moreover, the beneficiary subpopulations presumably exclude persons without SSA administrative records, which would eliminate a potential difference between the matched and full samples that is present for the total population. Because of their smaller sample sizes, however, we are not able to say that the beneficiary subpopulations do indeed show smaller biases. In fact, for the retired worker population, we find some evidence of a lesser reliance on Social Security benefits and greater family income—both absolute and relative to poverty—within the matched versus full sample (see Tables C.2.b and C.4.b). We call attention to this possible evidence of a slight bias in the matched beneficiary population because it is repeated in the CPS, as we show later in the chapter. But even here the differences involve deviations that do not exceed 2 percentage points in any income category, and most are a good deal smaller than that.

We can examine the possible impact of sample members without SSA administrative records more directly by looking at the citizenship and migration data collected in the wave 2 topical module. Table III.1 compares the matched and full sample estimates of the distribution of selected characteristics for the total population. Not surprisingly, matched respondents are more likely than all respondents to be native-born citizens, but the difference is only 2 percentage points (89.1 versus 87.3). Matched respondents are also less likely than all respondents to be non-citizens, whether permanent residents (4.7 versus 5.3 percent again) or not (1.5 versus 2.1). At the same time, however, matched respondents are actually less likely than all respondents to be foreign-born U.S. citizens (4.7 versus 5.3), which would not reflect the presence or absence of SSNs. All of these differences are statistically significant. Matched respondents are also slightly less likely to have moved to the U.S. after 1990 (3.3 versus 3.9 percent), but they are more likely to have moved to their current residence within the previous two years (20.5 versus 20.0 percent). None of these differences is particularly striking, given that the characteristics that we are comparing are the most obvious ways in which people who are not in the SSA administrative record system might be expected to differ from those who are in the system.

If most of the wave 1 demographic and economic characteristics that we examined showed little differentiation between the matched and full samples in the 2001 panel, then the steep decline in the match rate between the 1996 and 2001 panels could not have had much effect on match bias. This inference is confirmed in Appendices D and E, which compare the differences between the matched and full samples in the 1996 and 2001 panels. Appendix D presents side by side the differences in wave 1 characteristics between the matched and full wave 1/wave 2 samples in both panels. Appendix E does the same with the matched full panel and entire full panel samples from the two panels. Certainly, the differences estimated from the 2001 panel are

more variable than those from the 1996 panel, given that the matched samples in 2001 are barely half the size of those in the 1996 panel. Fewer differences in the 2001 panel are statistically significant, even though they are often larger than those in the 1996 panel. But, again, even when the differences are statistically significant, they are substantively unimportant for the most part. Consider, for example, Social Security payments as a percentage of total personal income among retired workers (Table D.2.b). The differences may be somewhat larger in the 2001 panel, and the largest differences are statistically significant, but the 2001 panel shows only narrowly more evidence of bias than the 1996 panel, and the differences between the matched and full samples lie within a range that we would characterize as small. In the same table, at the top, we see clear evidence of smaller differences in health insurance coverage in the 2001 panel among all retired workers and those under 65. Matched sample members in 2001 are clearly no more likely than all sample members to own their own homes (Table D.3.a), and differences in household and family income are negligible and clearly no greater in 2001 than 1996 (Table D.4.a).

Differences between the matched full panel and entire full panel samples tell the same story. Variability is greater in 2001, but there is little indication that the matched sample in 2001 is any less representative of the full sample than in 1996. This is particularly clear in comparisons involving income for the total population (Tables E.2.a and E.4.a) and retired workers (Tables E.2.b and E.4.b). We also compared the matched and full panel samples with respect to characteristics measured at wave 9 and reached the same conclusions (data not shown).

2. Eligibility for SSI

One of the key uses of SIPP by SSA as well as a number of other federal agencies and their contractors is to estimate eligibility for entitlement and other assistance programs in a specific month or series of months. In addition to monthly family composition and other variables that

condition eligibility, SIPP provides monthly estimates of income by source, which is needed to calculate "countable" income under each program's eligibility rules. SIPP also provides periodic estimates of assets by type—generally, once a year. With these data it is possible to simulate both income and asset eligibility during a number of specific months over the life of a SIPP panel. It is also possible to simulate month-to-month changes in income-eligibility, as the estimates of income, unlike assets, can change from month to month. (Monthly eligibility may also be affected by changes in family composition, with or without attendant changes in income.)

SSA expressed an interest in both types of eligibility simulations for the SSI program. Because it is exceedingly useful to link program administrative data—with monthly participation and benefits paid—to monthly survey-based estimates of eligibility, these two eligibility simulations provided good examples for evaluating bias in the matched samples.

a. Financial Eligibility in Selected Months

Financial eligibility for SSI among elderly persons was simulated in each of the SIPP waves that collects asset data in its topical module. These are waves 3, 6, and 9 of both the 1996 and 2001 panels.[4] We simulated eligibility for the calendar month that was common to the four rotation groups in each wave. For the 1996 panel this meant November of 1996, 1997, and 1999, and for the 2001 panel this meant September of 2001, 2002, and 2003. Estimates for the three months from the 1996 panel are presented in Tables III.2a through III.2c. Estimates for the 2001 panel are presented in Tables III.3a through III.3c. Separate estimates are presented for the percentage of persons simulated to be income eligible but not necessarily asset eligible (columns 1 and 2) and the percentage of persons who were both income and asset eligible (columns 3 and 4). The final two columns report estimates of the numbers of persons simulated to be income

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[4] The 1996 panel also collected asset data in wave 12 whereas the 2001 panel ended at wave 9. We limited our evaluation to the common waves.

and asset eligible, with indicators of statistical significance for the differences between the matched and full sample estimates.

For each year of the 1996 panel we find only small differences for both measures. In general, we find slightly fewer eligibles with the matched subsample than the full cross-sectional sample in each month. For example, 10.6 percent of the matched subsample is simulated to be income eligible in November 1996, and 6.1 percent is simulated to be income *and* asset eligible. The corresponding estimates from the full sample are 11.1 percent and 6.3 percent, respectively. The difference in the estimated numbers of eligibles is statistically significant but very small— about 74,000 from estimates of 1.955 versus 2.019 million. For non-Hispanic whites, the largest subgroup reported, these differences run only 0.1 to 0.2 percentage points except for income eligibility in 1998. The differences are consistently larger—about 1 percentage point—for non-Hispanic nonwhites and for Hispanic persons. When we divide the elderly by age at 75 and look separately at married versus single men and women, virtually all of the differences are under a percentage point, and they mostly show fewer eligibles in the matched subsample. The one consistent exception is among single men 65 to 74, where we find more income and asset eligible persons in the matched subsample than in the full sample in each of the three months.

When we look at eligibility rates by the level of monthly income relative to poverty, we find two patterns consistently across the three months. First, there are numerically more eligibles below 50 percent of poverty in the full sample than in the matched subsample. This is true even in September 2002 when the matched sample members in this lowest income category have a higher eligibility rate (62.4 percent versus 54.3 percent). It is apparent from this that there are more very low income people in the full sample than the matched sample. Second, the eligibility rate among persons between 50 and 100 percent of poverty is consistently very slightly higher in the matched subsample than the full sample. At higher income levels, where the difference

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between countable income and total income explains much of simulated eligibility, the matched and full samples vary with respect to which has the higher eligibility rate and the higher number of eligibles.

It is important to point out that our eligibility simulation does not take account of immigration status, which could bias the results in the direction of finding more eligibles in the full sample than in the matched sample—which is exactly what we find overall.[5] Undocumented aliens, in particular, are likely to include a higher proportion of persons who meet the SSI income and asset eligibility criteria. This will boost the simulated eligibility rates in the full population compared to the matched subpopulation, even though many of these additional "eligibles" would be ineligible because of their immigration status. While the young age distribution of immigrants implies that people without SSNs make up a smaller share of the elderly population than the nonelderly population, there may still be a sufficient number of elderly persons without SSNs to explain the slightly higher estimated SSI eligibility rate in the full sample versus the matched subsample. Taking this into account, it is quite possible that, despite the lower estimates of SSI eligibility, the matched sample provides an accurate representation of eligibility among elderly persons with SSNs.

Turning to the 2001 panel, we find, first, that for the elderly population as a whole, our results are very similar to the 1996 panel. The matched sample has a slightly lower percentage of income-eligibles and combined income and asset eligibles and numerically more of the latter in all three months (Tables III.3a to III.3c). The middle month shows more of a spread in the 2001 panel than the 1996 panel, but the results in the first and third months are strikingly similar between the two panels. For instance, in September 2003 the difference between the matched

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[5] The SIPP collects data on citizenship and migration history in the wave 2 topical module, but these data are not updated in later waves, so changes in status are not recorded. For this reason, we elected not to include this information in our eligibility simulation.

and full sample estimates of the percentage of elderly persons income eligible for SSI is 0.3 percentage points versus 0.4 percentage points in November 1998. The difference between the matched and full sample estimates of the percentage of elderly persons who were both income and asset eligible for SSI is 0.2 percentage points in September 2003 versus 0.3 percentage points in November 1998. The difference between the matched and full sample estimates of total elderly persons eligible for SSI is less than 80,000 in September 2003 and 90,000 in November 1998.

Given the similarity of the findings for the nonelderly population as a whole, we would not expect to find any notable differences between the two panels when we compare simulated eligibility rates for subgroups of the nonelderly population. The findings support this expectation. In fact, because of the greater sampling variability in the 2001 panel, which has barely half as many matched cases as the 1996 panel, the matched sample yields a higher subgroup eligibility rate than the full sample more often than it does in 1996. Among Hispanic persons this may reflect more than sampling variability, although we have no other explanation. In every one of the three months from the 2001 panel, the matched subsample yields higher simulated eligibility rates for Hispanic persons and numerically more Hispanic eligibles than the full sample.

b. Fluctuation in Monthly Income Eligibility

In comparisons based on calendar year data for 1997, 2001, and 2002, we find small but systematic differences between the matched and full samples with respect to the proportion of the elderly population that was ever income-eligible for SSI during a 12 month period and the proportion that was eligible for six months or more (Tables III.4, III.5a and III.5b). Slightly fewer of the matched cases were ever eligible during the year. For example, in 1997, 15.0 percent of the matched sample and 15.6 percent of the full sample was ever eligible for SSI.

Similarly, in 2002, 13.7 percent of the matched sample and 14.3 percent of the full sample was ever eligible for SSI. We also find that, compared to the full sample, consistently smaller proportions of the matched sample were eligible in January of each year and lost eligibility during the year. In 1997, for example, 10.6 of the matched sample and 11.2 percent of the full sample was eligible in January while 3.8 percent of the matched sample and 4.6 percent of the full sample lost eligibility during the year. We find similar patterns in 2001 and 2002.

At the same time, however, we find no difference in any of the years between the matched and full samples in the proportion of persons who were *ineligible* in January but *became* eligible during the year. In 1997, 4.4 percent of the elderly in each sample became income eligible for SSI during the year. In 2001, 5.7 percent of each sample became eligible during the year, and in 2002 4.1 percent of the matched subsample and 4.2 percent of the full sample became eligible during the year.

To sum up, this examination of fluctuation in monthly income eligibility for SSI provides further evidence that the substantially lower match rate in the 2001 panel had no impact on how well the matched sample represents the full sample. Even where we found that the matched sample differed systematically, albeit slightly, from the full sample, the magnitudes of the differences were very consistent between the 1996 and 2001 panels. Furthermore, as with the cross-sectional estimates presented earlier, these small differences between the matched and full samples in longitudinal estimates of income eligibility for SSI could very well be due to low-income immigrants without SSNs, who would be represented in the full sample but not the matched subsample.

3. **Pension Coverage of Divorced Women**

Another illustrative application of matched SIPP data identified by SSA involves the impact of a feature of the Social Security regulations that confers a spouse benefit on women who were

divorced from their former spouses after 10 years of marriage. Divorced women who were married long enough to benefit from this provision may behave differently with respect to their own pension coverage, receipt of Social Security benefits, or employment, and they may be better off economically than divorced women who were married too few years to any one spouse to have access to spouse benefits. To investigate this question requires marital history data collected in wave 2 and pension coverage collected in wave 7, so only the full panel sample is appropriate—that is, persons with data for all waves and assigned a full panel weight. The subset of the full panel sample with matched data could be used for this analysis as well, so that the richer and more accurate administrative data on Social Security recipiency could be substituted for what is reported in the SIPP. We use this policy application to extend our evaluation of bias in the matched subsample of the full panel relative to the entire full panel sample.

Current marital status and age may have important effects on the outcome measures that are of interest to SSA, so it is important to take these characteristics into account when examining the impact of the length of a prior marriage that ended in divorce. The upper half of Table III.6 provides estimates of the distribution of women 50 and older with at least one divorce by age, current marital status, and whether they were married to a divorced spouse for at least 10 years. The lower half provides estimates of the difference between the matched full panel estimate and the entire full panel estimate (matched minus full). Among women with at least one divorce, the number who had been married to a divorced former spouse for at least 10 years (8.9 million) was more than double the number who had not been married to any divorced spouse for that long (about 4.1 million). Those who had been divorced after at least 10 years of marriage were less likely to be currently married, and they were much older. This underscores the importance of taking these two characteristics into account when looking at the impact of the 10-year marriage

provision. The matched full panel estimates were generally similar, but many of the table cells are small, so discrepancies of 10 percent or more are not uncommon.[6]

Table III.7 looks at differences in the frequency of participation in a current or prior employer's pension plan. Table III.8 looks at the woman's receipt of Social Security benefits for herself. Table III.9 looks at current employment, and Table III.10 looks at the proportion with family income below 200 percent of poverty. Few of the 30 comparison cells in any table have statistically significant differences, and most of the percentage point differences are indeed very small, implying that an analyst working with either the matched data or the entire full panel sample would be led to the same conclusions.[7] Overall, the tables provide little evidence of an impact of the divorce provision. Because of the small samples in most cells, a regression approach might be more effective in finding evidence of an impact, but it would need to take account of higher order interactions.

C. MATCH BIAS IN THE CPS

To evaluate bias in the subsample of CPS records that could be matched to administrative records, we calibrated the matched subsample to the same population controls that the Census Bureau used to calibrate the full sample.   We then compared the reweighted matched and full samples with respect to a number of characteristics of Social Security retired workers, based on respondents' self-identification. We focused on a beneficiary population to reduce the impact of persons without SSNs, and we selected retired workers because they are the largest beneficiary

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[6] We did not test for statistically significant differences between the matched and full panel estimates in Table III.6, whereas we did so in the tables that follow.

[7] Because the estimates reported in Tables III.7 through III.10 are based on small cell sizes, we evaluated statistical significance at the 0.10 level.

subpopulation. Retired workers are divided into three age groups: under 65, 65 to 74, and 75 and older. The results of our evaluation are presented in Tables III.11 through III.14.

We find no meaningful differences with respect to demographic characteristics, but we do find some evidence that the matched cases tend to have more income than the full sample—particularly among those under 65.[8] Among retired workers under 65, Social Security benefits represent the only personal income reported by 17.5 of the matched respondents versus 21.5 percent of all respondents (Table III.12). This differential reliance on Social Security diminishes with increasing age. Similarly, matched respondents are more likely than all respondents to have family incomes above 400 percent of poverty (Table III.14), with the largest difference occurring among retired workers under age 65 (35.4 percent versus 31.9 percent). In addition, earnings provide a larger share (29.0 versus 25.1 percent) and Social Security benefits provide a smaller share (41.6 versus 46.5 percent) of family income among matched respondents under 65 than among all respondents. Likewise, Social Security benefits are the only family income reported by 7.3 percent of the matched subsample versus 11.4 percent of the full sample. All of these differences diminish or vanish altogether with increasing age.

We explained in Chapter 2 that the Census Bureau imputes the entire March supplement to respondents who complete the labor force survey but break off the interview before or during the supplement, as this is, technically, item nonresponse. Some researchers have questioned the wisdom of this approach, given the large volume of data imputed per person and the very limited tailoring of the general hot deck methodology to individual variables. Davern et al. (2007), for example, pointed out peculiarities in the distribution of health insurance coverage among

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[8] The Census Bureau does not calculate replicate weights for the CPS, and the sample information that the Census Bureau releases for the CPS does not support the calculation of standard errors with the same reliability that can be obtained with the SIPP. Consequently, we cannot produce the same test statistic for comparing the matched and full samples that we can produce for the SIPP. For this reason the tables presented here include no estimates of statistical significance.

nonrespondents to the supplement, and Koenig (2003) showed how respondents to the supplement differ from full sample respondents in the relationship between their CPS and matched SSA data.

We question the usefulness of data created by linking SSA administrative records to CPS records that have been imputed almost completely. Furthermore, the Census Bureau is able to match administrative records to only about half of the nonrespondents to the supplement, so the marginal benefit of including these additional matched cases, in terms of sample size, is small. We produced an additional reweighting of the matched subsample, wherein we limited the records to those sample members who responded to the supplement (and their children). We calibrated this subsample to the same population controls as the full matched sample. In addition, to allow us to examine possible match bias separately from any bias associated with response to the supplement, we also recalibrated the weights of the supplement respondents. We then compared the matched supplement respondents to all of the supplement respondents with respect to the same characteristics on which we compared all matched respondents to the full sample. These results are presented in Tables III.15 through III.18.

Here, too, we find no important differences on demographic characteristics (Tables III.15 and III.17) and very small differences in personal income, but the matched respondents have more family income and are less reliant on Social Security benefits than all of the respondents to the supplement—particularly among retired workers under 65. In this age group matched respondents are more likely than all respondents to report earnings (34.0 versus 29.7 percent), asset income (63.5 versus 59.5 percent) and other income (43.6 versus 41.8 percent). In addition, Social Security benefits are the only source of personal income for 16.4 percent of the matched respondents but 20.3 percent of all retired workers responding to the supplement (Table III.16). Similarly, earnings account for 28.7 percent of the family incomes of matched retired workers

under 65 versus 25.6 percent of all retired workers under 65 who responded to the supplement while Social Security benefits are 41.4 percent of the family incomes of matched retired workers versus 45.4 percent of all retired workers responding to the supplement (Table III.18). As we saw with the full sample, differences between the matched respondents and all respondents to the supplement diminish or vanish with increasing age.

D. CONCLUSION

While the proportion of SIPP respondents who could be matched to SSA administrative records dropped precipitously between the 1996 and 2001 panels, this appears to have occurred without increasing the bias of the matched sample. When we calibrated the matched and total sample members who responded to both waves 1 and 2 of the 2001 panel to the same wave 1 demographic controls that the Census Bureau used to calibrate the full wave 1 sample, we found little evidence of bias in estimates of a wide range of characteristics, much less an increase relative to the 1996 panel. Analyses of three illustrative applications of matched data defined by SSA provided stronger evidence of bias in the matched subsample. Simulations of elderly SSI eligibility based on income alone as well as income combined with assets showed somewhat fewer persons eligible for SSI in the matched sample than the full sample. Yet even here we found no evidence that this possible bias increased between the 1996 and 2001 panels. Furthermore, it is possible that the differences we observe between the matched subsample and full sample can be attributed to full sample members who lack SSNS and, therefore, are not included in the population that the matched sample represents. If so, the differences do not reflect bias in the matched subsample at all but, rather, our inability to identify and restrict our comparisons to the "matchable universe" within the full sample.

It is clear from our findings that the reduction in the size of the matched sample between the 1996 and 2001 panels, documented in Chapter 2, presents more of a problem for SSA analysts

than any increase in bias associated with the reduced match rate. We could address the impact of the reduced match rate by imputing matches to the unmatched records, but while some of SSA's applications of matched data could be well-served by imputed matches, other applications—in particular, those involving validation of SIPP data—could not. Furthermore, in imputing administrative record links to SIPP records without matches, we would have to find a way to identify—at least probabilistically—those records in the full sample that lacked SSNs and, therefore, should not be paired with administrative records.

A similar issue with SIPP records that have no corresponding administrative records arises in conjunction with the development of a further bias correction. We could expand our adjustments to the sample weights of the matched SIPP records so that the matched sample and the full sample yielded more similar estimates of simulated SSI-eligibles. First, however, we would need to resolve to what extent the differences in simulated eligibles are due to full sample members who lack administrative records. Any further adjustment to the SIPP sample weights would have to exclude the "bias" attributable to this source.

Our more limited evaluation of match bias in the CPS focused on retired workers and obtained results for that subpopulation that were very similar to what we found with the SIPP. For personal, family and household demographic characteristics the matched subsample mirrored the full sample. Small differences were observed for economic characteristics, with matched cases having slightly more income and being marginally less reliant on their Social Security benefits. These findings held when we restricted our analysis to those respondents who completed the annual supplement (as opposed to those whose data from the supplement were entirely imputed). As with the SIPP, the small bias that we detected would appear to be inconsequential for SSA's potential uses of CPS data.

TABLE III.1

DISTRIBUTION OF MIGRATION CHARACTERISTICS IDENTIFIED IN WAVE 2 OF THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 2 SAMPLE VERSUS ENTIRE WAVE 2 SAMPLE
TOTAL POPULATION 15 AND OLDER

| | Matched Wave 2 Topical Module Sample | | | | Wave 2 Topical Module Sample | | | |
| | | Age In May 2001 | | | | Age In May 2001 | | |
Characteristic	Total	15 to 18	18 to 64	65 +	Total	15 to 18	18 to 64	65 +
All Persons 15 and Older	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Citizenship								
Native-born citizen	89.1 ***	94.6 ***	88.4 ***	91.0 **	87.3	92.9	86.3	90.3
Foreign-born, naturalized citizen	4.7 ***	0.8 *	4.6 ***	6.6 **	5.3	1.2	5.2	7.3
Foreign born, not a citizen								
Permanent resident	4.7 ***	3.6 **	5.2 ***	2.2	5.3	4.3	6.0	2.1
Not a permanent resident	1.5 ***	1.0 **	1.8 ***	0.2	2.1	1.5	2.5	0.3
Year Moved to the U.S.								
After 1990	3.3 ***	2.8	3.8 ***	0.7	3.9	3.3	4.6	0.7
1980 to 1990	3.0	1.1	3.5	1.1	3.0	1.4	3.5	1.0
Before 1980	3.2	0.0 a	2.9	6.1	3.1	0.0	2.8	5.9
Don't know	1.4 ***	1.4 ***	1.5 ***	1.1 ***	2.6	2.3	2.8	2.0
Native-born	89.1 ***	94.6 ***	88.4 ***	91.0 **	87.3	92.9	86.3	90.3
Current Housing Tenure								
Owned or being bought	71.8 **	73.4	69.6 **	82.7	71.4	72.6	69.1	83.0
Rented for cash	26.4 **	25.7	28.6 ***	15.4	26.9	26.4	29.2	15.0
Occupied without payment of cash rent	1.7	0.9	1.8	1.9	1.7	1.0	1.7	2.0
Most Recent Move								
Moved since 1999	20.5 **	16.8	23.3 **	7.3	20.0	17.5	22.7	7.1
Last moved 1995 to 1999	30.1 ***	30.1	32.7 ***	16.6 **	29.3	30.8	31.8	15.8
Last moved 1990 to 1994	13.8 ***	17.0 ***	14.2 ***	10.3	13.2	15.7	13.6	10.2
Last moved 1980 to 1989	14.4 ***	11.9	14.2 *	16.2 ***	13.9	11.1	13.9	15.2
Last moved before 1980	13.3 **	0.0 a	8.3	44.0 **	13.0	0.0	8.2	42.6
Don't know	2.7 ***	2.8 ***	2.7 ***	2.7 ***	5.1	4.9	5.0	5.5
Always lived here	5.3	21.4 **	4.6	2.9 **	5.5	20.0	4.9	3.7

Source: Mathematica Policy Research, from the 2001 SIPP panel.

Note: Estimates are weighted by the May 2001 cross-sectional weight, or, for the matched cases, by an adjusted May 2001 cross-sectional weight that has been calibrated to the same population controls as the full May 2001 weight.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 2 sample estimate is zero or 100 percent; the matched wave 2 sample estimate cannot deviate from that value.

TABLE III.2a

SIMULATED ELIGIBILITY FOR SSI AMONG PERSONS 65 AND OLDER BY
SELECTED CHARACTERISTICS AND MATCHED VERSUS FULL SAMPLE:
1996 SIPP PANEL, NOVEMBER 1996

Characteristic	Percent of Persons Income Eligible for SSI		Percent of Persons Income and Asset Eligible for SSI		Number (1,000s) of Persons Income and Asset Eligible for SSI	
	Matched Sample	Full Sample	Matched Sample	Full Sample	Matched Sample	Full Sample
Age 65 to 74	9.6	10.2	5.8	6.1	1,051	1,098
Married men and women	5.2	5.6	2.6	2.9	298	331
Single men	15.0	14.8	11.7	10.9	225 *	205
Single women	18.2	19.3	11.1	11.6	528	561
Age 75 and Older	11.9	12.3	6.6	6.7	904	922
Married men and women	5.6	6.5	2.6	3.2	150 *	185
Single men	12.7	12.3	7.3	7.0	134	123
Single women	17.6	17.9	10.0	10.0	621	613
Age 65 and Older	10.6	11.1	6.1	6.3	1,955 *	2,019
White, non-Hispanic	7.0	7.2	3.3	3.4	893	919
Nonwhite, non-Hispanic	31.6	33.0	20.0	20.3	657	684
Hispanic	31.3	32.5	27.5	28.4	406	416
Monthly Income Relative to Poverty						
Under 50% of poverty	97.3	97.7	42.4	43.7	224	256
50% to under 100%	55.1	55.1	30.2	30.1	941	976
100% to under 150%	9.8	8.7	7.3	6.5	328	307
150% to under 200%	4.7	4.6	2.8	2.7	131	125
200% to under 300%	2.9	3.3	1.9	2.0	134	144
300% to under 400%	3.5	3.7	2.5	2.8	114	119
400% and over	1.9	2.2	1.2	1.3	84	92

Source: Mathematica Policy Research, from the 1996 SIPP panel.

Note: Standard errors were calculated only for the estimated numbers of persons who were simulated to be income and asset eligible for SSI.

* Matched sample estimate is significantly different from the full sample estimate at the .05 level.

TABLE III.2b

SIMULATED ELIGIBILITY FOR SSI AMONG PERSONS 65 AND OLDER BY
SELECTED CHARACTERISTICS AND MATCHED VERSUS FULL SAMPLE:
1996 SIPP PANEL, NOVEMBER 1997

Characteristic	Percent of Persons Income Eligible for SSI		Percent of Persons Income and Asset Eligible for SSI		Number (1,000s) of Persons Income and Asset Eligible for SSI	
	Matched Sample	Full Sample	Matched Sample	Full Sample	Matched Sample	Full Sample
Age 65 to 74	9.8	10.0	5.9	6.2	1,071 *	1,111
Married men and women	5.1	5.2	2.5	2.7	280	297
Single men	15.0	14.7	10.5	10.1	212	198
Single women	18.7	19.4	12.0	12.6	579	616
Age 75 and Older	11.6	12.1	6.1	6.4	851 *	905
Married men and women	6.5	6.8	3.0	3.0	170	175
Single men	9.4	10.2	5.9	6.6	124	133
Single women	17.0	17.6	8.8	9.5	557	597
Age 65 and Older	10.6	11.0	6.0	6.3	1,922 *	2,015
White, non-Hispanic	6.8	6.9	3.2	3.3	870	900
Nonwhite, non-Hispanic	31.3	32.6	19.5	20.1	657	695
Hispanic	30.7	32.2	24.2	26.1	395	420
Monthly Income Relative to Poverty						
Under 50% of poverty	96.4	97.0	49.1	50.5	243	256
50% to under 100%	58.5	58.5	32.1	32.3	959	983
100% to under 150%	10.2	9.7	6.3	6.2	289	294
150% to under 200%	4.6	4.4	2.9	2.7	131	125
200% to under 300%	3.1	3.4	2.0	2.2	154	170
300% to under 400%	2.1	3.1	1.2	2.1	54 *	94
400% and over	2.3	2.6	1.3	1.3	92	93

Source: Mathematica Policy Research, from the 1996 SIPP panel.

Note: Standard errors were calculated only for the estimated numbers of persons who were simulated to be income and asset eligible for SSI.

* Matched sample estimate is significantly different from the full sample estimate at the .05 level.

TABLE III.2c

SIMULATED ELIGIBILITY FOR SSI AMONG PERSONS 65 AND OLDER BY
SELECTED CHARACTERISTICS AND MATCHED VERSUS FULL SAMPLE:
1996 SIPP PANEL, NOVEMBER 1998

Characteristic	Percent of Persons Income Eligible for SSI		Percent of Persons Income and Asset Eligible for SSI		Number (1,000s) of Persons Income and Asset Eligible for SSI	
	Matched Sample	Full Sample	Matched Sample	Full Sample	Matched Sample	Full Sample
Age 65 to 74	9.9	10.2	5.8	6.0	1,044	1,073
Married men and women	5.4	5.5	2.9	3.1	327	347
Single men	14.2	14.0	8.6	8.0	170	158
Single women	18.9	19.9	11.7	12.0	546	568
Age 75 and Older	10.9	11.5	6.0	6.4	865 *	926
Married men and women	5.3	5.9	3.5	3.7	203	219
Single men	11.4	11.6	5.6	6.0	117	120
Single women	15.9	16.8	8.5	9.2	545	587
Age 65 and Older	10.4	10.8	5.9	6.2	1,909 *	1,999
White, non-Hispanic	6.5	6.9	3.1	3.2	833	874
Nonwhite, non-Hispanic	29.9	30.6	18.3	19.2	635 *	686
Hispanic	30.8	31.5	24.9	25.8	442	439
Monthly Income Relative to Poverty						
Under 50% of poverty	95.4	96.2	43.8	42.7	215	226
50% to under 100%	59.6	59.5	32.9	32.7	941	961
100% to under 150%	10.5	10.0	7.4	7.3	340	348
150% to under 200%	4.2	4.4	2.1	2.5	91	106
200% to under 300%	2.7	3.2	1.7	2.0	125	145
300% to under 400%	2.3	2.8	1.3	1.5	67	74
400% and over	2.6	2.7	1.7	1.9	131	138

Source: Mathematica Policy Research, from the 1996 SIPP panel.

Note: Standard errors were calculated only for the estimated numbers of persons who were simulated to be
income and asset eligible for SSI.

* Matched sample estimate is significantly different from the full sample estimate at the .05 level.

TABLE III.3a

SIMULATED ELIGIBILITY FOR SSI AMONG PERSONS 65 AND OLDER BY
SELECTED CHARACTERISTICS AND MATCHED VERSUS FULL SAMPLE:
2001 SIPP PANEL, SEPTEMBER 2001

Characteristic	Percent of Persons Income Eligible for SSI		Percent of Persons Income and Asset Eligible for SSI		Number (1,000s) of Persons Income and Asset Eligible for SSI	
	Matched Sample	Full Sample	Matched Sample	Full Sample	Matched Sample	Full Sample
Age 65 to 74	9.0	9.2	5.1	5.1	931	931
Married men and women	5.5	5.5	2.8	2.7	339	322
Single men	14.7	13.3	10.5	8.8	189 *	154
Single women	16.7	17.7	9.6	10.3	403	455
Age 75 and Older	10.3	11.2	5.5	6.1	845 *	938
Married men and women	6.0	5.9	2.4	2.1	167	144
Single men	7.1	8.4	4.9	5.3	91	97
Single women	15.7	17.5	8.8	10.4	588 *	697
Age 65 and Older	9.6	10.1	5.3	5.6	1,776 *	1,869
White, non-Hispanic	5.6	6.4	2.2	2.6	617 *	743
Nonwhite, non-Hispanic	25.5	26.1	16.0	17.1	599	653
Hispanic	37.5	34.8	30.4	26.7	560 *	472
Monthly Income Relative to Poverty						
Under 50% of poverty	90.8	94.4	38.2	43.7	165 *	233
50% to under 100%	55.6	53.9	28.6	27.9	881	880
100% to under 150%	8.7	8.8	6.1	6.3	280	293
150% to under 200%	4.4	4.0	3.1	2.8	141	132
200% to under 300%	3.2	3.5	1.9	1.9	151	156
300% to under 400%	2.6	2.8	1.6	1.4	81	71
400% and over	1.6	2.5	1.0	1.4	77	103

Source: Mathematica Policy Research, from the 2001 SIPP panel.

Note: Standard errors were calculated only for the estimated numbers of persons who were simulated to be income and asset eligible for SSI.

* Matched sample estimate is significantly different from the full sample estimate at the .05 level.

TABLE III.3b

SIMULATED ELIGIBILITY FOR SSI AMONG PERSONS 65 AND OLDER BY
SELECTED CHARACTERISTICS AND MATCHED VERSUS FULL SAMPLE:
2001 SIPP PANEL, SEPTEMBER 2002

Characteristic	Percent of Persons Income Eligible for SSI		Percent of Persons Income and Asset Eligible for SSI		Number (1,000s) of Persons Income and Asset Eligible for SSI	
	Matched Sample	Full Sample	Matched Sample	Full Sample	Matched Sample	Full Sample
Age 65 to 74	8.0	8.7	4.9	5.4	876 *	966
Married men and women	4.8	5.2	2.7	3.1	332	379
Single men	14.0	12.6	9.5	8.4	156	133
Single women	15.2	16.9	9.4	10.5	388 *	454
Age 75 and Older	9.4	10.5	6.1	6.5	965 *	1,036
Married men and women	5.4	5.7	3.4	3.2	250	234
Single men	9.6	11.2	6.8	8.0	125	148
Single women	13.7	15.4	8.9	9.7	590	654
Age 65 and Older	8.6	9.5	5.4	5.9	1,841 *	2,002
White, non-Hispanic	4.6	5.7	2.4	3.0	678 *	829
Nonwhite, non-Hispanic	23.4	25.6	15.4	17.1	583	658
Hispanic	36.2	33.8	28.3	27.0	580	515
Monthly Income Relative to Poverty						
Under 50% of poverty	93.5	95.4	62.4	54.3	216	247
50% to under 100%	55.6	55.9	35.5	34.8	999	1,033
100% to under 150%	9.0	8.6	5.2	5.8	245	275
150% to under 200%	5.3	4.6	4.2	3.5	188	157
200% to under 300%	2.3	2.7	1.1	1.6	85 *	127
300% to under 400%	2.0	2.6	0.9	1.2	48	61
400% and over	1.1	2.0	0.7	1.2	60 *	101

Source: Mathematica Policy Research, from the 2001 SIPP panel.

Note: Standard errors were calculated only for the estimated numbers of persons who were simulated to be income and asset eligible for SSI.

* Matched sample estimate is significantly different from the full sample estimate at the .05 level.

TABLE III.3c

SIMULATED ELIGIBILITY FOR SSI AMONG PERSONS 65 AND OLDER BY
SELECTED CHARACTERISTICS AND MATCHED VERSUS FULL SAMPLE:
2001 SIPP PANEL, SEPTEMBER 2003

Characteristic	Percent of Persons Income Eligible for SSI		Percent of Persons Income and Asset Eligible for SSI		Number (1,000s) of Persons Income and Asset Eligible for SSI	
	Matched Sample	Full Sample	Matched Sample	Full Sample	Matched Sample	Full Sample
Age 65 to 74	8.7	8.9	4.4	4.8	797 *	869
Married men and women	5.3	5.0	2.6	2.7	325	326
Single men	12.1	10.9	6.3	6.5	104	107
Single women	17.6	19.2	9.1	10.3	368	437
Age 75 and Older	10.5	11.1	6.4	6.4	1,041	1,044
Married men and women	6.0	6.5	3.6	3.5	274	260
Single men	12.4	12.0	8.4	8.3	157	158
Single women	15.1	15.7	9.0	9.1	609	625
Age 65 and Older	9.6	9.9	5.4	5.6	1,838 *	1,913
White, non-Hispanic	5.5	6.1	2.2	2.6	607 *	741
Nonwhite, non-Hispanic	23.8	25.2	14.3	15.1	564	601
Hispanic	34.6	31.7	28.8	26.5	667	571
Monthly Income Relative to Poverty						
Under 50% of poverty	96.7	97.4	39.7	46.2	172 *	251
50% to under 100%	60.7	58.4	33.5	31.1	982	936
100% to under 150%	9.9	9.6	6.2	6.7	290	322
150% to under 200%	3.7	3.3	3.3	2.7	154	128
200% to under 300%	2.4	2.5	1.5	1.5	114	114
300% to under 400%	2.0	3.0	1.1	1.7	51	78
400% and over	1.8	1.9	0.8	0.9	75	84

Source: Mathematica Policy Research, from the 2001 SIPP panel.

Note: Standard errors were calculated only for the estimated numbers of persons who were simulated to be income and asset eligible for SSI.

* Matched sample estimate is significantly different from the full sample estimate at the .05 level.

TABLE III.4

FLUCTUATION IN SSI INCOME ELIGIBILITY AMONG THE ELDERLY IN CALENDAR YEAR 1997

Pattern of Eligibility	Matched Sample			Full Sample		
	65 to 74	75 and Older	Total 65+	65 to 74	75 and Older	Total 65+
Percent of age group:						
Ever eligible in year	14.4 *	15.9 *	15.0 *	14.9	16.6	15.6
Eligible at least 6 months	9.7 *	11.4 *	10.5 *	10.1	12.1	11.0
Eligible in January	10.0 *	11.4 *	10.6 *	10.4	12.2	11.2
Exiting during the year	3.8	3.8	3.8	4.6	4.7	4.6
Exiting and re-entering	1.1	1.1	1.1	1.0	1.1	1.0
Exiting, re-entering and exiting	0.3 *	0.2	0.2	0.2	0.2	0.2
Ineligible in January but gaining eligibility during the year	4.4	4.4	4.4	4.4	4.5	4.4
Gaining and losing eligibility	2.1	2.2	2.2	2.2	2.2	2.2
Gaining, losing, and regaining	0.2	0.2	0.2	0.2	0.3	0.2

Source: Mathematica Policy Research, from the 1996 SIPP panel.

* Matched sample estimate is significantly different from the full sample estimate at the .05 level.

TABLE III.5a

FLUCTUATION IN SSI INCOME ELIGIBILITY AMONG THE ELDERLY IN CALENDAR YEAR 2001

Pattern of Eligibility	Matched Sample			Full Sample		
	65 to 74	75 and Older	Total 65+	65 to 74	75 and Older	Total 65+
Percent of age group:						
Ever eligible in year	14.5 *	16.4	15.3 *	15.8	17.2	16.4
Eligible at least 6 months	8.3 *	8.7	8.5 *	9.1	9.6	9.3
Eligible in January	9.2 *	10.2 *	9.6 *	10.3	11.2	10.7
Exiting during the year	4.2 *	4.2 *	4.2 *	6.0	5.7	5.9
Exiting and re-entering	1.1	0.6	0.9	1.2	0.8	1.0
Exiting, re-entering and exiting	0.1	0.1	0.1	0.2	0.2	0.2
Ineligible in January but gaining eligibility during the year	5.3	6.2	5.7	5.4	6.0	5.7
Gaining and losing eligibility	2.9	3.5	3.1	3.0	3.2	3.1
Gaining, losing, and regaining	0.2	0.2	0.2	0.2	0.2	0.2

Source: Mathematica Policy Research, from the 2001 SIPP panel.

* Matched sample estimate is significantly different from the full sample estimate at the .05 level.

TABLE III.5b

FLUCTUATION IN SSI INCOME ELIGIBILITY AMONG THE ELDERLY IN CALENDAR YEAR 2002

| | Matched Sample | | | Full Sample | | |
Pattern of Eligibility	65 to 74	75 and Older	Total 65+	65 to 74	75 and Older	Total 65+
Percent of age group:						
Ever eligible in year	12.9	14.7	13.7	13.1	15.8	14.3
Eligible at least 6 months	8.5	8.7 *	8.6 *	9.0	10.1	9.5
Eligible in January	9.2	10.1	9.6	9.4	10.9	10.1
Exiting during the year	3.9	4.1	4.0	4.9	4.8	4.8
Exiting and re-entering	1.2	0.8	1.0	1.2	0.8	1.0
Exiting, re-entering and exiting	0.0	0.0	0.0	0.2	0.1	0.1
Ineligible in January but gaining eligibility during the year	3.6	4.6	4.1	3.7	4.9	4.2
Gaining and losing eligibility	1.9	2.9	2.4	1.9	2.6	2.2
Gaining, losing, and regaining	0.3	0.3	0.3	0.3	0.2	0.2

Source: Mathematica Policy Research, from the 2001 SIPP panel.

* Matched sample estimate is significantly different from the full sample estimate at the .05 level.

TABLE III.6

DENOMINATORS BY CURRENT MARITAL STATUS AND LENGTH OF PRIOR MARRIAGE:
WOMEN WITH AT LEAST ONE DIVORCE, BY AGE, JANUARY 2003
(Thousands of persons)

Age in December 2002	Married to Divorced Spouse Fewer than 10 Years			Married to Any Divorced Spouse 10 Years or More		
	Currently Married	Not Married; Widowed	Not Married And Not Widowed	Currently Married	Not Married; Widowed	Not Married And Not Widowed
Full Panel Estimates:						
50 to 55	1,111	87	778	1,277	34	1,361
56 to 61	594	112	378	842	172	1,126
62 to 64	123	67	114	349	79	410
65 to 74	303	147	79	607	288	1,019
75 and older	86	131	27	287	557	512
Total	2,217	544	1,375	3,363	1,130	4,428
Matched Full Panel vs. Entire Full Panel:						
50 to 55	62	2	-41	-141	-3	-8
56 to 61	40	-15	19	38	-16	48
62 to 64	20	10	3	-5	8	79
65 to 74	5	25	15	44	-45	-36
75 and older	11	33	6	76	16	-47
Total	138	55	2	11	-40	37

Source: Mathematica Policy Research, from the 2001 SIPP panel.

Note: The sample was restricted to full panel members who were present in every month
from wave 2 through the end of wave 7.

TABLE III.7

PARTICIPATION IN CURRENT OR PRIOR EMPLOYER'S PENSION PLAN,
CURRENT MARITAL STATUS, AND LENGTH OF PRIOR MARRIAGE:
WOMEN WITH AT LEAST ONE DIVORCE, BY AGE, JANUARY 2003

Age in December 2002	Married to Divorced Spouse Fewer than 10 Years			Married to Any Divorced Spouse 10 Years or More		
	Currently Married	Not Married; Widowed	Not Married And Not Widowed	Currently Married	Not Married; Widowed	Not Married And Not Widowed
Full Panel Estimates:						
50 to 55	51.1	44.8	55.4	53.8	55.4	58.3
56 to 61	54.7	32.8	55.8	47.0	38.1	55.6
62 to 64	43.4	52.2	65.7	33.7	27.7	41.6
65 to 74	30.8	40.6	31.2	30.2	31.0	40.6
75 and older	4.7	23.9	0.0	16.3	24.0	23.4
Matched Full Panel vs. Entire Full Panel:						
50 to 55	3.0	0.6	2.5	1.5	0.9	2.6
56 to 61	-1.1	5.9	-0.8	3.5	2.7	0.6
62 to 64	4.0	-12.8	-8.1	3.1	-2.5	-2.3
65 to 74	-8.2	-1.7	12.4 *	-1.4	-10.9 *	6.5 *
75 and older	1.9	0.7	0.0 a	6.0 *	0.0	5.0

Source: Mathematica Policy Research, from the 2001 SIPP panel.

Note: The sample was restricted to full panel members who were present in every month from wave 2 through the end of wave 7.

a The full panel estimate is zero or 100 percent; the matched panel estimate cannot deviate from that value.

* Matched sample estimate is significantly different from the full sample estimate at the .10 level.

TABLE III.8

RECEIVING SOCIAL SECURITY PAYMENTS FOR SELF IN WAVE 7,
CURRENT MARITAL STATUS, AND LENGTH OF PRIOR MARRIAGE:
WOMEN WITH AT LEAST ONE DIVORCE, BY AGE, JANUARY 2003

Age in December 2002	Married to Divorced Spouse Fewer than 10 Years			Married to Any Divorced Spouse 10 Years or More		
	Currently Married	Not Married; Widowed	Not Married And Not Widowed	Currently Married	Not Married; Widowed	Not Married And Not Widowed
Full Panel Estimates:						
50 to 55	3.8	37.0	6.1	5.7	0.0	8.8
56 to 61	14.1	28.2	11.5	7.3	18.1	9.3
62 to 64	66.7	78.5	56.6	63.6	100.0	59.8
65 to 74	96.7	94.6	80.4	95.6	94.7	92.1
75 and older	100.0	100.0	100.0	94.6	98.0	92.6
Matched Full Panel vs. Entire Full Panel:						
50 to 55	0.4	15.3 **	0.3	-0.4	0.0 a	0.9
56 to 61	1.4	-1.3	1.3	-1.3	-2.4	0.2
62 to 64	-1.7	0.2	-0.3	-3.0	0.0 a	2.2
65 to 74	0.9	2.5	7.2	1.1	-7.1	-1.9
75 and older	0.0 a	0.0 a	0.0 a	-1.8	0.6	0.4

Source: Mathematica Policy Research, from the 2001 SIPP panel.

Note: The sample was restricted to full panel members who were present in every month from wave 2 through the end of wave 7.

a The full panel estimate is zero or 100 percent; the matched panel estimate cannot deviate from that value.

* Matched sample estimate is significantly different from the full sample estimate at the .10 level or better.

TABLE III.9

CURRENT EMPLOYMENT BY CURRENT MARITAL STATUS
AND LENGTH OF PRIOR MARRIAGE: WOMEN WITH
AT LEAST ONE DIVORCE, BY AGE, JANUARY 2003

Age in December 2002	Married to Divorced Spouse Fewer than 10 Years			Married to Any Divorced Spouse 10 Years or More		
	Currently Married	Not Married; Widowed	Not Married And Not Widowed	Currently Married	Not Married; Widowed	Not Married And Not Widowed
Full Panel Estimates:						
50 to 55	69.4	54.4	74.2	69.5	69.6	80.5
56 to 61	54.1	55.2	75.0	56.4	58.2	75.3
62 to 64	49.9	40.0	51.8	42.5	12.9	48.7
65 to 74	13.0	29.2	33.0	14.5	28.3	31.5
75 and older	5.5	0.0	23.8	5.0	4.9	7.1
Matched Full Panel vs. Entire Full Panel:						
50 to 55	3.0	-13.6 *	-0.3	3.3	-13.3	-1.2
56 to 61	4.6 *	-13.0	-1.6	1.0	4.9	3.1
62 to 64	-4.3	-16.3 *	-5.4	5.1	-7.2	-0.8
65 to 74	0.8	5.3	-11.3 *	-5.1 *	-2.9	0.4
75 and older	2.7	0.0 a	-23.8	-1.0	2.8 *	0.6

Source: Mathematica Policy Research, from the 2001 SIPP panel.

Note: The sample was restricted to full panel members who were present in every month from wave 2 through the end of wave 7.

[a] The full panel estimate is zero or 100 percent; the matched panel estimate cannot deviate from that value.

* Matched sample estimate is significantly different from the full sample estimate at the .10 level or better.

TABLE III.10

ANNUAL INCOME-TO-POVERTY RATIO IS UNDER 200 PERCENT IN 2002,
CURRENT MARITAL STATUS, AND LENGTH OF PRIOR MARRIAGE:
WOMEN WITH AT LEAST ONE DIVORCE, BY AGE, JANUARY 2003

Age in December 2002	Married to Divorced Spouse Fewer than 10 Years			Married to Any Divorced Spouse 10 Years or More		
	Currently Married	Not Married; Widowed	Not Married And Not Widowed	Currently Married	Not Married; Widowed	Not Married And Not Widowed
Full Panel Estimates:						
50 to 55	12.7	55.6	42.7	10.9	28.3	30.0
56 to 61	16.3	38.5	32.9	17.4	48.6	32.2
62 to 64	20.1	52.5	14.9	6.4	54.0	46.1
65 to 74	26.7	43.4	57.3	19.1	52.7	49.9
75 and older	35.9	57.5	76.2	23.6	60.1	56.4
Matched Full Panel vs. Entire Full Panel:						
50 to 55	-0.8	8.2	2.9	0.8	-10.4	-1.0
56 to 61	-0.2	-7.5	-1.5	-2.3	-2.0	-4.6 *
62 to 64	4.9	14.0 *	7.1	-1.9	-3.3	-1.1
65 to 74	6.0	-1.3	-5.9	-0.9	-11.0 *	-0.8
75 and older	7.8	0.4	23.8	1.1	-5.4	-3.5

Source: Mathematica Policy Research, from the 2001 SIPP panel.

Note: The sample was restricted to full panel members who were present in every month from wave 2 through the end of wave 7.

[a] The full panel estimate is zero or 100 percent; the matched panel estimate cannot deviate from that value.

* Matched sample estimate is significantly different from the full sample estimate at the .10 level or better.

TABLE III.11

PERSONAL CHARACTERISTICS OF RETIRED WORKERS BY AGE:
MARCH 2002 CPS FULL SAMPLE VERSUS MATCHED SUBSAMPLE

| | Full Sample | | | | Matched Subsample | | | |
| | | Age In March 2002 | | | | Age In March 2002 | | |
Characteristic	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sex								
Male	45.0	48.2	47.4	41.6	45.1	48.2	47.8	41.5
Female	55.0	51.8	52.6	58.4	54.9	51.8	52.2	58.5
Race								
White	89.6	87.5	88.4	91.4	89.6	87.8	88.2	91.6
Black	7.8	10.0	8.6	6.5	7.9	9.7	8.8	6.4
American Indian, Alaska Native	0.6	0.6	0.8	0.5	0.6	0.7	0.7	0.4
Asian, Pacific Islander	2.0	1.9	2.2	1.7	1.9	1.8	2.3	1.5
Ethnicity								
Hispanic	4.8	6.3	5.4	3.8	4.8	6.7	5.5	3.7
Non-Hispanic	95.2	93.7	94.6	96.2	95.2	93.3	94.5	96.3
Marital Status								
Married	59.5	71.6	67.4	48.0	59.5	73.2	67.0	48.2
Widowed	28.1	8.0	19.1	43.0	28.0	6.6	19.4	42.4
Divorced or separated	8.6	14.9	10.2	5.4	8.9	14.9	10.5	5.8
Never married	3.7	5.4	3.4	3.6	3.5	5.2	3.1	3.6
Years of education								
0 to 8	13.9	7.7	11.4	18.2	14.0	7.3	11.2	18.7
9 to 11	12.5	9.7	12.5	13.2	12.7	9.1	12.8	13.3
12	37.8	42.5	38.5	35.9	36.9	42.2	37.3	35.2
13 to 15	18.8	22.0	18.9	17.8	19.2	22.8	19.5	18.2
16 or more	17.0	18.1	18.8	14.9	17.2	18.5	19.2	14.7
Unknown (used for children)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Living Arrangement								
Lives alone	29.3	16.7	23.3	38.9	29.1	14.2	23.6	38.5
Lives with relatives	68.5	79.5	74.2	59.5	68.7	81.9	73.9	60.0
Lives with only non-relatives	2.2	3.8	2.5	1.6	2.2	3.9	2.4	1.5
Relationship to Householder								
Householder	66.5	58.9	64.1	71.0	66.7	57.0	65.1	70.7
Spouse	26.6	33.3	30.6	20.4	26.3	34.5	29.8	20.7
Child	0.3	1.7	0.2	0.0	0.3	1.7	0.3	0.0
Grandchild	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Parent	3.4	2.5	2.4	4.6	3.4	3.0	2.3	4.6
Sibling	0.4	0.5	0.2	0.4	0.3	0.5	0.2	0.4
Other relative	1.7	1.0	1.2	2.5	1.9	1.1	1.3	2.7
Nonrelative	1.2	2.2	1.1	0.9	1.1	2.3	1.1	0.8

Source: Mathematica Policy Research, from the 2002 CPS ASEC supplement.

Note: Sample weights for the matched subsample have been recalibrated to the full sample demographic control totals.

TABLE III.12

ADDITIONAL PERSONAL CHARACTERISTICS OF RETIRED WORKERS BY AGE:
MARCH 2002 CPS FULL SAMPLE VERSUS MATCHED SUBSAMPLE

| | Full Sample | | | | Matched Subsample | | | |
| | | Age In March 2002 | | | | Age In March 2002 | | |
Characteristic	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Health Insurance								
Medicaid	7.8	7.4	7.4	8.2	7.9	6.6	8.0	8.2
Medicare	92.6	27.8	100.0	100.0	92.6	22.8	100.0	100.0
Private (including military)	66.0	67.2	67.9	63.6	68.0	73.8	69.3	65.2
None	1.4	14.1	0.0	0.0	1.1	11.4	0.0	0.0
Sources of Own Income								
Social Security	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
SSI	2.3	2.6	2.1	2.4	2.4	2.8	2.4	2.3
Other public assistance	0.7	0.5	0.7	0.8	0.9	0.5	0.8	1.0
Earnings	16.1	27.7	22.4	6.3	17.1	32.7	23.4	6.5
Asset income	61.5	58.6	62.1	61.5	63.8	62.7	64.0	63.7
Other	39.8	41.5	39.3	40.0	41.2	42.8	41.1	41.0
Average Monthly Personal Income								
Under $100	0.3	0.7	0.3	0.3	0.3	0.4	0.2	0.3
$100 to 249	1.0	2.3	0.7	1.0	1.0	2.4	0.6	1.0
$250 to 499	8.3	9.0	8.3	8.1	7.9	8.3	7.8	7.9
$500 to 749	15.4	15.2	16.0	14.8	15.0	13.6	15.7	14.5
$750 to 999	15.0	11.6	13.2	17.9	14.8	11.2	13.1	17.5
$1,000 to 1,499	21.8	19.0	19.2	25.3	21.6	18.5	18.9	25.3
$1,500 to 1,999	12.2	12.0	12.0	12.5	12.4	13.0	12.0	12.8
$2,000 to 2,999	12.3	14.2	13.9	10.1	12.9	15.5	14.7	10.4
$3,000 to 3,999	5.1	6.7	5.8	4.0	5.3	6.9	5.9	4.3
$4,000 to 4999	2.9	3.4	3.3	2.2	2.9	3.4	3.5	2.1
$5,000 or more	5.7	6.0	7.3	3.7	5.9	6.8	7.6	3.8
Social Security Payments as a Percentage of Personal Income								
Under 25 percent	12.3	18.5	14.7	8.2	12.8	20.6	15.5	8.2
25 to under 50 percent	20.6	25.7	22.6	17.2	21.3	28.8	23.0	17.8
50 to under 75 percent	19.6	16.5	19.4	20.5	20.2	16.1	20.1	21.2
75 to under 100 percent	25.3	17.7	22.6	30.1	25.3	16.9	22.6	30.2
100 percent	22.2	21.5	20.7	24.0	20.3	17.5	18.8	22.6

Source: Mathematica Policy Research, from the 2002 CPS ASEC supplement.

Note: Sample weights for the matched subsample have been recalibrated to the full sample demographic control totals.

TABLE III.13

HOUSEHOLD AND FAMILY CHARACTERISTICS OF RETIRED WORKERS BY AGE:
MARCH 2002 CPS FULL SAMPLE VERSUS MATCHED SUBSAMPLE

| | Full Sample | | | | Matched Subsample | | | |
| | Age In March 2002 | | | | Age In March 2002 | | | |
Characteristic	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household Type								
Family								
Married couple present	60.2	71.1	67.2	49.9	60.2	72.8	66.7	50.1
No married couple present								
Male householder	2.6	2.7	2.2	3.0	2.6	2.9	2.2	3.0
Female householder	5.9	5.9	5.1	6.8	6.2	6.7	5.3	7.1
Nonfamily								
Male householder	8.8	8.0	8.1	9.8	9.1	7.6	8.4	10.2
Female householder	22.4	12.3	17.3	30.5	21.9	10.1	17.4	29.5
Ownership Status of Living Quarters								
Owned	85.3	86.8	87.8	82.2	85.6	88.9	87.9	82.3
Not owned	14.7	13.2	12.2	17.8	14.4	11.1	12.1	17.7
Residence in Public Housing	2.8	2.0	2.4	3.5	3.2	2.0	2.7	4.0
Household Size								
1 person	29.3	16.7	23.3	38.9	29.1	14.2	23.6	38.5
2 persons	56.6	63.0	61.7	49.4	56.1	63.1	60.5	49.5
3 to 4 persons	11.1	15.4	11.7	9.5	11.6	16.9	12.3	9.7
5 or more persons	3.0	4.8	3.3	2.2	3.2	5.7	3.5	2.4
Family Size								
1 person	31.5	20.5	25.8	40.5	31.3	18.1	26.1	40.0
2 persons	55.2	61.1	60.1	48.3	54.6	61.0	58.7	48.6
3 to 4 persons	10.6	13.9	11.2	9.1	11.2	15.7	12.1	9.2
5 or more persons	2.7	4.4	3.0	2.0	2.9	5.2	3.1	2.2
Persons under 18 in Family								
None	95.2	91.8	94.4	97.0	94.8	90.2	93.8	96.9
1 person	2.7	4.6	3.2	1.7	2.9	5.2	3.5	1.7
2 persons	1.4	2.0	1.7	0.9	1.5	2.3	1.9	0.9
3 or more persons	0.7	1.6	0.8	0.4	0.8	2.3	0.9	0.5

Source: Mathematica Policy Research, from the 2002 CPS ASEC supplement.

Note: Sample weights for the matched subsample have been recalibrated to the full sample demographic control totals.

TABLE III.14

HOUSEHOLD AND FAMILY INCOME OF RETIRED WORKERS BY AGE:
MARCH 2002 CPS FULL SAMPLE VERSUS MATCHED SUBSAMPLE

	Full Sample				Matched Subsample			
		Age In March 2002				Age In March 2002		
Characteristic	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household Receipt of:								
Energy assistance	2.6	2.2	2.3	3.0	2.8	2.2	2.5	3.1
Housing assistance	1.0	0.3	0.7	1.5	1.1	0.4	0.9	1.6
Food stamps	2.8	3.8	3.0	2.4	2.9	3.3	3.3	2.4
Average Monthly Family Income								
Less than $500	1.9	1.7	1.4	2.5	1.8	1.4	1.3	2.4
$500 to 999	12.6	9.7	10.2	16.1	12.0	7.4	9.7	15.5
$1,000 to 1,499	15.3	11.8	12.5	19.3	14.4	9.6	11.4	18.7
$1,500 to 1,999	13.0	10.0	12.3	14.5	12.5	8.6	11.7	14.3
$2,000 to 2,999	20.0	19.1	21.0	19.2	20.6	19.6	21.7	19.5
$3,000 to 3,999	11.9	14.8	13.3	9.7	12.6	15.5	13.9	10.4
$4,000 to 4,999	6.9	9.9	7.8	5.2	7.3	11.5	8.2	5.5
$5,000 or more	18.3	23.1	21.5	13.4	18.9	26.3	22.1	13.7
Family Income in Relation to Poverty								
Under 10 percent	0.1	0.2	0.0	0.2	0.1	0.0	0.1	0.2
10 to under 50 percent	0.8	1.0	0.6	1.1	0.7	1.1	0.5	0.9
50 to under 100 percent	7.0	8.6	5.9	7.8	6.7	6.9	5.7	7.9
100 to under 125 percent	6.3	4.4	5.7	7.4	5.7	3.6	5.1	6.8
125 to under 150 percent	7.7	6.7	6.2	9.7	7.5	5.3	6.1	9.6
150 to under 200 percent	14.2	11.3	12.1	17.2	13.5	9.6	11.2	16.9
200 to under 300 percent	22.2	19.9	22.3	22.6	22.4	20.7	22.4	22.7
300 to under 400 percent	14.4	16.1	15.2	13.1	15.2	17.4	16.1	13.7
400 percent or more	27.2	31.9	31.9	20.9	28.2	35.4	32.9	21.5
Distribution of Family Income by Source								
Social Security	56.6	46.5	53.2	62.7	55.1	41.6	51.7	62.0
SSI	0.7	1.1	0.7	0.7	0.7	1.2	0.8	0.6
Other public assistance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Earnings	16.0	25.1	19.1	10.3	16.4	29.0	19.3	10.3
Asset income	10.3	7.9	10.1	11.1	10.6	8.4	10.3	11.5
All other	16.2	19.1	16.7	15.0	16.9	19.7	17.7	15.3
Social Security Payments as a Percentage of Family Income								
Under 25 percent	20.6	31.1	22.9	15.4	21.5	34.8	24.1	15.8
25 to under 50 percent	24.9	30.8	27.5	20.5	25.5	33.3	28.1	20.9
50 to under 75 percent	21.3	15.1	21.5	22.6	21.9	14.7	21.8	23.5
75 to under 100 percent	20.2	11.6	16.8	26.0	19.5	9.8	15.9	25.6
100 percent	13.1	11.4	11.4	15.4	11.6	7.3	10.1	14.3

Source: Mathematica Policy Research, from the 2002 CPS ASEC supplement.

Note: Sample weights for the matched subsample have been recalibrated to the full sample demographic control totals.

TABLE III.15

PERSONAL CHARACTERISTICS OF RETIRED WORKERS BY AGE, MARCH 2002 CPS:
ALL SUPPLEMENT RESPONDENTS VERSUS MATCHED SUBSAMPLE

| Characteristic | All Respondents to Supplement | | | | Matched Subsample of Respondents | | | |
| | | Age In March 2002 | | | | Age In March 2002 | | |
	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sex								
Male	45.1	48.1	47.6	41.7	45.1	48.2	47.8	41.5
Female	54.9	51.9	52.4	58.3	54.9	51.8	52.2	58.5
Race								
White	89.8	87.7	88.6	91.5	89.8	88.3	88.4	91.7
Black	7.8	10.1	8.5	6.5	7.8	9.4	8.7	6.4
American Indian, Alaska Native	0.6	0.6	0.8	0.5	0.6	0.6	0.8	0.4
Asian, Pacific Islander	1.7	1.6	2.1	1.5	1.8	1.7	2.2	1.5
Ethnicity								
Hispanic	4.8	6.2	5.4	3.8	4.8	6.5	5.4	3.8
Non-Hispanic	95.2	93.8	94.6	96.2	95.2	93.5	94.6	96.2
Marital Status								
Married	59.4	71.4	66.9	48.2	59.3	72.6	66.7	48.2
Widowed	28.2	8.1	19.3	42.8	28.1	6.8	19.5	42.3
Divorced or separated	8.8	15.3	10.4	5.4	9.1	15.4	10.7	5.9
Never married	3.7	5.3	3.4	3.6	3.5	5.2	3.1	3.6
Years of education								
0 to 8	13.9	7.7	11.3	18.3	14.0	7.5	11.1	18.6
9 to 11	12.5	9.5	12.5	13.1	12.6	9.0	12.8	13.3
12	37.7	42.2	38.3	36.0	37.1	42.1	37.7	35.4
13 to 15	18.8	21.7	19.2	17.7	19.1	22.3	19.4	18.0
16 or more	17.1	18.9	18.7	14.9	17.2	19.1	19.1	14.7
Unknown (used for children)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Living Arrangement								
Lives alone	29.4	16.7	23.6	38.7	29.3	14.7	23.8	38.6
Lives with relatives	68.4	79.7	73.8	59.8	68.5	81.6	73.7	59.9
Lives with only non-relatives	2.2	3.6	2.5	1.6	2.2	3.7	2.5	1.4
Relationship to Householder								
Householder	66.8	58.6	64.8	71.0	67.0	57.0	65.4	70.9
Spouse	26.4	33.6	30.2	20.5	26.2	34.4	29.7	20.6
Child	0.3	1.7	0.3	0.0	0.3	1.6	0.2	0.0
Grandchild	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Parent	3.3	2.5	2.3	4.6	3.3	3.1	2.2	4.5
Sibling	0.3	0.5	0.2	0.4	0.3	0.5	0.2	0.4
Other relative	1.7	1.1	1.0	2.6	1.9	1.2	1.2	2.7
Nonrelative	1.1	2.0	1.2	0.9	1.1	2.2	1.1	0.8

Source: Mathematica Policy Research, from the 2002 CPS ASEC supplement.

Note: Sample weights for all supplement respondents and the matched subsample have been recalibrated to the full sample demographic control totals.

TABLE III.16

ADDITIONAL PERSONAL CHARACTERISTICS OF RETIRED WORKERS BY AGE, MARCH 2002 CPS:
ALL SUPPLEMENT RESPONDENTS VERSUS MATCHED SUBSAMPLE

| | Full Sample | | | | Matched Subsample | | | |
| | | Age In March 2002 | | | | Age In March 2002 | | |
Characteristic	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Health Insurance								
Medicaid	7.7	6.8	7.6	8.0	7.9	6.4	7.9	8.2
Medicare	92.7	26.5	100.0	100.0	92.6	21.8	100.0	100.0
Private (including military)	66.8	71.2	68.3	64.1	68.4	75.5	69.6	65.5
None	1.1	11.4	0.0	0.0	1.0	10.4	0.0	0.0
Sources of Own Income								
Social Security	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
SSI	2.2	2.6	2.1	2.3	2.4	2.7	2.3	2.3
Other public assistance	0.8	0.5	0.7	0.9	0.9	0.6	0.9	1.0
Earnings	16.2	29.7	22.5	6.1	17.2	34.0	23.7	6.4
Asset income	61.6	59.5	62.1	61.6	63.8	63.5	64.0	63.7
Other	40.0	41.8	39.3	40.3	41.5	43.6	41.2	41.4
Average Monthly Personal Income								
Under $100	0.3	0.6	0.3	0.3	0.3	0.2	0.2	0.3
$100 to 249	1.0	2.5	0.7	0.9	0.9	2.5	0.6	1.0
$250 to 499	8.2	8.7	8.1	8.1	7.7	7.8	7.6	7.9
$500 to 749	15.3	14.7	15.9	14.7	15.1	13.5	15.8	14.5
$750 to 999	15.1	11.2	13.3	18.0	14.8	10.9	13.1	17.6
$1,000 to 1,499	21.8	18.8	19.2	25.4	21.8	18.6	19.1	25.5
$1,500 to 1,999	12.2	12.0	12.0	12.5	12.4	13.2	12.0	12.6
$2,000 to 2,999	12.3	14.8	14.0	9.9	12.9	16.0	14.8	10.2
$3,000 to 3,999	5.1	6.8	5.7	4.1	5.3	7.2	5.8	4.4
$4,000 to 4999	2.8	3.4	3.4	2.1	2.9	3.4	3.4	2.1
$5,000 or more	5.7	6.4	7.4	3.8	5.9	6.7	7.5	3.9
Social Security Payments as a Percentage of Personal Income								
Under 25 percent	12.4	19.5	14.7	8.1	12.9	21.0	15.3	8.4
25 to under 50 percent	20.7	26.7	22.6	17.1	21.5	29.9	23.1	17.7
50 to under 75 percent	19.6	17.0	19.4	20.5	20.1	16.5	20.1	20.9
75 to under 100 percent	25.2	16.6	22.5	30.2	25.3	16.2	22.6	30.3
100 percent	22.2	20.3	20.8	24.1	20.3	16.4	18.9	22.6

Source: Mathematica Policy Research, from the 2002 CPS ASEC supplement.

Note: Sample weights for all supplement respondents and the matched subsample have been recalibrated to the full sample demographic control totals.

TABLE III.17

HOUSEHOLD AND FAMILY CHARACTERISTICS OF RETIRED WORKERS BY AGE, MARCH 2002 CPS:
ALL SUPPLEMENT RESPONDENTS VERSUS MATCHED SUBSAMPLE

| | Full Sample | | | | Matched Subsample | | | |
| | | Age In March 2002 | | | | Age In March 2002 | | |
Characteristic	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household Type								
Family								
Married couple present	60.0	70.7	66.6	50.2	59.9	72.4	66.3	50.1
No married couple present								
Male householder	2.7	3.0	2.3	3.0	2.6	2.9	2.2	2.9
Female householder	6.0	6.3	5.2	6.8	6.3	6.6	5.4	7.2
Nonfamily								
Male householder	8.8	8.0	8.2	9.7	9.2	7.5	8.5	10.3
Female householder	22.5	12.1	17.6	30.3	22.0	10.6	17.5	29.5
Ownership Status of Living Quarters								
Owned	85.5	87.3	87.8	82.4	85.6	89.0	87.9	82.4
Not owned	14.5	12.7	12.2	17.6	14.4	11.0	12.1	17.6
Residence in Public Housing	3.0	2.3	2.5	3.6	3.3	2.1	2.8	4.1
Household Size								
1 person	29.4	16.7	23.6	38.7	29.3	14.7	23.8	38.6
2 persons	56.8	63.5	61.8	49.8	56.2	63.5	60.6	49.6
3 to 4 persons	11.0	15.2	11.4	9.5	11.5	16.5	12.2	9.6
5 or more persons	2.8	4.5	3.2	2.0	3.0	5.3	3.4	2.2
Family Size								
1 person	31.6	20.3	26.2	40.2	31.5	18.4	26.3	40.1
2 persons	55.4	61.6	60.1	48.7	54.7	61.3	58.8	48.7
3 to 4 persons	10.5	14.0	10.9	9.1	11.1	15.4	11.9	9.2
5 or more persons	2.6	4.2	2.9	1.9	2.8	4.9	3.0	2.0
Persons under 18 in Family								
None	95.3	91.8	94.5	97.1	94.9	90.6	93.9	97.0
1 person	2.6	4.7	3.1	1.7	2.8	5.0	3.4	1.8
2 persons	1.3	2.0	1.6	0.9	1.4	2.2	1.8	0.8
3 or more persons	0.7	1.6	0.8	0.4	0.8	2.2	0.9	0.4

Source: Mathematica Policy Research, from the 2002 CPS ASEC supplement.

Note: Sample weights for all supplement respondents and the matched subsample have been recalibrated to the full sample demographic control totals.

TABLE III.18

HOUSEHOLD AND FAMILY INCOME OF RETIRED WORKERS BY AGE, MARCH 2002 CPS:
ALL SUPPLEMENT RESPONDENTS VERSUS MATCHED SUBSAMPLE

| | Full Sample | | | | Matched Subsample | | | |
| | | Age In March 2002 | | | | Age In March 2002 | | |
Characteristic	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Household Receipt of:								
Energy assistance	2.6	2.4	2.4	2.9	2.9	2.3	2.6	3.2
Housing assistance	1.0	0.3	0.7	1.4	1.1	0.4	0.9	1.6
Food stamps	2.8	3.5	3.2	2.1	2.9	3.3	3.3	2.3
Average Monthly Family Income								
Less than $500	1.9	1.8	1.5	2.4	1.7	1.3	1.2	2.3
$500 to 999	12.6	9.1	10.3	16.0	12.1	7.6	9.8	15.6
$1,000 to 1,499	15.3	11.4	12.5	19.3	14.4	9.2	11.4	18.9
$1,500 to 1,999	13.0	10.0	12.1	14.7	12.6	8.8	11.8	14.4
$2,000 to 2,999	20.2	18.9	21.3	19.4	20.6	19.5	21.8	19.5
$3,000 to 3,999	12.0	14.8	13.3	9.8	12.6	15.8	14.0	10.3
$4,000 to 4,999	6.9	10.7	7.7	5.2	7.4	12.0	8.3	5.3
$5,000 or more	18.0	23.4	21.3	13.2	18.5	25.8	21.6	13.5
Family Income in Relation to Poverty								
Under 10 percent	0.1	0.2	0.0	0.2	0.1	0.0	0.1	0.2
10 to under 50 percent	0.8	0.9	0.6	1.0	0.7	0.9	0.5	0.8
50 to under 100 percent	6.9	8.4	6.0	7.7	6.8	7.3	5.7	7.9
100 to under 125 percent	6.4	4.0	5.9	7.4	5.8	3.5	5.4	6.8
125 to under 150 percent	7.7	6.3	6.2	9.8	7.5	5.0	5.9	9.8
150 to under 200 percent	14.2	11.3	12.0	17.3	13.5	9.4	11.1	17.1
200 to under 300 percent	22.2	19.4	22.4	22.7	22.4	20.3	22.5	22.7
300 to under 400 percent	14.4	16.2	15.2	13.0	15.2	18.1	16.1	13.5
400 percent or more	27.2	33.2	31.7	20.9	28.1	35.6	32.8	21.4
Distribution of Family Income by Source								
Social Security	56.6	45.4	53.4	62.8	55.2	41.4	51.9	62.0
SSI	0.7	1.1	0.7	0.7	0.7	1.2	0.7	0.6
Other public assistance	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Earnings	15.8	25.6	19.0	10.1	16.3	28.7	19.4	10.2
Asset income	10.2	8.0	10.0	11.0	10.5	8.3	10.2	11.4
All other	16.3	19.6	16.7	15.2	17.0	20.2	17.7	15.5
Social Security Payments as a Percentage of Family Income								
Under 25 percent	20.4	31.8	22.7	15.2	21.4	34.6	23.9	15.8
25 to under 50 percent	24.9	31.2	27.3	20.7	25.6	33.7	28.2	20.9
50 to under 75 percent	21.5	15.9	21.7	22.6	21.9	15.3	21.9	23.2
75 to under 100 percent	20.0	10.2	16.7	26.0	19.5	9.1	15.9	25.7
100 percent	13.2	10.9	11.7	15.5	11.7	7.3	10.1	14.4

Source: Mathematica Policy Research, from the 2002 CPS ASEC supplement.

Note: Sample weights for all supplement respondents and the matched subsample have been recalibrated to the full sample demographic control totals.

IV. ATTRITION BIAS IN THE SIPP

With each successive interview, fewer members of an initial SIPP panel respond. Excluding those who have left the SIPP universe, this attrition of panel members may make the sample less representative of the survivors of the population from which the initial sample was selected. There is ample evidence from numerous studies over the years that people who attrite from panel surveys—including the SIPP—are different from people who continue to respond.[1] However, SIPP sample weights—both cross-sectional and longitudinal—incorporate rather substantial adjustments designed to reduce the bias that may result from attrition. This chapter looks at the effectiveness of the adjustments that are included in the Census Bureau's weights in compensating for attrition bias and considers whether any refinement of these adjustments could be beneficial to applications of SIPP panel data by SSA. We discuss methodological issues in evaluating attrition bias in Section A and lay out our approach. In Section B we compare the full panel sample and the wave 1 cross-sectional sample with respect to characteristics reported in the SIPP. In Section C we extend the comparison to matched IRS and SSA administrative records. Section D summarizes our major conclusions.

A. EVALUATING ATTRITION BIAS

Efforts to evaluate the bias associated with sample loss due to attrition confront three notable limitations. First, survey data on attriters are available only prior to attrition. Second, the survey data provided by eventual attriters could be of different quality than the data provided by those who do not attrite. Third, while administrative records linked to survey records address both of these limitations, administrative data are available only for matched observations, and the

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[1] See, for example, the collection of papers in *The Journal of Human Resources*, Vol. 33, No. 2, Special Issue: Attrition in Longitudinal Surveys (Spring 1998).

decline in match rates is the single largest source of increased sample loss in the SIPP over the period covered by this study.

Studies of attrition bias in panel surveys are typically limited to the panel survey data alone, meaning that the attriters and non-attriters can be compared only with respect to characteristics before attrition. Indeed, the two are often compared with respect to characteristics measured at the initial interview because at that point, no one has attrited. For unchanging characteristics, such as date of birth, sex, race, and ethnicity, such comparisons are informative about the impact of attrition over the life of the panel. For characteristics that can change over time (and, in so doing, provide the rationale for conducting longitudinal surveys in the first place), differences between attriters and non-attriters at the initial interview may tell us little about the differences that exist after attriters leave the sample, which is what we really want to know. More sophisticated analyses, but still restricted to the panel data, can examine characteristics of attriters not just at the initial interview but closer to the point of attrition—comparing the attriters to non-attriters at the same point in time. Part of the intent of such analyses is to find evidence of triggering events, such as a divorce, loss of employment, or birth of a child or death of a family member. If there are triggering events, however, and especially if they are powerful, these events may be more likely to occur after rather than prior to the last completed interview; if so, they will not be captured in the survey data.

Another approach to evaluating attrition bias is to use aggregate data from an independent, external source—such as a cross-sectional survey or a census—in order to determine how attrition may have affected the distribution of characteristics in the panel survey. Comparability of the measured variables across the surveys is a serious issue, of course. The most common way to address this concern is to focus on trends rather than point-in-time measures, in which case it is not as critical that the variables compared across surveys be identical as opposed to

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merely similar. A comparison of poverty trends between the SIPP and the CPS, for example, suggests that lower-income families are more likely than higher-income families to attrite. When comparing estimates from panel surveys and cross-sectional surveys, however, one must also account for factors besides attrition that contribute to the diminishing representativeness of most panel surveys over time. Most importantly, additions to the population through immigration, people returning from abroad, and people leaving institutions and the military are either not represented, or they are under-represented in most panel surveys. The absence or underrepresentation of these additions may induce a trend in the panel data that is not reflected in a series of repeated cross-sections, which maintain consistent representativeness over time.

Even if the comparisons across surveys are effective and accurate, they are limited. They may tell us about the impact of attrition on estimates of change at the aggregate level, or net change, to borrow terminology from Vaughan and Scheuren (2002), but they tell us little about the impact of attrition on estimates of gross change—that is, the changes experienced by individuals.

Linked administrative and survey records make it possible to evaluate attrition bias directly. If longitudinal administrative records can be linked to all persons present at the start of a panel survey, then attriters and non-attriters can be compared with respect to characteristics measured after as well as before attrition. Furthermore, attriters and non-attriters can be compared with respect to their distributions of gross change rather than just their overall, net change.

Recent research by Vaughan and Scheuren (2002) and by Huynh et al. (2001) using SSA administrative records matched to SIPP panel data produced similar findings with respect to both earnings and program benefits.[2] Attriters and non-attriters differ markedly with respect to their

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[2] Vaughan and Scheuren examined attrition in the SPD, which was selected from the 1992 and 1993 SIPP panels.

characteristics at the beginning of the panel—that is, before attrition. Over time, however, these differences attenuate. With enough passing years, the characteristics of those who attrited and those who continued to respond to the survey converge. This trend suggests that compensating for the impact of attrition on cross-sectional estimates becomes both easier and less important over time. But the fact that the differences are large to begin with and then diminish over time also implies that attriters experience greater change than non-attriters. Vaughan and Scheuren suggest that compensating for the attrition bias in estimates of gross change is both important and much more difficult than compensating for differences in net change.

SSA uses SIPP data in two main ways: (1) to support microsimulation modeling of retirement behavior as well as eligibility for SSI and the Medicare Low Income Supplement and (2) to provide detailed information on the characteristics of its beneficiary populations. For the first application, SSA has tended to rely on the "full panel sample," consisting of the subset of respondents with data for as long as they remained in the SIPP universe. Members of the full panel sample are assigned full panel weights, which incorporate a person-level non-interview adjustment and calibration to wave 1 population controls. For the second application, SSA often uses calendar year snapshots but has also used as little as a single wave. Clearly, attrition and the possibility of attrition bias are concerns for both applications. Because the second application may draw data from two or more time periods over the life of a SIPP panel, the potential impact of attrition bias varies. Estimates of characteristics based on data drawn from the first year of a SIPP panel will be less affected by attrition than estimates based on data from, say, the third year of a panel. For the modeling applications using the full panel sample, respondents who attrited at any point over the life of the panel are excluded, so the magnitude of attrition reflected in full panel estimates is uniform over the entire length of the survey (although the impact on estimates over the length of the panel may not be uniform).

In our evaluation of attrition bias in the SIPP, we focus on comparisons between the full panel sample and the initial or wave 1 cross-sectional sample. Using the full panel sample ensures that we will observe the maximum impact of attrition.[3] At the same time, because full panel weights are assigned to sample members who leave the survey universe (providing that they have no missing data prior to their departure), using the full panel sample will ensure that we do not confound universe leavers with attriters. As we explained in Chapter 2, people who leave the survey universe differ in a number of ways from those who remain, but they are not attriters and their exits from the survey universe are not counted as sample loss. By retaining universe leavers in the full panel sample, we make certain that the differences between universe leavers and those who remain in the population do not get folded into our estimates of attrition bias.

Comparisons of the full panel sample and the wave 1 sample with respect to characteristics measured in wave 1 of the SIPP can use the full wave 1 sample. Comparisons using administrative records must exclude those full panel and wave 1 sample members who could not be matched to administrative records. For the wave 1 sample, this includes sample members who did not respond to the second wave of the survey, where SSNs were first requested. While some of the wave 1 respondents who missed wave 2 responded to a later wave and were asked for and provided their SSNs, we restricted the comparison sample to those wave 1 respondents

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[3] We note, however, that attriters are not the only sample members who are included in the wave 1 sample but not the full panel sample. Respondents who missed a single wave—or even a single month within a single wave—would have been excluded from the 2001 full panel sample by the Census Bureau. By imputing missing waves, as the Census Bureau did prior to the 1996 panel, we could add such persons to the full panel sample, but this would require constructing an entirely new set of full panel weights to accommodate the expanded panel sample. In our evaluation of attrition bias we felt that it was important to be able to document the effectiveness of the Census Bureau's panel weights before considering any additional adjustments.

who responded to the second wave (and could be matched to administrative records).[4] For the full panel sample it was not necessary to impose any additional restriction, as everyone who qualified for a full panel weight responded to all nine waves and would have been asked to provide an SSN (unless they left the survey universe immediately after the first wave).[5]

B. ASSESSMENT BASED ON SIPP CHARACTERISTICS

We estimated the magnitude of attrition bias in the estimates obtained from the full panel sample by comparing weighted distributions of a wide range of demographic and economic characteristics in wave 1 of the 2001 panel for all wave 1 respondents and those who qualified to receive full panel weights. The sample estimates for all wave 1 respondents were weighted by the January 2001 cross-sectional weight. The full panel sample estimates were weighted by the Census Bureau's full panel weight (LGTPNLWT). The full panel sample includes 64.4 percent of the cross-sectional sample (or 64.6 percent if weighted by the cross-sectional weight; see table II.2).[6]

Because of their large number, the 20 tables that present these comparisons are presented in Appendix F. Estimates of bias with respect to personal demographic characteristics are reported in Tables F.1.a through F.1.e, where the lower-case letters *a* through *e* refer to the total population and four subpopulations of SSA beneficiaries: (b) retired workers, (c) disabled

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[4] We did so in order that we might be able to compare matched sample members and all sample members among those who responded to both waves 1 and 2, as some of our comparisons required data collected in wave 2. See Chapter 3.

[5] When we compare the matched full panel to the entire full panel sample, members of the latter who left the SIPP universe between the wave 1 and wave 2 interviews will not be represented in the matched data. This group is very small, however, accounting for only one-third of one percent of the sample, so the impact of its exclusion from the matched panel sample is negligible.

[6] For the four subpopulations the full panel estimates include somewhat larger proportions of the corresponding wave 1 cross-sectional sample observations. These proportions, calculated from Table II.3 (and weighted by the January 2001 cross-sectional weight) are: 75.6 percent for retired workers, 72.1 percent for disabled workers, 72.7 percent for all other social security beneficiaries, and 66.3 percent for SSI recipients.

workers, (d) all other social security beneficiaries, and (e) SSI beneficiaries. In each table the population or subpopulation is divided into three age groups, which vary by subpopulation. Tables F.2.a through F.2.e provide estimates of attrition bias for an additional set of personal characteristics, including personal income. Tables F.3.a through F.3.e provide estimates for family and household demographic characteristics while Tables F.4.a through F.4.e report estimates for several measures of family and household income. In each table the leftmost columns report estimates for the cross-sectional sample while the rightmost columns report the difference between the full panel and cross-sectional estimates with indicators of statistical significance.

The overwhelming impression created by these comparisons is that the estimates for the full panel sample and the wave 1 cross-sectional sample represent the same population. While we do find some differences that are statistically significant and appear to be systematic, they are small. The similarities in the two sets of estimates are far more striking. This is particularly true for the several measures of income. This includes the distribution of average monthly total personal income, the sources of own income, and the amount of social security benefits as a percentage of total personal income in Tables F.2.a through F.2.e and all of the household and family income measures in Tables F.4.a through F.4.e. For example, the amount of social security payments as a percentage of total personal income is classified into five ranges. For the total population the largest difference between the full panel and the cross-section is 0.1 percentage point (Table F.2.a). For retired workers the differences range from zero to 0.3 percentage points—none statistically significant (Table F.2.b). The range grows larger for disabled workers and other social security beneficiaries but then smaller for SSI recipients, and none of the differences is statistically significant. For total personal income for the total population, one category (under $100) has a difference of 0.4 percentage points. For the remaining 10 categories the differences

are zero or 0.1 percentage point. For total household income for the total population the largest difference is 0.3 percentage points while all of the rest are zero or 0.1 percentage point (Table F.4.a). The proportion of households receiving food stamps differs by just 0.2 percentage points for the total population, 0.3 percentage points for retired workers, zero for disabled workers, 0.1 percentage point for all other social security beneficiaries, and 1.8 percentage points for SSI recipients (who have the largest food stamp participation rate by far).

The biggest differences are found in the family composition of SSI children, where those in the full panel are more likely to be living with both parents than with only one parent (Tables F.1.e and F.3.e). Child recipients of "other" social security benefits show similarly patterned but smaller differences (Tables F.1.d and F.3.d). SSI children in the full panel are also more likely than those in the wave 1 sample to be the only person under 18 in their families (Table F.3.e). Again, though, these differences are rare among the many characteristics reported for the full population and four subpopulations. What we infer from these results is that the Census Bureau's non-interview adjustments for the full panel weight are doing an excellent job of adjusting for differential attrition by characteristics that are important to SSA's uses of the SIPP panel data.

We performed the same set of comparisons for the 1996 panel. The results, presented in Appendix G, show the same high level of agreement between the full panel and the cross-section that we found for the 2001 panel. Distributions of economic variables are remarkably similar between the panel and cross-section, and this holds for the beneficiary subpopulations as well as the total population. The biggest difference is that we did not find the discrepancies in living arrangements between the panel and cross-section that we found in the 2001 panel. For example, SSI children in the panel had very similar living arrangements to those in the cross-section. We did not see any of the patterns in 1996 that were prominent in 2001. This may imply that the

Census Bureau's adjustments for family composition were less effective in 2001 than 1996, but it may also indicate that the differences we observed between the panel and cross-section in 2001 were not a reflection of anything systematic but simply chance occurrences—despite what the significance tests suggest.

The principal limitation of these findings is that they provide a point of comparison only at the beginning of the panel. Now, this is where Vaughan and Scheuren (2002) found the largest differences between attriters and non-attriters, but it does not necessarily follow that that largest *adjusted* differences will occur at the beginning of the panel as well. After all, the Census Bureau's non-interview adjustments are based on wave 1 characteristics, so the adjustments ought to be most effective at the beginning rather than the end of the panel. To evaluate the level of attrition bias later in the panel, we need to look beyond SIPP characteristics because we have no measures of such characteristics for attriters. We turn next to administrative records, which allow us to compare the full panel and cross-sectional samples not only at the beginning of a panel but at any point during the panel plus before and after the panel as well.

C. ASSESSMENT BASED ON MATCHED ADMINISTRATIVE RECORDS

Using 2001 SIPP panel data matched to annual earnings records from the IRS and SSA administrative records for social security and SSI beneficiaries, we compared the matched full panel sample with the matched wave 1 sample members who also responded to wave 2. Unlike the preceding comparison, which used only SIPP data, the comparison based on matched administrative records could not include any wave 1 sample members who attrited before wave 2, as SSNs were not requested until wave 2. Lacking consent as well as SSNs, the Census Bureau could not obtain matched administrative records for any of these early attriters. The exclusion of these early attriters could reduce the amount of attrition bias, tilting our results in favor of finding little attrition bias after taking account of the Census Bureau's nonresponse

adjustments. To determine whether the exclusion of these early attriters might have affected our results, we repeated the analysis of attrition bias with the 1996 panel, which allowed us to compare matched full panel sample members with matched wave 1 sample members *including* those who attrited before wave 2 (but provided SSNs). Findings from both analyses are reported below.

1. Bias in Full Panel Estimates of Earnings

Vaughan and Scheuren (2002) and Hall et al. (2004) added to the literature on differences between attriters and continuers with extensive analyses using SIPP and SPD data linked to summary earnings record (SER) data.[7] Our focus in this report is different. We acknowledge that there are important differences between attriters and continuers, but the question of interest to us is whether differences exist between the full panel (continuers) and the full cross-sectional sample (continuers plus attriters) after the application of non-interview adjustments and demographic calibration designed to reduce or eliminate specific types of differences between the full panel and the cross-sectional sample.

Using SIPP data matched to the SER, we compared distributions of earnings between the full panel sample and the wave 1 respondents who also responded to wave 2. The wave 1/wave 2 sample serves as a proxy for the wave 1 cross-sectional sample. To correct in a simple way for match bias, we calibrated both samples to the population totals that the Census Bureau used to calibrate the January 2001 cross-sectional sample and the full panel.

The upper panel of Table IV.1 reports the wave 1/wave 2 estimates of the proportion of persons with positive SER earnings, by age, for each of the years 1999 through 2003. An advantage of using administrative records in evaluating attrition bias is that we are not limited to

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[7] The SER contains the annual earnings (from both wage and salary and self-employment) on which Social Security taxes were paid and which are used to calculate social security benefit entitlements.

the survey period (although SSA's analytical use of SIPP full panel data linked to administrative records would be limited to the time frame of the survey). The lower panel of the table reports the difference between the full panel and wave 1/wave 2 estimate of each proportion, with indicators of statistical significance. For persons 18 to 24, the full panel estimates are about a percentage point lower than the cross-sectional sample estimates across all years, and the largest of these differences (in 2000 and 2001) are statistically significant at the 0.05 level. Outside of this age group, the differences are negligible, and none is significant at the 0.05 level.

Tables IV.2 and IV.3 report the wave 1/wave 2 estimates of points in the distribution of earnings among those with positive earnings, by age, in each of the five years, as well as differences between the full panel and wave 1/wave 2 estimates, with indicators of statistical significance. Except for one age group (65+) in one year (2002), mean positive earnings among panel members 45 and older are consistently lower than the estimates from the wave 1/wave 2 sample, and half of the differences in mean earnings among workers 55 and older are large enough to be statistically significant at the 0.10 level or better. Median earnings are also lower, generally, for panel members 45 and older, but the difference is not statistically significant in any age group and year. It is evident from Table IV.3 that the differences in means are driven by the upper part of the earnings distribution. Panel estimates of the 75th percentile are consistently lower than the wave 1/wave 2 estimates among workers 35 to 64. The differences are statistically significant among workers 55 to 64 in three of the five years.

It is surprising that where we find differences in positive earnings, the panel sample (after the Census Bureau's attrition adjustment) has a *lower* incidence of high earnings than the cross-sectional sample. This runs counter to our earlier finding in this project that attrition probabilities in the 2001 SIPP panel were inversely related to income (Czajka 2006). Together these findings suggest that while the Census Bureau's attrition adjustments generally compensate

for differential attrition with respect to income, the adjustments appear to over-correct for attrition among older workers (55 to 64) by producing more high-income workers than were lost to attrition.

Figures IV.1 through IV.7 complement Tables IV.2 and IV.3 by showing how the percentiles of earnings in 2001 differ between the full panel sample and the wave 1/wave 2 sample across the full distribution of earnings rather than just three points. By plotting the percentiles of earnings in the full panel sample against the percentiles of earnings in the wave 1/wave 2 sample and then comparing the shape of this figure to a 45-degree line, we can see if the two distributions differ and, if so, discern the location and extent of the differences. If this joint function of the two distributions is coincident with the 45-degree line, then the percentiles of the distributions are equal to one another. If the function is coincident with the 45-degree line for lower earnings but then diverges and remains above the 45-degree line for higher earners, then the upper percentiles of the distribution in the full panel sample are greater than those in the wave 1/wave 2 sample. In this case the right tail of the full panel distribution is thicker than the right tail of the cross-sectional distribution. Similarly, if the function is coincident with the 45-degree line for lower earnings and then diverges and remains *below* the 45-degree line for higher earners, then the upper percentiles of the distribution in the full panel sample are less than those in the wave 1/wave 2 sample. In this case the right tail of the cross-sectional distribution is thicker than the right tail of the full panel distribution.

Figures IV.1 through IV.7 support the findings from Tables IV.2 and IV.3, showing that the earnings distributions using the full panel sample and the wave 1/wave 2 sample are almost identical in the lower half of the distribution and remain similar in the upper half for individuals ages 18+, 18-24, 25-34, 35-44, and 45-54. For individuals ages 55-64, the upper ends of the distributions differ slightly beginning at around the 80th percentile, with the full panel sample

containing fewer high earners than the wave 1/wave 2 sample. It is more evident from Figure IV.6 than from Table IV.3 how small are the deviations from equality in the two earnings distributions. For individuals ages 65+, the distributions become slightly dissimilar only around the 95th percentile. Since the earnings distributions plotted in the figures include only positive earnings, the 95th percentile for elderly workers is the 99th percentile for all elderly persons, as only 15 percent of the elderly had earnings in 2001 (see Table IV.1).

Lastly, Table IV.4 compares the matched wave 1/wave 2 and full panel samples with respect to the gross change in annual earnings between 2001 and 2003. The upper part of the table reports the (weighted) proportion of persons in the wave 1/wave 2 sample with a positive change, no change, or negative change in earnings between the two years. Persons with zero earnings in either year are excluded. Among all persons 18 and older, 60.9 percent experienced an increase in earnings and 39.1 percent incurred a reduction in earnings. Positive changes peak in the youngest age group and decline with increasing age. Table IV.5 presents a frequency distribution of the magnitudes of the changes whose signs are measured in Table IV.4. Most of the individuals who experience a positive change in earnings between 2001 and 2003 incur more than a 25 percent change in earnings. Similarly, most of the individuals who experience a negative change in earnings across years have their earnings decrease by more than 25 percent.

The lower portions of Tables IV.4 and IV.5 report differences between the matched full panel and wave 1/wave 2 samples. Among persons 18 and older, full panel members were significantly more likely than cross-sectional sample members to experience an increase in earnings, but the difference was less than a percentage point. Differences are very slightly larger and still significant among persons 25 to 34, but there are no significant differences at ages 35 and older. Where Vaughan and Scheuren found that attriters experienced greater increases in earnings than nonattriters, we find that when the sample weights are adjusted for attrition bias,

it's the full panel sample—the non-attriters—who are somewhat more likely to experience an increase in earnings over the duration of the panel, suggesting that, if anything, the Census Bureau's weighting adjustments for attrition bias may overcompensate for the bias arising from attrition. When we compare the magnitudes of the change in earnings, we find that full panel members 18 to 64 were significantly less likely to have experienced a large decline in earnings but were no more likely than cross-sectional sample members to have experienced a large increase in earnings—or any change beyond a large decline. In short, by this measure of gross change in earnings, full panel members as a whole were quite similar to cross-sectional sample members.

2. Bias in Full Panel Estimates of Social Security Beneficiaries

To assess the bias in full panel estimates of Social Security beneficiaries, we compared the full panel and wave 1/wave 2 samples with respect to characteristics obtained from the Social Security Master Beneficiary Record enhanced with payment data from the Payment History Update System (MBR-PHUS).

The full panel and wave 1/wave 2 samples produce nearly identical estimates of the number of Social Security beneficiaries in January 2001 and their distribution by type of beneficiary and age (Table IV.6). For example, on an estimate of 28 million retired workers, the two samples differ by only 56,000. On an estimate of 5 million disabled workers, the two samples differ by only 23,000. Larger differences occur for the smaller aged non-widow and all other beneficiary populations, but only the difference of 99,000 for an estimate of 2 million aged non-widows is statistically significant—and only at the 0.10 level.

Larger differences emerge by the end of the panel (September 2003), but even here only one category has differences that are statistically significant. Out of 30 million retired worker beneficiaries the two samples differ by about one-third of a million. For all beneficiaries, the full

panel is 405,000 or less than 1 percent below the wave 1/wave 2 estimate of 45.5 million, a difference that is statistically significant at the 0.01 level.

Since the SIPP is a longitudinal survey, how well it captures important life transitions is of great interest to users. Transitions into and out of each beneficiary status category, as well as the differences in these transitions between the full panel and the wave 1/wave 2 sample, are estimated in Table IV.7. The first and fourth columns are the January 2001 and September 2003 category totals from Table IV.6. The second and third columns contain estimates of the number of individuals who enter into or exit from each beneficiary category between January 2001 and September 2003. The full panel and wave 1/wave 2 samples produce nearly identical estimates of these transitions. The only transition for which there is a statistically significant difference (at the 0.05 level) involves retired workers who receive a benefit in January 2001 but no longer receive a retirement benefit in September 2003. In this case, the full panel estimate is approximately 7 percent greater than the wave 1/wave 2 estimate. Additionally, the number of entrants into all beneficiary categories is 249,000 lower in the full panel than in the cross-sectional sample. While this difference is statistically significant at the 0.01 level, it is less than 3 percent of the wave 1/wave 2 entrant total of 8.5 million.

Table IV.8 reports the mean amounts of several administrative variables that are related to the primary insurance amount among disabled and retired workers, based on the matched wave1/ wave 2 observations, as well as the differences in means between the full panel and the wave1/ wave 2 sample. For disabled workers, these differences are negligible, and none is statistically significant at the 0.10 level. For retired workers, there are only negligible differences between the two samples although five of them, ranging from $5 to $6, are statistically significant at the 0.10 level.

Table IV.9 presents estimates of the distribution of Social Security payments as a percentage of personal income in January 2001 for all retired workers who receive Social Security benefits and for subgroups defined by selected demographic characteristics. In both the numerator and denominator of this percentage, the Social Security benefit amount reported in the SIPP has been replaced by the amount recorded in the MBR-PHUS. Additionally, in the denominator of this percentage, the SSI benefit amount reported in the SIPP has been replaced by the amount recorded in the SSI program administrative records. The right hand side of the table contains differences between the full panel and wave 1/wave 2 samples. The two samples are nearly identical for all retired workers who receive Social Security benefits, with no statistically significant differences. There are statistically significant differences between the samples for several demographic groups; however, the differences are small and scattered, suggesting no general pattern.

Table IV.9 was re-estimated on Social Security beneficiaries other than retired workers. These estimates are displayed in Table IV.10. The differences between the full panel and the wave 1/wave 2 samples are generally larger and more systematic than what we observed among retired workers, but this may be due in part to sample size. There are twice as many retired workers as all other social security beneficiaries (see Table IV.7). The few significant differences, however, are concentrated in the lower tail of the distribution, corresponding to Social Security payments that comprise 25 to 49 percent of the individual's total income. Compared to the cross-section, the panel tends to estimate proportionately fewer beneficiaries in this part of the distribution while finding a greater share who rely more heavily on their Social Security benefits.

3. Bias in Full Panel Estimates of SSI Recipients

To assess the bias in full panel estimates of SSI recipients, we compared the full panel and wave 1/wave 2 samples with respect to characteristics obtained from the Supplemental Security Record (SSR).

Estimates of the number, type (age, blind, or disabled), and age distribution of SSI recipients also differ little between the full panel and the wave 1/wave 2 cross-section (Table IV.11). In both January 2001 and September 2003 the full panel finds more disabled beneficiaries age 25 to 49 than the wave 1/wave 2 sample; the difference is about 100,000 out of 2 million, or a little less than 5 percent, but it is not statistically significant. This difference grows to 143,000 in September 2003 but still falls short of statistical significance. In other age groups the differences are proportionally similar except among persons 65 and older, where the difference in the estimates of aged beneficiaries approaches 10 percent in January 2001 and exceeds 12 percent in September 2003. The panel and cross-section samples are very close in their estimates of elderly disabled beneficiaries, however. Differences between the two samples are not statistically significant for any age group and eligibility category pair, although it should be noted that the sample of blind recipients is too small to support statistically significant differences.

Table IV.12 contains estimates of the means of federal and state payment variables as well as two determinants of the payment variables, earned and unearned income. Differences in the mean amounts between the two samples are generally small, only a few are statistically significant, and they form no obvious pattern. The mean of the federal SSI benefit over all age groups is about 4 percent greater in the full panel sample than in the cross-sectional sample in January 2001. For 25-49 year old beneficiaries, the mean federal SSI benefit is about 7 percent greater in the full panel sample than in the cross-sectional sample in January 2001. Both

differences are statistically significant at the 0.10 level. Estimates from the two samples are even closer in September 2003 than in January 2001.

The two samples are also quite similar with respect to the gross change in a number of the payment variables recorded on the SSR (see Table IV.13). For all recipients and elderly recipients, the largest differences lie in the 1 to 2 percentage point range. None of the differences for elderly recipients is statistically significant. Differences for recipients under age 65 are somewhat larger than this for three of the four variables, and differences for earned income and the federal benefit amount are statistically significant. When the age groups are combined we find statistically significant differences for these same two variables. Overall, though, the small magnitudes of the differences between the two samples and the absence of a strong pattern in these differences are more compelling. We note, for example, that the largest differences run in opposite directions for the nonelderly and elderly beneficiaries.

Table IV.14 presents estimates of the distribution of SSI payments as a percentage of personal income in January 2001 for all SSI recipients and for subgroups defined by selected demographic characteristics. In both the numerator and denominator of this percentage, the benefit amount reported in the SIPP has been replaced by the amount recorded in the SSR. Additionally, in the denominator of this percentage, the Social Security benefit amount reported in the SIPP has been replaced by the amount recorded in the MBR-PHUS. Differences between the full panel and wave 1/wave 2 samples are reported in the right hand side of the table. The two samples are nearly identical for all SSI recipients, with no statistically significant differences. For several demographic groups, there are statistically significant differences between the samples, but the differences are scattered, suggesting no particular pattern, and they rarely exceed 3 percentage points.

4. Attrition Bias in the 1996 Panel

While the primary focus of our evaluation of SIPP sample loss from attrition is the 2001 panel, our detailed analysis with administrative records was limited by the exclusion of wave 1 attriters—approximately one quarter of all attriters—from the comparisons. Earlier in the chapter we presented findings from an analysis of attrition bias using wave 1 SIPP characteristics where we replicated our 2001 panel analysis on the 1996 panel. Neither analysis excluded wave 1 attriters because matching was not involved. The two analyses showed, very convincingly, that the finding of little attrition bias in the 2001 full panel with the Census Bureau's non-interview adjustments held true for the 1996 panel as well. We replicated the administrative data analysis on the 1996 panel as well, but in so doing we did not have to exclude wave 1 attriters because matched data were available for those who provided SSNs. We review our findings here.

A set of tables based on the 1996 panel are included in Appendix H and form an analogous set to Tables IV.1 through IV.14 that were based on the 2001 panel. There are two main methodological differences between the sets of tables. The tables based on the 1996 panel use a wave 1 SIPP cross-sectional weight, whereas the 2001 tables use the wave 1/wave 2 cross-sectional weight. Additionally, the full panel weights in the 1996 tables are based on a 12-wave panel, whereas the 2001 tables reflect a 9-wave panel. For the 2001 analysis the matched full panel observations were 72.9 percent of the matched wave 1/wave 2 observations (weighted). For the 1996 analysis described here, the matched full panel observations only 60.8 percent of the matched wave 1 observations.

As in the 2001 panel, the differences between the estimates using the full panel and cross-sectional weights of the proportion of persons with positive SER earnings for each of the years 1994 to 1998, by age, are negligible in magnitude and lack statistical significance (see Table

H.1). However, unlike the 2001 estimates of the earnings distributions characteristics, the estimates based on the 1996 panel show statistically significant differences in the means, medians, and 25th and 75th percentiles of the earnings distributions for several age groups (see Tables H.2 and H.3). Mean and median earnings among panel members 25 to 44 are consistently and significantly greater than the estimates from the cross-sectional sample, while mean and median earnings among older panel members are consistently—and for panel members 65+, significantly—lower. Workers 18 to 44 in the panel also have higher 25th percentile earnings than those in the cross-sectional sample, while panel members 65 and older have a lower incidence of higher earnings (as represented by the 75th percentile) than those in the cross-sectional sample.

Figures H.1 through H.7 are useful in obtaining a broader perspective on the differences between samples. Seen against the entire distribution, many of the deviations documented in Tables H.2 and H.3 appear inconsequential. The plots for age groups 25 to 34, 35 to 44, and 45 to 54 (Figures H.3, H.4 and H.5) suggest that the full panel sample lines up extraordinarily well with the cross-sectional sample, given that the former includes only 60 percent of the latter and underrepresents the low-income sample members in every age group prior to adjustment. At ages 55 to 64 we see a more marked divergence, but it's confined to the upper 15 percent of the distribution, where policy interest fades. There is a very pronounced divergence among the elderly, where some of the panel percentiles lie as much as $12,000 below the corresponding cross-sectional percentiles, but the separation occurs around the 80th percentile among workers who represented only 9 percent of the elderly at the time (see Table H.1). Workers 18 to 24 show evidence of a more compressed earnings distribution (Figure H.2), with a greater number of panel members than cross-sectional sample members between the 10th and 90th percentiles of the earnings distribution. The tails of the distribution, particularly the upper tail, are thinner for

panel members than for members of the cross-sectional sample. But, again, the most prominent divergence between the two samples is in this upper tail, where policy interest is least.

Overall, the figures belie the notion that the full SIPP panel—when properly weighted—under-represents the low-income population. Instead the percentiles of the earned income distribution among the working members of the full panel sample line up quite well with the percentiles of the cross-sectional earnings distribution until age 55, where we see significant separation at the upper quintile, with the panel sample underestimating the incomes of the top quintile of workers in the cross-sectional sample. Given that SSA's policy focus is generally much lower in the income distribution, well away from the biggest discrepancies, we view these findings as very supportive of SSA's continuing use of SIPP panel data.

Despite these differences in the static measures of earnings distributions between the full panel and cross-sectional samples, there are only scattered significant differences in the sign or magnitude of the gross changes in earnings between 1996 and 1998 across samples (see Tables H.4 and H.5). Where we do see significant differences, they are consistent with and very similar in magnitude to the results obtained with the 2001 panel with respect to gross changes between 2001 and 2003. Among all workers as a group and among those 25 to 34, positive changes in earnings were very slightly more common (and negative changes equally *less* common) in the panel sample than the cross-sectional sample. Similarly, reductions of more than 25 percent among nonelderly workers were less common in the panel sample while gains of 5 to 10 percent in this same population were *more* common in the panel sample.

To assess the bias in full panel estimates of Social Security beneficiaries, we compared the full panel and wave 1 samples with respect to characteristics obtained from the MBR-PHUS. Similar to the 2001 findings, there were no significant differences in the number of disabled workers at the beginning of the panel or two-and-a-half years later. Unlike the 2001 estimates,

however, there were significantly fewer retired workers in the panel sample than the wave 1 cross-section at *both* points in time, rather than just the later point in time, but the difference in 1998 (1 percent of the cross-sectional estimate) was virtually identical to what we found in September 2003. Statistically significant differences also exist for the category "all other beneficiaries" where there were none in the 2001 panel.[8] The differences range from 7 to 10 percent of the cross-sectional estimates of this small subpopulation, but in absolute magnitude the difference in 1998 is comparable to that for retired workers. Overall, the panel has 1 percent more Social Security beneficiaries than the cross-sectional sample in March 1996 and one-half percent more beneficiaries in November 1998. In September 2003 the full panel sample estimated 1 percent *fewer* total beneficiaries than the wave 1/wave 2 sample, which was due almost entirely to retired workers.

Estimates of transitions into and out of each beneficiary status category, as well as the differences in these transitions between the full panel and the wave 1 sample, are presented in Table H.7. The second and third columns contain estimates of the number of individuals who entered into or exited from each beneficiary category between March 1996 and November 1998. The panel finds significantly fewer entries into the disabled worker category and fewer entries overall. The panel also finds significantly fewer exits from the two aged non-worker categories. With the 2001 panel we also found fewer entries overall, but there was no difference for any of the beneficiary categories. In contrast to the 1996 panel, the 2001 panel sample had more exits from the retired worker category than the cross-sectional sample but no difference for the two aged categories. That the few significant differences in transitions vary between the two panels (except for overall entries) implies that these differences are not systematic and do not detract

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[8] The category "all other beneficiaries" includes spouses caring for minor children, widows(ers) caring for minor children, disabled widows(ers), adults disabled in childhood, student children, minor child, and other individuals who have a current payment status who are not elsewhere classified.

from the panel's overall strong representation of movement into and out of Social Security beneficiary status.

Table H.8 reports the mean amounts of several administrative variables that are related to the primary insurance amount for disabled and retired workers. As in the 2001 panel, we find negligible differences between the full panel and cross-sectional estimates in the 1996 panel, only some of which are statistically significant. In general the benefit amounts recorded for retired workers 65 and older are slightly less in the panel than in the cross-sectional sample in November 1998. The same was true in September 2003. But the largest differences in both panels are less than one percent of the average monthly benefits.

Table H.9 presents estimates of the distribution of Social Security payments as a percentage of personal income in March 1996 for all retired workers who receive Social Security benefits and for subgroups defined by selected demographic characteristics. In both the numerator and denominator of this percentage, the Social Security benefit amount reported in the SIPP has been replaced by the amount recorded in the MBR-PHUS. Additionally, in the denominator of this percentage, the SSI benefit amount reported in the SIPP has been replaced by the amount recorded in the SSR. The right hand side of the table contains differences between the full panel and wave 1 samples.

The distribution of Social Security payments relative to total personal income is nearly identical in the two samples, with only one statistically significant difference amounting to less than 1.0 percentage point. There are small, statistically significant differences between the samples for several demographic groups. While most of the differences are scattered and suggest no general pattern, some are concentrated in the center to right tail of the distribution, corresponding to Social Security payments that comprise 50 to 74 percent of the individual's total income. Compared to the cross-section, the panel tends to estimate proportionately more

beneficiaries in this part of the distribution while finding a smaller share (0.3 percentage points, on average) who rely more heavily on their Social Security benefits.

When Table H.9 is re-estimated on all other Social Security beneficiaries (see Table H.10), the two samples are nearly identical with respect to the distribution of benefits relative to personal income, with no statistically significant differences present. For the demographic subgroups, the differences between the full panel and wave 1 samples are even smaller and more widely scattered than for retired workers. Compared to the analogous table from the 2001 panel, the full sample and cross-sectional samples are more similar in 1996 than in 2001.

Our analysis of the bias in full panel estimates of SSI recipients using the SSR file matched to the 1996 SIPP panel produced similar results to those found using the SSR file matched to the 2001 SIPP panel. Tables H.11, H.12, and H.13 display the estimates based on the cross-sectional sample and the differences in estimates based on the full panel and cross-sectional samples for the distribution of beneficiaries by eligibility category, the mean dollar values of selected payment variables, and the gross changes in these payments variables in March 1996 and November 1998, respectively. Differences between the two samples are either (1) not statistically significant for any age group and eligibility category pair or any age group and payment variable pair, or (2) *are* statistically significant but generally small and without an obvious pattern.

Finally, Table H.14 presents estimates of the distribution of SSI payments as a percentage of personal income in March 1996 for all SSI recipients and for subgroups defined by selected demographic characteristics. In both the numerator and denominator of this percentage, the benefit amount reported in the SIPP has been replaced by the amount recorded in the SSR. Additionally, in the denominator of this percentage, the Social Security benefit amount reported in the SIPP has been replaced by the amount recorded in the MBR-PHUS. The right hand side

of the table contains differences between the full panel and wave 1 samples. Whereas in the 2001 panel there were no significant differences for all SSI recipients, the 1996 panel shows small, significant differences (at the 0.10 level) of approximately 1 percentage point for recipients whose SSI payment comprises 0 to 24 percent or 50 to 74 percent of their total income. As in the 2001 panel, for several demographic groups, there are statistically significant differences between the samples, but the differences are scattered, suggesting no particular pattern, and they rarely exceed 2.5 percentage points.

D. CONCLUSION

Comparative analysis of SIPP full panel and cross-sectional sample estimates of a wide variety of characteristics measured in wave 1 of the 1996 and 2001 SIPP panels for the total population and four subpopulations of Social Security and SSI beneficiaries provides evidence that the Census Bureau's full panel weights are highly effective in eliminating the effects of differential attrition on the full panel estimates of cross-sectional characteristics. Further analysis using subsamples of the full panel and cross-sectional samples matched to IRS earnings records and Social Security benefit records provides further evidence that the full panel sample with the Census Bureau's panel weights can support largely unbiased estimates for characteristics and subpopulations of interest to SSA analysts.

Because it applies to the entire population, rather than just the elderly subpopulation with its lower attrition rates, and because it was not limited to a single point in time, our analysis of IRS annual earnings data records matched to SIPP records is particularly compelling. For the 2001 SIPP panel we found no important differences between the full panel and cross-sectional sample estimates of the proportion of persons with positive earnings, by age, in any of the years 1999 through 2003. Differences in the distribution of earnings among those with positive earnings were generally small and rarely statistically significant. Where there appeared to be a pattern in

these differences, among persons 55 to 64, it ran counter to what is known about differential attrition by income—that is, the panel sample had somewhat lower rather than higher earnings than the cross-sectional sample. Estimates of gross changes in earnings also differed little between the full panel and wave 1/wave 2 cross-sectional samples.

We replicated this analysis on the 1996 panel so that we could include cross-sectional sample members who attrited between the first and second waves. As with the 2001 panel we found no important differences in the proportion of persons with positive earnings in any of the five years we examined (1994 through 1998). There was stronger evidence of differential earnings between the full panel and cross-sectional samples, particularly at ages 55 and up, but the percentile distributions of earnings lined up quite closely through the 80th percentile. At higher income levels the full panel underestimated the number of higher earners (yielded lower percentile values) relative to the cross-sectional sample, but these differences are beyond the level where SSA policy analysts would focus most of their attention.

Estimates of the number and selected characteristics of Social Security and SSI beneficiaries show only small differences between the full panel and cross-sectional samples for both panels. This is particularly striking for estimates of transitions into and out of Social Security beneficiary categories, estimates of payment amounts for retired and disabled workers, and estimates of the proportion of Social Security and SSI beneficiaries' personal income that is provided by their respective programs.

TABLE IV.1

PROPORTION OF PERSONS WITH POSITIVE EARNINGS IN THE SER
BY AGE AND CALENDAR YEAR

Age in January	1999	2000	2001	2002	2003
	Wave 1 Sample with Wave 2 and Matched Data				
18+	70.6	70.8	69.9	68.2	67.1
18-24	85.8	87.6	87.1	85.3	83.8
25-34	85.7	86.5	86.0	84.1	84.0
35-44	83.2	83.8	83.5	81.8	81.2
45-54	78.6	79.6	79.2	78.4	77.8
55-64	60.5	60.8	60.8	61.1	61.0
65+	16.1	16.2	15.4	15.3	14.6
	Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Wave 2 and Matched Data				
18+	-0.3 *	-0.3	-0.2	0.0	0.0
18-24	-0.8	-1.1 **	-1.4 ***	-0.7	-0.9 *
25-34	0.1	-0.1	-0.2	0.0	0.2
35-44	-0.5 *	-0.2	-0.3	0.0	-0.2
45-54	-0.3	-0.2	0.4	0.3	0.3
55-64	-0.2	0.1	0.1	0.6	0.5
65+	0.1	0.2	0.1	-0.1	0.0

Source: Mathematica Policy Research, from linked 2001 SIPP-SER records.

Note: All earnings have been adjusted for inflation and are in 2001 dollars.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE IV.2

MEAN AND MEDIAN ANNUAL EARNINGS OF WORKERS WITH POSITIVE EARNINGS
IN THE SER, BY AGE AND CALENDAR YEAR

Age in January	1999	2000	2001	2002	2003
	Mean Earnings				
	Wave 1 Sample with Wave 2 and Matched Data				
18+	27,756	28,131	28,308	28,637	28,628
18-24	12,952	13,282	12,989	12,846	12,421
25-34	27,355	28,268	28,557	28,707	28,279
35-44	32,662	33,027	33,185	33,662	33,821
45-54	35,057	35,077	35,289	35,790	36,165
55-64	29,139	29,132	29,914	30,766	30,855
65+	13,610	13,955	14,669	14,611	14,799
	Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Wave 2 and Matched Data				
18+	-64	-84	-93	-57	-17
18-24	105	108	-161	-201	-174
25-34	-153	-34	66	194	370
35-44	8	-217	-110	-165	46
45-54	-104	-181	-329	-227	-216
55-64	-558 **	-196	-471	-480 *	-598 **
65+	-697 *	-796 **	-397	43	-142
	Median Earnings				
	Wave 1 Sample with Wave 2 and Matched Data				
18+	22,986	23,308	23,400	23,457	23,415
18-24	10,382	10,588	9,987	10,182	9,722
25-34	24,088	24,827	25,150	25,287	24,962
35-44	29,220	29,225	29,005	29,112	29,284
45-54	30,983	30,817	31,231	31,453	31,835
55-64	23,436	23,368	24,215	24,473	24,218
65+	7,083	7,341	8,366	7,877	8,355
	Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Wave 2 and Matched Data				
18+	62	72	27	74	154
18-24	324	184	-173	-247	-458
25-34	-66	60	48	468	255
35-44	88	-190	-81	-375	166
45-54	19	-103	-478	-229	-128
55-64	-495	367	-217	-213	-210
65+	-14	-54	-124	13	65

Source: Mathematica Policy Research, from linked 2001 SIPP-SER records.

Note: All earnings have been adjusted for inflation and are in 2001 dollars.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE IV.3

25TH AND 75TH PERCENTILES OF ANNUAL EARNINGS OF WORKERS WITH
POSITIVE EARNINGS IN THE SER, BY AGE AND CALENDAR YEAR

Age in January	1999	2000	2001	2002	2003
			25th Percentile of Earnings		
			Wave 1 Sample with Wave 2 and Matched Data		
18+	10,361	10,565	10,339	10,328	10,090
18-24	4,375	4,331	4,360	4,024	3,623
25-34	12,490	13,068	13,169	13,110	12,687
35-44	14,937	14,941	14,875	14,661	14,807
45-54	16,805	17,004	17,024	17,412	17,362
55-64	10,022	10,257	10,493	10,616	10,736
65+	2,231	2,166	2,403	2,569	2,737
		Difference between Full Panel Sample with Matched Data and			
		Wave 1 Sample with Wave 2 and Matched Data			
18+	189	154	71	144	137
18-24	140	106	-319 **	-121	-166
25-34	-14	120	173	232	532 *
35-44	356	428	125	114	333
45-54	234	153	-337	13	121
55-64	155	320	210	59	-43
65+	-20	-12	-3	170	-249
			75th Percentile of Earnings		
			Wave 1 Sample with Wave 2 and Matched Data		
18+	39,545	40,129	40,403	40,805	40,730
18-24	18,626	19,312	18,956	18,787	18,190
25-34	37,311	38,863	39,193	39,465	38,338
35-44	46,252	46,799	46,640	47,574	48,248
45-54	50,057	50,199	50,106	50,194	51,083
55-64	42,427	41,678	43,440	45,096	45,164
65+	15,445	16,941	16,929	17,685	18,022
		Difference between Full Panel Sample with Matched Data and			
		Wave 1 Sample with Wave 2 and Matched Data			
18+	-233	-333 *	-387	-268	-222
18-24	204	163	-24	-229	-74
25-34	-312	-588	-168	69	336
35-44	0	-628	-598	-542	-820
45-54	-298	-646	-382	-443	-759
55-64	-1,205 *	-749	-1,844 **	-1,233	-1,552 **
65+	-616	-923	-285	202	392

Source: Mathematica Policy Research, from linked 2001 SIPP-SER records.

Note: All earnings have been adjusted for inflation and are in 2001 dollars.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE IV.4

PROPORTION OF PERSONS WITH A CHANGE IN SER ANNUAL EARNINGS,
BY DIRECTION, 2001 TO 2003: PERSONS WITH
POSITIVE EARNINGS IN BOTH YEARS

Age in January 2001	Positive Change	No Change	Negative Change
	Wave 1 Sample with Wave 2 and Matched Data		
18+	60.9	0.0	39.1
18-24	67.2	0.0	32.8
25-34	62.9	0.0	37.1
35-44	62.2	0.0	37.8
45-54	59.8	0.0	40.2
55-64	50.8	0.0	49.2
65+	39.2	0.0	60.8
	Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Wave 2 and Matched Data		
18+	0.7 ***	0.0 [a]	-0.7 ***
18-24	1.1	0.0 [a]	-1.1
25-34	1.3 **	0.0 [a]	-1.3 **
35-44	0.5	0.0 [a]	-0.5
45-54	0.1	0.0 [a]	-0.1
55-64	0.4	0.0 [a]	-0.4
65+	0.3	0.0 [a]	-0.3

Source: Mathematica Policy Research, from linked 2001 SIPP-SER records.

Note: All earnings have been adjusted for inflation and are in 2001 dollars.

[a] The cross-sectional sample estimate is zero, so the full panel estimate cannot deviate from that value.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE IV.5

FREQUENCY DISTRIBUTION OF GROSS CHANGE IN SER ANNUAL EARNINGS,
2001 TO 2003, BY AGE: PERSONS WITH POSITIVE EARNINGS BOTH YEARS
(Thousands of Persons)

Percentage Change in Earnings	Age in January 2001		
	18+	18 to 64	65+
	Wave 1 Sample with Wave 2 and Matched Data		
(More than -25.0%)	23,442	22,182	1,260
(-10.1% to -25.0%)	10,556	10,096	460
(-5.1% to -10.0%)	6,408	6,225	183
(-2.1% to -5.0%)	6,219	5,954	265
(-0.1% to -2.0%)	4,397	4,252	145
0	0	0	0
(0.1% to 2.0%)	5,001	4,922	79
(2.1% to 5.0%)	14,487	14,194	293
(5.1% to 10.0%)	11,063	10,889	174
(10.1% to 25.0%)	18,030	17,763	267
(More than 25.0%)	30,949	30,269	680
	Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Wave 2 and Matched Data		
(More than -25.0%)	-1,153 ***	-1,137 ***	-15
(-10.1% to -25.0%)	-220	-221	1
(-5.1% to -10.0%)	145	138	7
(-2.1% to -5.0%)	225	233 *	-8
(-0.1% to -2.0%)	33	21	12
0	0 a	0 a	0 a
(0.1% to 2.0%)	188	192	-4
(2.1% to 5.0%)	130	131	-1
(5.1% to 10.0%)	530 ***	523 ***	6
(10.1% to 25.0%)	235	227	8
(More than 25.0%)	-393	-401	8

Source: Mathematica Policy Research, from linked 2001 SIPP-SER records.

Note: All earnings have been adjusted for inflation and are in 2001 dollars.

[a] The cross-sectional sample estimate is zero, so the full panel estimate cannot deviate from that value.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level

TABLE IV.6

DISTRIBUTION OF SOCIAL SECURITY BENEFICIARY STATUS IDENTIFIED IN THE MBR, BY AGE:
JANUARY 2001 AND SEPTEMBER 2003
(Thousands of Persons)

Age	Disabled Worker	Retired Worker	Aged Non-widow	Aged Widow	All Other Beneficiaries	Total
		Wave 1 Sample with Wave 2 and Matched Data				
January 2001:						
Under 65	5,000	2,620	240	334	3,986	12,180
65 and older	0	25,435	1,720	3,107	21	30,283
Total	5,000	28,055	1,960	3,441	4,007	42,462
September 2003:						
Under 65	5,895	2,861	117	416	4,145	13,434
65 and older	0	27,190	1,681	3,181	24	32,077
Total	5,895	30,051	1,799	3,597	4,169	45,511
		Difference between Full Panel Sample with Matched Data and				
		Wave 1 Sample with Wave 2 and Matched Data				
January 2001:						
Under 65	23	29	-18	23	137	193
65 and older	0 a	-84	-80	23	0	-141 *
Total	23	-56	-99 *	46	138	52
September 2003:						
Under 65	-65	-48	-18	18	61	-51
65 and older	0 a	-284 *	-58	-12	0	-354 **
Total	-65	-332 **	-75	6	61	-405 *

Source: Mathematica Policy Research, from linked 2001 SIPP-MBR-PHUS records.

Note: The category "all other beneficiaries" includes spouses and widow(er)s caring for minor children, disabled widow(er)s, adults disabled in childhood, student children, minor children, and other individuals who have a current payment status and who are not elsewhere classified.

[a] The cross-sectional sample estimate is zero, so the full panel estimate cannot deviate from that value.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE IV.7

ENTRIES INTO AND EXITS FROM SOCIAL SECURITY BENEFICIARY CATEGORIES
BETWEEN JANUARY 2001 AND SEPTEMBER 2003
(Thousands of Persons)

Beneficiary Category	January 2001	Entries into Category	Exits from Category	September 2003
	Wave 1 Sample with Wave 2 and Matched Data			
Disabled worker	5,000	1,835	939	5,895
Retired worker	28,055	4,559	2,563	30,051
Aged non-widow	1,960	194	355	1,799
Aged widow	3,441	599	443	3,597
All other beneficiaries	4,007	1,330	1,168	4,169
Total	42,462	8,517	5,468	45,511
	Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Wave 2 and Matched Data			
Disabled worker	23	-35	52	-65
Retired worker	-56	-86	190 **	-332 **
Aged non-widow	-99 *	-11	-34	-75
Aged widow	46	-13	27	6
All other beneficiaries	138	-104	-27	61
Total	52	-249 *	208	-405 *

Source: Mathematica Policy Research, from 2001 linked SIPP-MBR-PHUS records.

Note: The category "all other beneficiaries" includes spouses and widow(er)s caring for minor children, disabled widow(er)s, adults disabled in childhood, student children, minor children, and other individuals who have a current payment status and are not elsewhere classified.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE IV.8

MEAN DOLLAR VALUES OF SELECTED PAYMENT VARIABLES AMONG RETIRED AND DISABLED WORKERS
WHO ARE CURRENT BENEFICIARIES, JANUARY 2001 AND SEPTEMBER 2003

| | January 2001 | | | | September 2003 | | | |
| | Retired Workers | | | | Retired Workers | | | |
Payment Variable	Under 65	65+	Total	Disabled Workers	Under 65	65+	Total	Disabled Workers
	Wave 1 Sample with Wave 2 and Matched Data							
Family Maximum Benefit	1,628	1,467	1,482	1,116	1,703	1,481	1,502	1,158
Indexed Monthly Earnings	2,069	1,099	1,190	1,178	2,192	1,224	1,316	1,340
Monthly Benefit Amount	809	858	854	768	810	867	862	800
Monthly Benefit Payable	806	813	812	745	806	817	816	777
Medicare Part B Premium	1	45	41	22	2	49	45	23
Monthly Benefit Paid	732	810	802	717	755	813	807	816
Primary Insurance Amount	953	856	865	775	991	863	876	806
Social Security Income	733	855	843	739	757	862	852	838
	Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Wave 2 and Matched Data							
Family Maximum Benefit	-1	-7	-6	-1	7	-10	-8	-9
Indexed Monthly Earnings	-11	-13	-12	-8	12	-14	-12	-13
Monthly Benefit Amount	-1	-4	-3	0	-2	-6 *	-5 *	-5
Monthly Benefit Payable	-1	-3	-3	0	-2	-6 *	-5 *	-5
Medicare Part B Premium	0	0	0	0	0	0	0	0
Monthly Benefit Paid	-5	-3	-3	17	-1	-6 *	-5 *	-4
Primary Insurance Amount	-1	-5	-4	0	4	-6 *	-5 *	-5
Social Security Income	-5	-3	-4	17	-1	-6 *	-6 *	-4

Source: Mathematica Policy Research, from 2001 linked SIPP-MBR-PHUS records.

  * Statistically significant at 0.10 level

TABLE IV.9

DISTRIBUTION OF SOCIAL SECURITY PAYMENTS AS A PERCENTAGE OF PERSONAL INCOME AMONG RETIRED WORKERS WITH
POSITIVE SOCIAL SECURITY BENEFIT AMOUNTS AND POSITIVE TOTAL INCOME BY SELECTED PERSONAL CHARACTERISTICS:
JANUARY 2001

| | Wave 1 Sample with Wave 2 and Matched Data | | | | | Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Wave 2 and Matched Data | | | | |
| | Social Security Payment as a Percentage of Total Personal Income | | | | | Social Security Payment as a Percentage of Total Personal Income | | | | |
Characteristic	0-24%	25-49%	50-74%	75-99%	100%	0-24%	25-49%	50-74%	75-99%	100%
All Recipients	11.6	27.6	22.9	25.7	12.2	-0.2	-0.2	0.3	0.2	-0.1
Sex										
Male	15.2	29.9	24.2	20.3	10.4	-0.2	-0.3	0.0	-0.2	0.7 *
Female	7.6	25.1	21.6	31.5	14.1	-0.2	-0.2	0.7	0.8	-1.0 **
Age										
Under 65	13.4	35.3	20.5	19.3	11.5	-2.1 **	0.7	0.4	1.1	0.0
65+	11.4	26.8	23.2	26.3	12.3	0.0	-0.3	0.3	0.2	-0.1
Race										
White	11.3	28.1	23.1	26.2	11.3	-0.1	-0.1	0.2	0.0	0.0
Black	12.4	21.2	21.6	21.5	23.2	-1.1	-0.3	0.9	2.2 *	-1.7
American Indian, Alaska Native	17.5	27.1	22.9	22.6	9.9	0.7	0.9	0.2	0.6	-2.4
Asian, Pacific Islander	19.3	30.9	19.6	19.6	10.6	-4.2	-7.5	3.6	6.9 **	1.2
Ethnicity										
Hispanic	8.6	16.7	23.4	26.1	25.2	1.2	-2.0	-0.7	-1.4	2.9 *
Non-Hispanic	11.7	28.2	22.9	25.6	11.6	-0.3	-0.2	0.4	0.3	-0.3
Marital Status										
Married	12.7	29.6	21.9	25.3	10.6	-0.3	-0.6	0.3	0.3	0.4
Widowed	8.2	21.5	25.3	30.8	14.1	-0.3	0.2	-0.2	0.9	-0.7
Divorced or separated	12.6	27.0	25.7	18.3	16.5	0.3	0.8	2.3 **	-1.6 *	-1.8
Never married	10.8	33.0	20.9	17.5	17.8	0.4	1.4	-0.4	1.3	-2.7

Source: Mathematica Policy Research, from 2001 SIPP-SSR and SIPP-MBRPHUS.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE IV.10

DISTRIBUTION OF SOCIAL SECURITY PAYMENTS AS A PERCENTAGE OF PERSONAL INCOME AMONG NON-RETIRED BENEFICIARIES
WITH POSITIVE SOCIAL SECURITY BENEFIT AMOUNTS AND POSITIVE TOTAL INCOME BY SELECTED PERSONAL CHARACTERISTICS:
JANUARY 2001

| | Wave 1 Sample with Wave 2 and Matched Data | | | | | Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Wave 2 and Matched Data | | | | |
| | Social Security Payment as a Percentage of Total Personal Income | | | | | Social Security Payment as a Percentage of Total Personal Income | | | | |
Characteristic	0-24%	25-49%	50-74%	75-99%	100%	0-24%	25-49%	50-74%	75-99%	100%
All Recipients	6.4	17.1	20.6	29.9	26.0	0.1	-1.4 **	0.6	0.2	0.6
Sex										
Male	5.6	19.0	19.6	25.6	30.3	0.6	-1.8 *	-0.3	0.5	1.0
Female	6.7	16.4	21.0	31.6	24.3	-0.1	-1.3 **	0.9	0.1	0.5
Age										
15-17	9.1	14.1	22.2	41.4	13.2	-3.4	-2.3	0.2	2.5	2.9
18-64	5.3	18.9	21.0	26.1	28.7	0.3	-0.8	0.4	-0.2	0.2
65+	7.5	15.2	19.8	33.7	23.8	0.1	-2.2 ***	0.8	0.5	0.8
Race										
White	5.4	18.0	19.7	31.6	25.3	-0.2	-1.1 **	0.5	-0.2	0.9
Black	10.9	11.2	25.0	20.8	32.2	2.1	-2.3	1.0	2.1	-2.8
American Indian, Alaska Native	19.2	15.2	29.8	12.0	23.7	-6.3	-7.1	3.1	5.3	5.1
Asian, Pacific Islander	9.8	22.7	24.6	31.9	11.0	-2.1	-3.4	-5.0	5.8	4.7
Ethnicity										
Hispanic	6.5	20.0	16.3	21.8	35.3	1.1	-3.3	2.9	-1.5	0.8
Non-Hispanic	6.4	16.8	21.0	30.7	25.1	0.0	-1.3 **	0.4	0.4	0.6
Marital Status										
Married	8.0	17.2	17.6	31.8	25.5	-0.5	-0.8	-0.4	-0.2	1.9 *
Widowed	5.1	18.2	22.1	30.4	24.3	0.5	-2.3 **	1.5 *	0.7	-0.4
Divorced or separated	3.6	14.9	24.0	27.1	30.4	0.2	1.3	-1.6	0.9	-0.7
Never married	7.3	16.7	22.1	27.0	26.8	0.6	-3.1 *	2.1	-0.1	0.6

Source: Mathematica Policy Research, from 2001 SIPP-SSR and SIPP-MBRPHUS.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE IV.11

SSI RECIPIENTS IDENTIFIED IN THE SSR BY AGE AND ELIGIBILITY CATEGORY:
JANUARY 2001 AND SEPTEMBER 2003
(Thousands of Persons)

Month and Eligibility	Age in Month						
Category	Under 18	18-24	25-49	50-61	62-65	65+	Total
	Wave 1 Sample with Wave 2 and Matched Data						
January 2001:							
Aged	0	0	0	0	5	1,095	1,100
Blind	10	15	23	27	4	10	89
Disabled	771	480	2,322	1,155	220	590	5,538
September 2003:							
Aged	0	0	0	0	0	1,124	1,124
Blind	10	0	43	27	0	10	90
Disabled	882	491	2,190	1,164	313	643	5,682
	Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Wave 2 and Matched Data						
January 2001:							
Aged	0 [a]	0 [a]	0 [a]	0 [a]	1	102	103
Blind	6	8	-8	-2	-4	4	4
Disabled	-63	48	102	73	1	-20	140
September 2003:							
Aged	0 [a]	0 [a]	0 [a]	0 [a]	0 [a]	135	135
Blind	6	0 [a]	-17	-2	0 [a]	-3	-16
Disabled	-76	-34	143	56	19	-6	102

Source: Mathematica Policy Research, from linked 2001 SIPP-SSR records.

[a] The cross-sectional sample estimate is zero, so the full panel estimate cannot deviate from that value.

TABLE IV.12

MEAN DOLLAR VALUES OF SELECTED PAYMENT VARIABLES ON THE SSR FOR SSI RECIPIENTS BY AGE:
JANUARY 2001 AND SEPTEMBER 2003

| Month and Payment Variable | Age in Month | | | | | | Total |
	Under 18	18-24	25-49	50-61	62-65	65+	
	Wave 1 Sample with Wave 2 and Matched Data						
January 2001							
Earned Income	2	28	11	6	2	7	9
Unearned Income	79	66	116	133	169	245	145
Federal Money Amount Payment	417	391	364	488	320	258	367
State Support Amount	14	30	31	33	34	58	36
September 2003							
Earned Income	0	23	8	2	0	3	6
Unearned Income	63	40	140	135	224	240	151
Federal Money Amount Payment	469	465	382	361	280	256	359
State Support Amount	25	23	45	46	39	76	48
	Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Wave 2 and Matched Data						
January 2001							
Earned Income	1	0	3	2 ***	-2	0	2
Unearned Income	-7	-3	-14 *	5	23	-4	-4
Federal Money Amount Payment	6	27	25 *	31	-20	-2	15 *
State Support Amount	2	2	-2	-1	1	1	0
September 2003							
Earned Income	0 a	11	2	0	0 a	2	2 *
Unearned Income	-2	2	-13	5	-5	2	0
Federal Money Amount Payment	2	-11	9	-4	0	-2	-2
State Support Amount	3	-3	-1	-2	4	7 *	2

Source: Mathematica Policy Research, from linked 2001 SIPP-SSR records.

a The cross-sectional sample estimate is zero, so the full panel estimate cannot deviate from that value.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE IV.13

GROSS CHANGE IN PAYMENT VARIABLES ON THE SSR FILE, JANUARY 2001 TO
SEPTEMBER 2003, FOR SSI RECIPIENTS BY AGE

Payment Variable and Gross Change	Wave 1 Sample with Wave 2 and Matched Data			Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Wave 2 and Matched Data		
	Age in January 2001			Age in January 2001		
	Under 65	65+	Total	Under 65	65+	Total
Earned Income						
Positive Change	2.8	0.8	2.3	1.0 **	0.4	0.9 **
Negative Change	3.6	3.2	3.5	0.3	0.1	0.2
No Change	93.6	96.0	94.2	-1.3 *	-0.5	-1.1 *
Unearned Income						
Positive Change	11.9	6.1	10.5	-1.1	0.4	-0.7
Negative Change	32.3	61.0	39.2	-1.2	1.6	-0.3
No Change	55.8	32.9	50.3	2.2	-1.9	1.0
Federal Payment						
Positive Change	19.7	9.3	17.2	-2.7 **	1.5	-1.7 *
Negative Change	77.2	85.7	79.3	3.8 ***	-2.1	2.4 **
No Change	3.1	5.0	3.5	-1.2 *	0.6	-0.7
State Support Amount						
Positive Change	13.0	28.3	16.7	0.6	2.2	1.1
Negative Change	19.9	17.0	19.2	0.2	0.0	0.1
No Change	67.1	54.6	64.1	-0.8	-2.1	-1.2

Source: Mathematica Policy Research, from linked 2001 SIPP-SSR records.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE IV.14

DISTRIBUTION OF SSI PAYMENTS AS A PERCENTAGE OF PERSONAL INCOME AMONG PERSONS WITH POSITIVE SSI
AND POSITIVE TOTAL INCOME BY SELECTED PERSONAL CHARACTERISTICS: JANUARY 2001

| | Wave 1 Sample with Wave 2 and Matched Data | | | | | Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Wave 2 and Matched Data | | | | |
| | SSI Payment as a Percentage of Total Personal Income | | | | | SSI Payment as a Percentage of Total Personal Income | | | | |
Characteristic	0-24%	25-49%	50-74%	75-99%	100%	0-24%	25-49%	50-74%	75-99%	100%
All Recipients	20.8	16.2	9.1	10.6	43.4	-0.9	0.1	-0.3	0.4	0.8
Sex										
Male	18.5	12.6	6.0	12.0	50.8	-2.9 **	-0.3	-1.5 *	1.6	3.0 *
Female	22.3	18.4	11.0	9.6	38.7	0.6	0.6	0.8	-0.6	-1.3
Age										
15-17	0.0	0.0	10.0	14.5	75.5	0.0 a	0.0 a	2.1	-2.7	0.6
18-64	16.5	14.8	9.1	10.8	48.9	-0.6	-0.3	-0.5	1.2	0.1
65+	32.1	20.3	9.0	9.8	28.7	-1.5	1.1	0.1	-1.4	1.7
Race										
White	22.2	16.8	7.8	10.3	42.9	-2.0 *	1.1	0.2	0.1	0.6
Black	19.4	17.6	9.5	10.3	43.2	2.2	-2.0	-2.3 *	1.2	0.9
American Indian, Alaska Native	25.9	10.0	11.2	11.7	41.2	0.1	3.5	2.8	-0.8	-5.6
Asian, Pacific Islander	12.5	4.5	18.7	13.8	50.5	-4.6	0.9	1.7	-0.9	2.9
Ethnicity										
Hispanic	19.8	14.1	8.2	9.9	47.9	-2.1	2.0	2.0 **	1.6	-3.4
Non-Hispanic	21.1	16.7	9.3	10.7	42.2	-0.6	-0.4	-0.9	0.0	1.9
Marital Status										
Married	17.1	12.4	10.6	16.2	43.7	-1.0	-0.3	-0.6	-0.3	2.2
Widowed	33.0	18.8	8.0	9.1	31.1	2.3	-0.9	2.0	-4.4 **	1.0
Divorced or separated	24.3	17.4	9.5	9.2	39.6	0.0	-0.3	-1.1	0.3	1.0
Never married	14.5	15.9	8.4	9.3	51.8	-2.3 *	1.2	-0.6	2.6 **	-0.9

Source: Mathematica Policy Research, from 2001 SIPP-SSR and SIPP-MBRPHUS.

a The cross-sectional sample estimate is zero, so the full panel estimate cannot deviate from that value.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

Figure IV.1
DISTRIBUTION OF POSITIVE EARNINGS IN THE SER IN 2001 AMONG PERSONS AGED 18+
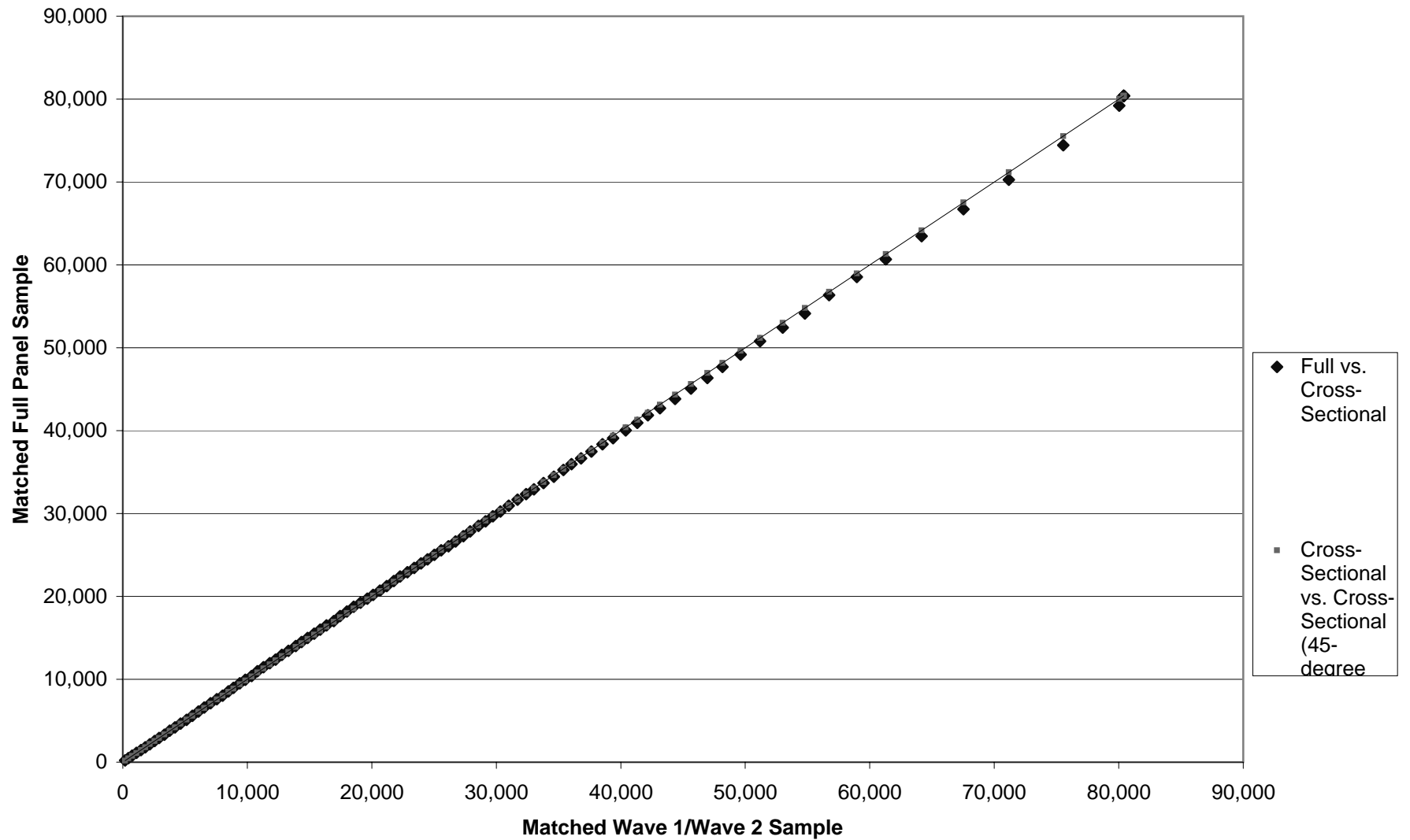
Figure IV.2
DISTRIBUTION OF POSITIVE EARNINGS IN THE SER IN 2001 AMONG PERSONS AGED 18-24
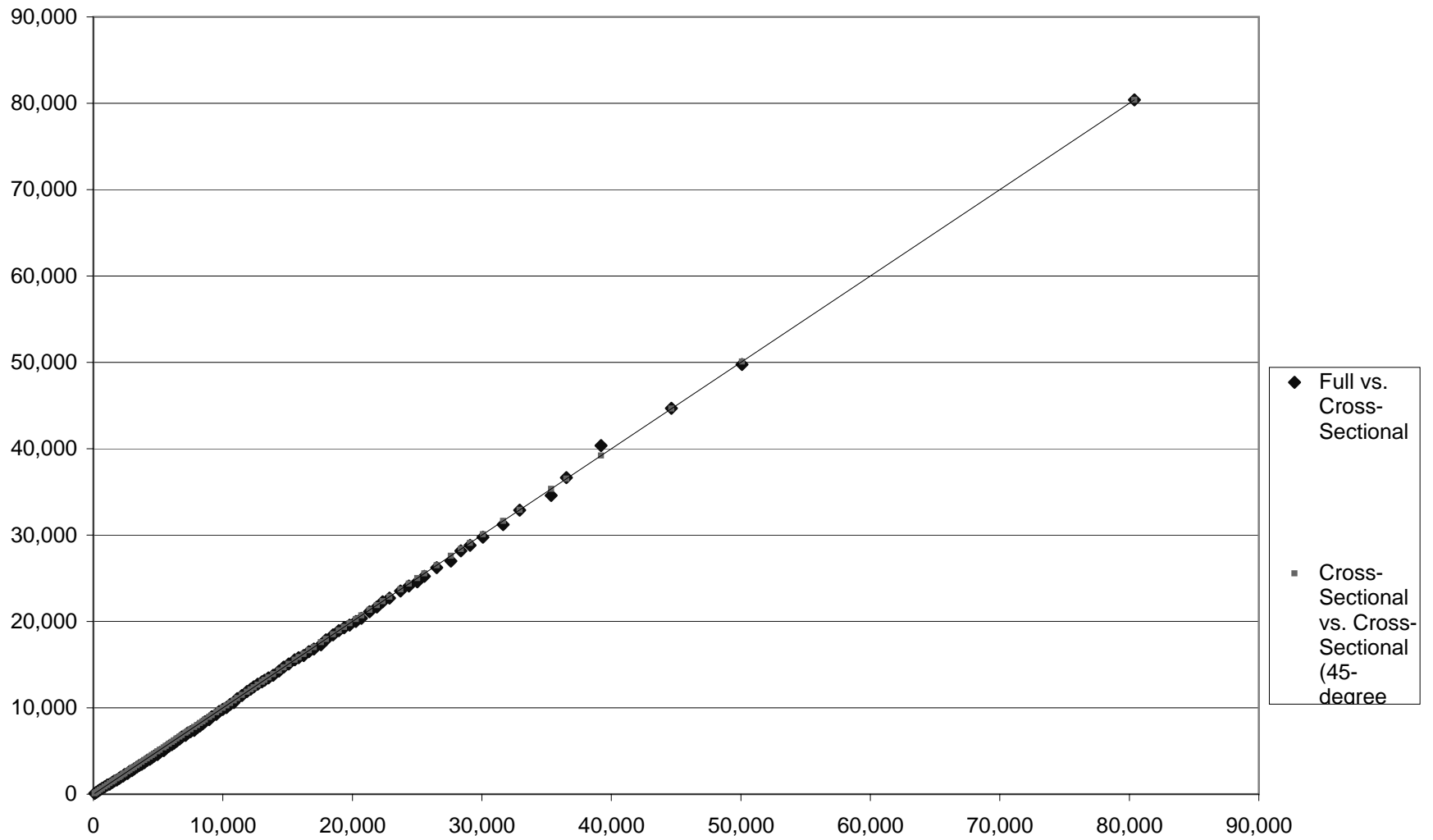
Figure IV.3
DISTRIBUTION OF POSITIVE EARNINGS IN THE SER IN 2001 AMONG PERSONS AGED 25-34

Legend:
- ◆ Full vs. Cross-Sectional
- ▪ Cross-Sectional vs. Cross-Sectional (45-degree
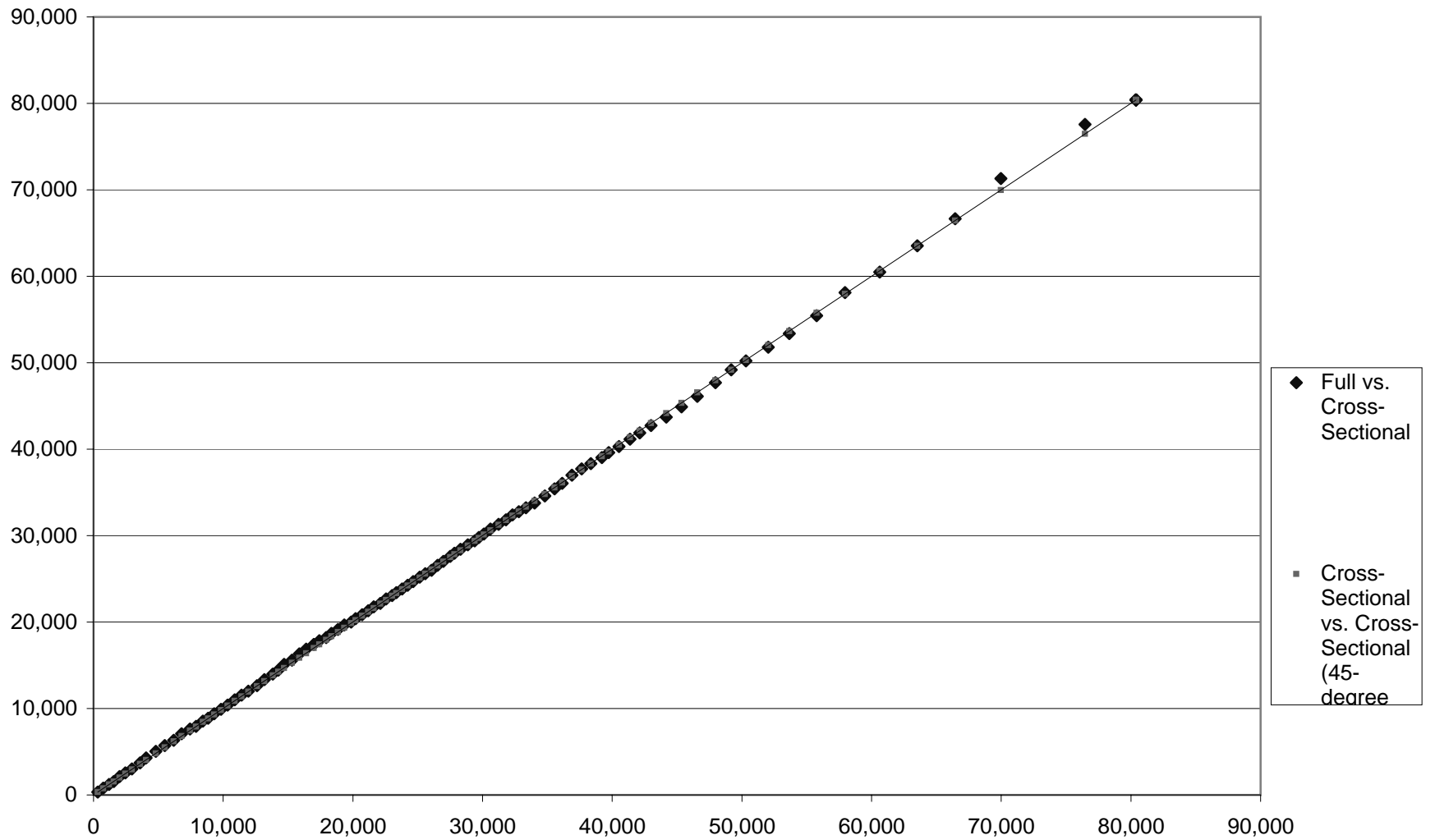
Figure IV.4
DISTRIBUTION OF POSITIVE EARNINGS IN THE SER IN 2001 AMONG PERSONS AGED 35-44

- ◆ Full vs. Cross-Sectional
- ▪ Cross-Sectional vs. Cross-Sectional (45-degree
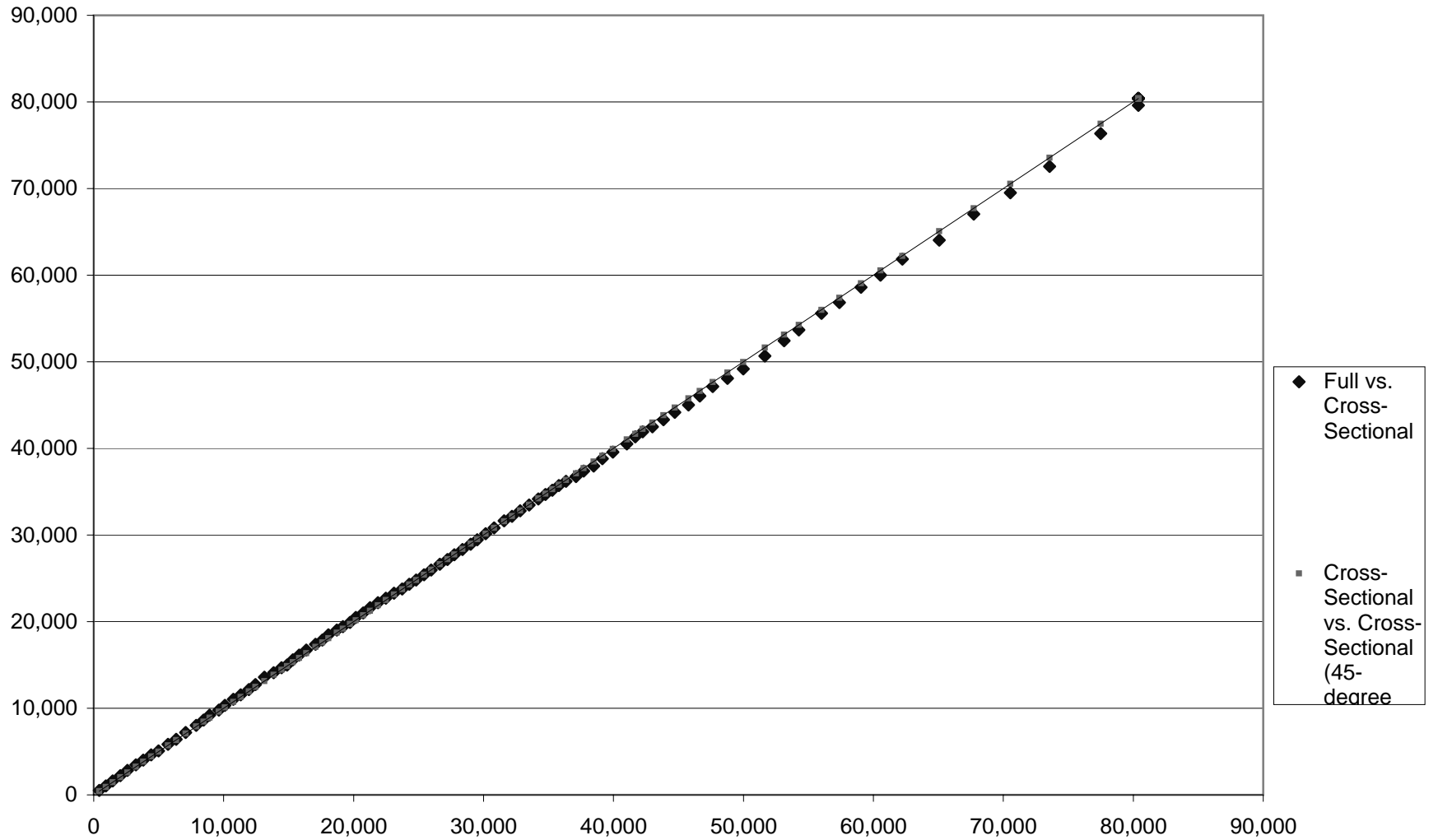
Figure IV.5
DISTRIBUTION OF POSITIVE EARNINGS IN THE SER IN 2001 AMONG PERSONS AGED 45-54
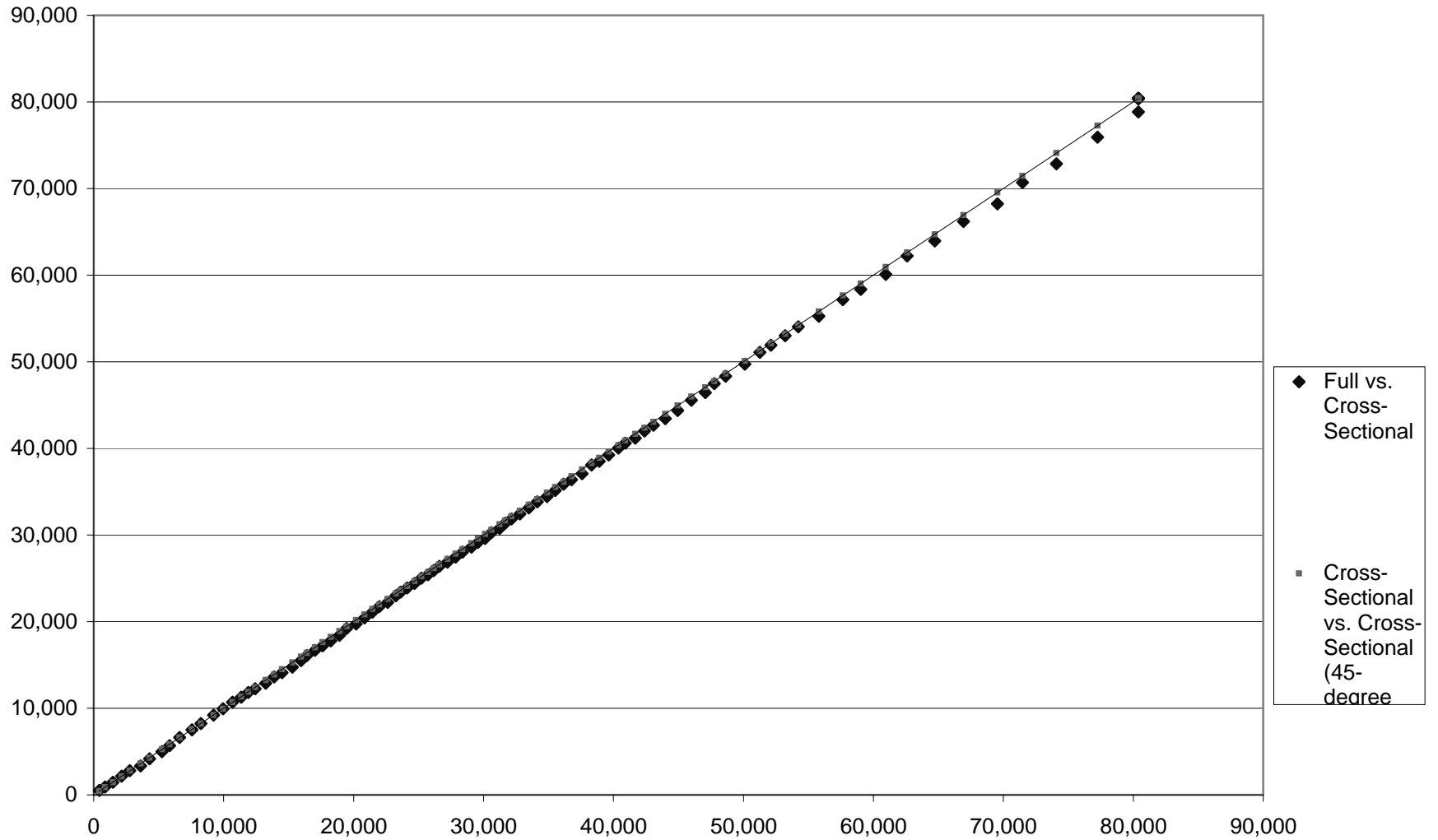
Figure IV.6
DISTRIBUTION OF POSITIVE EARNINGS IN THE SER IN 2001 AMONG PERSONS AGED 55-64
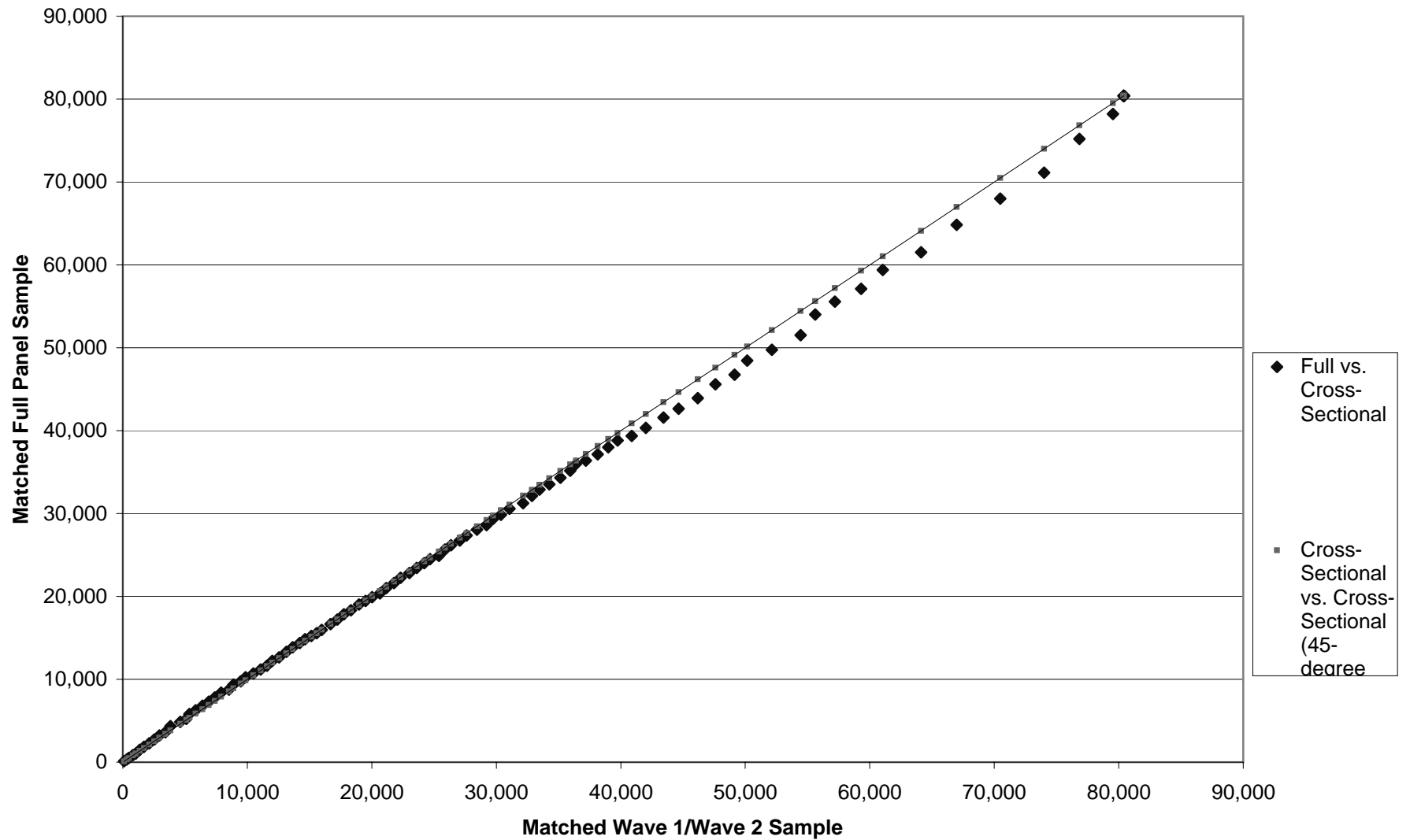
Figure IV.7
DISTRIBUTION OF POSITIVE EARNINGS IN THE SER IN 2001 AMONG PERSONS AGED 65+
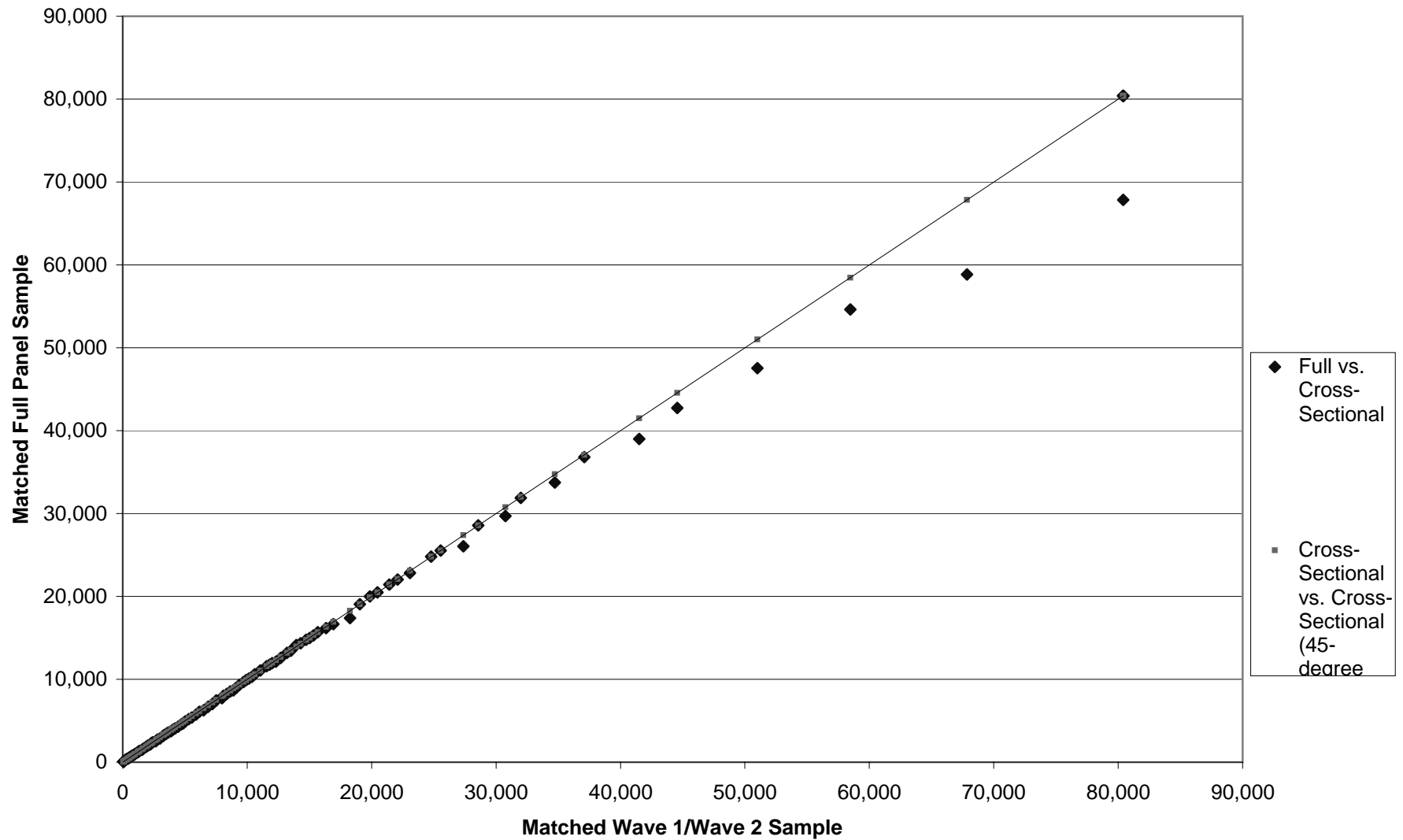
V. CROSS-SECTIONAL REPRESENTATIVENESS OVER TIME

In order to maintain full cross-sectional representativeness, a panel survey requires two elements in its design. First, the survey must have a viable mechanism for adding new sample members to represent additions to the population from which the panel was originally selected. Second, the survey must have an effective means of compensating for nonrandom attrition. If a panel survey lacks either of these elements, it will become increasingly less representative of the full population over time. Recognizing this, designers of panel surveys sometimes employ an overlapping panel design, in which new panels are started every year, and the data from two or more panels (depending on the length of the panel) are pooled for cross-sectional estimation. As long as new panels do not lose their representativeness more rapidly or less rapidly than earlier panels, the pooled panel estimates derived from data collected at the same time each year will have a constant bias over time. The SIPP employed an overlapping panel design from 1984 through 1993.[1]

The loss of cross-sectional representativeness may not be a problem to users interested solely in longitudinal analysis, providing that the panel accurately represents the *original* population through time. In the preceding chapter we presented compelling evidence that the SIPP full panel sample, when weighted with the Census Bureau's longitudinal weights, does indeed provide good representation of the wave 1 population over time—not only for the whole population but also (and perhaps especially) for subpopulations of Social Security beneficiaries. But while SSA's uses of the SIPP include important longitudinal applications, cross-sectional uses abound. Consequently, the cross-sectional representativeness of the SIPP over time is of

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[1] The Medical Expenditure Panel Survey continues to employ an overlapping panel design, with two-year panels being initiated every year. The Medicare Current Beneficiary Survey has an overlapping panel design with four-year panels.

considerable interest to SSA analysts. This interest in cross-sectional representativeness extends to the matched subsample, which SSA analysts have used to examine the characteristics of SSA beneficiaries at successive points in time.

In this chapter we explore the SIPP's cross-sectional representativeness over time. We begin by looking at SSA's own estimates of the characteristics of disabled workers and SSI recipients during the final two years of the 1996 panel and the first year of the 2001 panel. Then we turn our attention to trends in SIPP monthly poverty rates, which raise a number of questions about the dynamics of the SIPP sample over time and how it affects the cross-sectional estimates that are derived from the survey. Finally, we look at what the absence of a refreshment mechanism means with respect to who is missing from SIPP cross-sectional estimates over time, and, in light of our findings in the previous chapter, we consider whether the lack of a refreshment mechanism might be the principal source of bias in SIPP cross-sectional estimates.

A. CHARACTERISTICS OF DISABLED WORKERS AND SSI RECIPIENTS

In 2000, SSA began publishing an extensive set of SIPP-based descriptive statistics on the disabled worker population in the *Annual Statistical Report on the Social Security Disability Insurance Program*. This was followed a year later by the initiation of a similar set of statistics on the SSI population in the *SSI Annual Statistical Report*. Both sets of statistics were derived from SIPP data matched to SSA administrative records and were based on data from the third year of the 1996 panel. Estimates represented the population as of December 1998, with income corresponding to the 1998 calendar year. Only matched records were used in preparing the estimates. The matched records were weighted to program beneficiary totals, adjusted to reflect the noninstitutionalized population. SSA applied the same methodology to produce estimates for December 1999, with calendar year 1999 income. These estimates were published in the next volume of each annual report.

SSA produced a third set of statistics for each program, based on data from the 2001 SIPP panel. Because of the reduced match rate attained with this panel, SSA modified the methodology. Instead of restricting the tabulations to matched records, SSA used both matched and unmatched records. Beneficiary status and benefit amounts from administrative records were substituted for reported values on the matched records while reported beneficiary status and benefit amounts were used for the unmatched records. The tabulations for the DI program replicated the December reference month and calendar year income used in the earlier tables, so there was an expectation that the new estimates would line up with the earlier estimates and provide readers with a glimpse of how the characteristics and economic status of DI beneficiaries had changed since the end of the 1990s economic boom. And while SSA might have expected some increase in DI beneficiaries' reliance upon their Social Security benefits, given the changes in the economy, including a brief recession in 2001, what the estimates showed was an improbably large increase in the proportion of their personal and family income that DI beneficiaries received from Social Security. Later, a careful review of how the estimates were constructed revealed that most of the increase in personal and family income coming from Social Security benefits was actually due to the substitution of a different administrative data source for the one that was used in preparing the 1990s estimates. The new source differed from the earlier source in how lump sum payments of back benefits were recorded, which gave higher benefits in the short run to beneficiaries with lump sum payments. Other differences between the two administrative sources may have existed as well, whereas the impact of differences between the two SIPP panels and how the data from the two panels were used was unclear.

In producing the 2001 estimates for the SSI program a year later, SSA made other changes to the methodology. Most notably, the reference period was shifted from December 2001 for population estimates and the 2001 calendar year for income estimates to the final month of wave

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2 for the population estimates (May through August 2001, depending on the rotation group) and the four months of the wave for income estimates (February to May through May to August, again depending on the rotation group). The change was made with an eye toward a planned, periodic survey of DI and SSI recipients that involved the administration of a single-wave SIPP interview to a sample of beneficiaries drawn from program administrative records.[2] Because of this change, the income estimates produced for the 2001 statistical tables are not comparable to the earlier income estimates from the 1996 panel. Ironically, there was no issue with the administrative benefit data that replaced the reported Social Security benefits for matched cases.

No additional tabulations were produced. The tables for 2001 were reprinted in the next year's editions of the DI and SSI statistical reports, and in the following year SSA announced to its readers that it had removed the SIPP-based tables from the report because the reduced match rate and increased attrition had made the estimates too unreliable. At the time of the decision there was an expectation that SSA would be able to replace the tabulations with equivalent tabulations from a new and better source—namely, the aforementioned periodic survey of DI and SSI recipients.

Table V.1 reproduces selected tabulations from the DI tables for all three years, and Table V.2 reproduces selected tabulations from the SSI tables for the same three years. For disabled workers the estimates of demographic characteristics are reasonably consistent across the years, but for health insurance there is a sharp decline in private coverage, which is partially offset by an increase in reported Medicaid coverage. The income estimates show a sharp decline in the

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[2] Two of the surveys were carried out, but the first survey had significant omissions from the frame and an exceedingly low interview rate for child beneficiaries. Both problems were corrected in the second survey, but the Census Bureau's announced termination of the SIPP resulted in SSA's cancellation of the third survey, which ultimately could have been fielded but probably without the topical module that was to have collected asset data. Topical modules were dropped for the balance of the 2004 panel when the survey was resumed in wave 9 with half of the wave 8 sample.

proportion of DI beneficiaries with Social Security representing less than a quarter of their personal income. Social Security benefits rise from 36 percent of annual family income in 1999 to 53 percent in 2001 after falling from 45 percent in 1998. Changes in the distribution of family income relative to the poverty threshold are more modest, however, and generally no greater than the changes recorded between 1998 and 1999.

We have excluded all of the income-based statistics from the SSI tables presented in Table V.2 because of the aforementioned change in the length of the reference period. For the remaining characteristics, overall, the similarities between the 1999 and 2001 estimates are more striking than the differences, and this is important because December 1999 represents the end of a four-year panel while May through August of 2001 is near the beginning of a new panel. Moreover, the estimates of participation in means-tested programs, which we might expect to show the greatest effects of attrition in the 1996 panel, show lower rather than higher participation as fuller representation of the population is restored with the 2001 panel.

When we turn from indirect to direct estimates of income, however, we see more clearly the discontinuity that can develop across SIPP panels, and that is where we focus our attention for the remainder of this chapter.

B. MONTHLY POVERTY

Estimates of the percentage of persons in poverty by survey month illustrate the discontinuity between panels that has become a persistent feature of SIPP panels since the 1996 redesign. Each new panel since 1996 has started with a wave 1 poverty rate that was at least two percentage points higher than the poverty rate in the final wave of the preceding panel (Figure V.1 and Table V.3).[3] This was true even though two of the prior panels—1992 and 2001—

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[3] We exclude the 1993 panel from this comparison because this panel seems to have drawn a sample with an over-representation of the low-income population relative to other SIPP panels. Poverty rates in the 1993 panel run

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showed little if any downward trend over their lifetimes. In fact, the largest difference between the end of one panel and the beginning of the next—3 percentage points—occurred after the 2001 panel, which showed no decline at all after the second wave.

1. Possible Sources of Discontinuity between Panels

Attrition has been cited as the principal reason that cross-sectional estimates of poverty might decline over the life of a SIPP panel and then rise when a new panel starts. For example, Weinberg (2003) observed:

> Cross-section estimates from the SIPP are potentially biased by differentially high attrition of low-income households, poverty estimates more than any other. Without refreshment of a panel by new households, as was provided by SIPP's original (1983) overlapping panel design, poverty estimates would naturally decline over the life of any one panel, jumping up even in the absence of any change in environmental economic conditions when another panel began.

By refreshment Weinberg means the introduction of a new sample that is representative in every respect rather than just representative of people who have joined the universe since the start of the previous panel. In fact, Weinberg implies that the biggest contribution of refreshment is to correct for differential attrition. Our findings in the preceding chapter indicate that the adjustments for differential attrition that are incorporated into the SIPP longitudinal weights are effective in eliminating attrition bias in employment, earnings, and receipt of Social Security and SSI benefits. Is it possible, then, that differential attrition is not really a factor in the discontinuity between the estimates of poverty at the end of one panel and the beginning of the next? Could the discontinuity be explained fully by the entrants and re-entrants to the universe,

(continued)

about two percentage points higher than they do in the 1992 panel for the same reference months, and participants in the 1993 panel report higher levels of participation in programs serving the low-income population (such as the Food Stamp Program). While part of this difference may reflect the discontinuity that we are discussing, the greater

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who are not represented and who grow in number between the beginning and end of a panel but are then fully represented at the start of the next panel? Or is there an attrition bias in the SIPP cross-sectional weights that is absent from the longitudinal weights? Alternatively, are there one or more other factors that might contribute to the observed discontinuity, whether or not attrition plays a role?

One such alternative is "time-in-sample" bias. In the monthly labor force survey that is the core of the CPS the existence of a time-in-sample bias has been known for decades. Addresses that are selected into the CPS sample are included in the monthly sample for four consecutive months, dropped for eight months, and then included again for an additional four months. Respondents interviewed in the first month report higher unemployment rates than respondents interviewed in later months. A possible explanation for time-in-sample bias is that respondents learn to be better respondents over the course of multiple interviews. Earlier interviews tell them what behaviors they will be expected to report, and they become better observers. Detailed questions about income recipiency and amounts would seem to lend themselves to such learning by respondents, with the possible result that respondents provide a more complete report of their income in successive waves. The Census Bureau has looked for evidence of a time-in-sample bias in the reporting of income and benefit receipt in the SIPP by comparing data from overlapping waves in successive panels. This research, conducted prior to the redesign, has turned up no evidence of a time-in-sample bias in the SIPP (U.S. Census Bureau 1991). With the abutted panel design, however, it is no longer possible to test for time-in-sample bias in the same manner, so there are no data on possible time-in-sample bias since the introduction of computer-assisted interviewing.

(continued)
part of the difference appears to be due to the composition of the 1993 panel sample. SIPP staff at the Census

While there may be no evidence of time-in-sample bias in earlier SIPP panels, there is a strong suggestion of some type of correction in the reporting—or perhaps subsequent processing—of poverty between the first two waves of each SIPP panel since 1996. In each of the three panels since the redesign, there was at least a one percentage point drop in the estimated monthly poverty rate between the common reference months of the first and second waves. In the 2001 panel there was no further reduction in the poverty rate after wave 2. In the 2004 panel the decline between waves 1 and 2 was close to two percentage points.

We compared poverty status between the first two waves of the 2004 panel to determine how much of the reduction in poverty could be attributed to sample loss as opposed to actual change in recorded poverty. We repeated our calculations on waves 2 and 3 to determine how the gross changes in recorded poverty compared between the two pairs of waves. We found, first, that more than half of the poor recorded some type of transition between each pair of waves. Only 20 million out of an estimated 47 million poor persons in wave 1 had no change in status between waves 1 and 2 while 19 million out of 42 million poor persons in wave 2 had no change in status (Table V.4). Overall, changes in recorded poverty accounted for 87 percent of the reduction of 5.0 million poor persons between waves 1 and 2, with sample changes accounting for the balance.

Between waves 2 and 3, sample changes had a positive effect on the poverty rate—primarily because of wave 1 sample members who missed the wave 2 interview but returned for wave 3 with family incomes below poverty. As a result, gross changes in poverty accounted for more than 100 percent of the 0.3 percentage point decline in poverty rates between waves 2 and 3. The biggest difference between the two pairs of waves, however, lies in the number of persons

making transitions *out* of poverty: 14.2 million between waves 1 and 2 versus 11.2 million between waves 2 and 3. With about the same number making transitions *into* poverty between each pair of waves (9.8 million between waves 1 and 2 versus 10.1 million between waves 2 and 3), this difference in the frequency of transitions into poverty drives the final result.

The difference between the two pairs of waves is not dramatic, given the large number of transitions occurring between both pairs of waves. The difference would be more striking—and more suggestive of possible causes—if the total number of transitions were significantly smaller between waves 2 and 3 than between waves 1 and 2. Instead, we see that reported poverty is quite volatile between both pairs of waves. Nevertheless, transitions out of poverty are sufficiently more frequent after wave 1 than after wave 2 to yield quite different rates of net change in poverty. Most likely, only the Census Bureau can determine what accounts for the difference, but we can be almost certain that the difference does not reflect a markedly greater incidence of real change between waves 1 and 2 than between waves 2 and 3.

This wave 1 "effect," as we will identify it subsequently, may be just one manifestation of a more general development in the SIPP that could also be contributing to the observed discontinuity between panels. SIPP's movement to an end-to-end or abutted panel design increases the extent to which each successive SIPP panel constitutes a different survey. This has both good and bad implications. The longer time between the start of successive panels (five years in the case of the 1996 and 2001 panels, although there was a small, abortive 2000 panel) provides the Census Bureau more time to develop and implement survey innovations, which is indeed a good thing, generally, although innovations may not always yield better data. At the same time, however, innovations chip away at the comparability of panels over time. As we will demonstrate shortly, one particular innovation in the 2004 panel—a genuine improvement—had a pronounced impact on poverty rates in the subset of the population that the innovation affected.

In Chapter VI we will present additional evidence of change across panels that underscores the point that successive panels are different surveys that cannot be expected to yield strictly comparable estimates of everything they measure.

2. Discontinuities by Age

There are notable differences across age groups in the magnitudes of the discontinuities across panels, the sizes of the wave 1 effect, and the within-panel trends (Figures V.2 to V.6). Both the discontinuity between panels and the wave 1 effect are strongest among young adults 18 to 24—a narrow age group but one that compares in size to the elderly. The discontinuity grows from 4 percentage points between the end of the 1992 and beginning of the 1996 panel to 5.5 percentage points between the end of the 2001 panel and the beginning of the 2004 panel (Table V.5). Arguably, the 1992 to 1996 discontinuity is overstated because the monthly poverty rates in this age group in the comparatively small 1992 panel are highly volatile, with peaks and troughs that differ by 4.5 percentage points and no discernible trend. The peak, wave 1 value in the 1996 panel is barely higher than the peaks observed in the 1992 panel. But the lesser volatility in the 1996 and 2001 panels gives emphasis to the large discontinuities that follow those two panels. Furthermore, the declines in poverty rates between waves 1 and 2 range from 2.5 to 3.4 percentage points.

Children under 18 and adults 25 to 39 show the most similar patterns over the four panels. The discontinuities are sharper in the adult group, but both age groups have discernible upward trends in poverty rates in the 2001 panel and modest wave 1 effects that underscore the extent of the discontinuity with the 2004 panel. This upward trend in poverty in the 2001 panel is absent in the 40 to 64 age group, but the break between the 2001 and 2004 panels is the most stark in this age group, where it stands in sharp contrast to the modest discontinuities and wave 1 effects observed in the earlier panels. Indeed, the poverty estimates from the first three waves of the

2004 panel do not appear to come from the same population as the estimates from the earlier panels.

The elderly population deviates the most from the other age groups. First, the elderly are unique in showing an upward trend in poverty in the 1992 panel. Even if we extrapolate this trend, however, there is still a clear discontinuity with the 1996 panel. Second, the elderly are also unique in showing a decline in poverty between the end of the 2001 panel and the beginning of the 2004 panel. More specifically, the estimated poverty rate declined by 1.1 percentage points between September 2003 and January 2004 whereas it rose by at least 3 percentage points in every other age group. This is the only instance of a decline in poverty occurring between the end of one panel and the beginning of the next, and we attribute this result to a change in how Social Security payment amounts were requested. With the first wave of the 2004 panel, the SIPP began to measure Social Security payments as a gross amount rather than asking respondents to exclude the amount of the Medicare Part B premium. The decline in the elderly poverty rate between September 2003 and January 2004 is evidence that the new procedure works more effectively than earlier attempts to collect gross payment amounts.[4]

C. SOURCES OF BIAS IN SIPP CROSS-SECTIONAL ESTIMATES

In the plots of monthly poverty over time, the principal evidence that panels lose their cross-sectional representativeness over their lifetimes is seen in the discontinuity in poverty estimates between successive panels rather than the decline in estimated poverty to which Weinberg alluded. Of the 1992, 1996 and 2001 panels, only the 1996 panel shows a broad-based decline in

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[4] Unlike earlier attempts to measure gross Social Security payments, which ended after the 1991 panel, respondents to the 2004 panel are asked to report the amount of their Medicare Part B premiums separately from their benefit payments. Respondents are still asked to report their net payment amounts, but two follow-up questions ask if any deductions are taken out, such as for Medicare Part B premiums, and how much they are. The responses enable the Census Bureau to construct the gross amount.

poverty over time, and that panel was fielded during an extended economic boom, from which there is ample evidence that poverty rates declined significantly. Both the 1992 and 2001 panels included recessions, so the evidence of declining representativeness may be expressed in generally flat rather than rising poverty rates. In other words, the tendency for poverty rates to decline over the life of a SIPP panel may have been offset by an upward secular trend, leaving a flat trend line as the net result.

The plots of SIPP monthly poverty rates over time also provide evidence that the discontinuity between panels may be exaggerated by excessive estimates of poverty in the initial waves of the 1996, 2001 and, especially, 2004 panels. Comparing estimates of poverty between the final wave of one panel and the second wave of the next panel suggests that the cumulative bias over the length of a panel may be barely more than a percentage point for the population as a whole—but two to three percentage points for younger adults.

1. Attrition

The magnitude of attrition in SIPP panels and the voluminous evidence from the SIPP and other panel surveys that attrition is nonrandom have contributed to a widespread presumption that differential attrition is the principal source of any discontinuities that may be observed in the estimates of poverty rates between successive panels. But how can this reconciled with the findings presented in Chapter IV, showing that the Census Bureau's full panel weights provide an effective adjustment for the biasing effects of differential attrition? Could the full panel weights provide protection against differential attrition while the cross-sectional weights do not?

The non-interview adjustment that is incorporated into the full panel weights is calculated and applied at the person level while the non-interview adjustment that is built into the cross-sectional weights is calculated and applied at the household level. This difference reflects the fact that the cross-sectional non-interview adjustment is calculated independently from one wave

to the next. Since data are collected for all members of a sample household in a given wave (or imputed to those for whom no data can be collected), the same non-interview adjustment is applied to all members of the same household in a given wave. Because the cross-sectional non-interview adjustment is calculated and applied at the household level, the adjustment is based on household-level characteristics, which may include personal characteristics of the household reference person. The full panel non-interview adjustment is applied at the person level because sample members who start out in the same household may differ in whether they qualify to receive full panel weights. Consequently, the full panel non-interview adjustment is based on the personal characteristics of each respondent who qualifies. Both the cross-sectional and full panel adjustments are based on characteristics measured in wave 1, however, and both are designed to minimize differences between all responding wave 1 households or persons and those households or persons qualifying to receive the post-wave 1 cross-sectional or full panel longitudinal weights.

Table V.6 compares the characteristics that may be used to define the non-interview adjustment cells for the full panel and cross-sectional weights. The 149 full panel and 109 cross-sectional adjustment cells are a small subset of the thousands of possible combinations of characteristics that would be generated by a full cross-classification of the 10 variables in each case. The smaller number of cross-sectional than full panel adjustment cells reflects the smaller number of responding households than responding persons. Could the greater number of adjustment cells used for the full panel weight make the full panel non-interview adjustment more effective than the cross-sectional adjustment? Certainly, that is a possibility. At the same time, however, the fact that the cross-sectional non-interview adjustment is recalculated at each wave means that the combination of characteristics used to define the 109 adjustment cells can

vary from wave to wave, depending on which characteristics—and combinations—best differentiate between responding and non-responding households at each point.

Several of the characteristics that may be used to define the adjustment cells for the full panel versus cross-sectional weights are identical, which implies that they are household-level characteristics. Others, such as poverty level and participation in means-tested programs, are defined similarly but not identically. Still others—such as whether the respondent was self-employed or not, or in the labor force or not, and whether the housing unit is owned or rented—are unique to one or the other weight. We are puzzled by some of these. The full panel non-interview adjustment potentially includes whether the household was selected from a poverty stratum or not, but the cross-sectional non-interview adjustment does not. Is this characteristic really a more effective predictor of response propensity for the full panel than for a given wave, or does its appearance in one non-interview adjustment but not the other reflect some other basis? Apart from the different numbers of adjustment cells, however, we see nothing, a priori, to suggest that the non-interview adjustment for the full panel weight should be more effective than the adjustment for the cross-sectional weight.

Unfortunately, we cannot evaluate the bias of the weighted cross-sectional sample in the same way that we could evaluate the bias of the weighted full panel sample. To evaluate the bias of the full panel sample we compared the subset of wave 1 respondents who received full panel weights and the complete wave 1 sample from which they were drawn. By using administrative records matched to both the subsample and the complete sample, we were able to assess differences at points in time either prior to or subsequent to wave 1. There is no analog for the cross-sectional sample. The cross-sectional sample in a given wave cannot be compared to a larger and representative sample of households from which it was drawn, as all of the households that respond in a given wave receive cross-sectional weights for that wave. Furthermore, the

cross-sectional sample is post-stratified to population totals that include persons who are not represented in the SIPP panel. We have no data on these persons in the SIPP, so we cannot assess how well the cross-sectional sample compensates for their omission.

We could restrict the comparison to persons who were in the sample in wave 1, by removing those who entered the sample after wave 1. The point of doing so would be to allow us to assess the effectiveness of the cross-sectional adjustments for attrition alone. But while we could back out an approximation of the "mover adjustment" that the Census Bureau builds into the cross-sectional weights to compensate for the addition of new sample members, we cannot undo the post-stratification adjustments. Even if we could obtain access to the intermediate cross-sectional weights, prior to the application of post-stratification, one could argue that these intermediate weights do not reflect the Census Bureau's full attrition adjustment and that using them in an evaluation of attrition bias would understate the effectiveness of the attrition adjustment.[5]

If we concede that it is not possible to separate the attrition adjustment from the adjustment for entries to the population, we can consider an alternative approach to evaluating the cross-sectional representativeness of a SIPP panel over time. This would involve comparing the SIPP to an external source—the CPS—using administrative records matched to both samples. Separate comparisons would be performed between the CPS and SIPP samples in March of each year, with the weights of the matched records from both surveys being calibrated to the same population totals. In effect, we would be using administrative records to evaluate the

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[5] The problem can be explained as follows. If we were adjusting the cross-sectional weights for attrition alone, we would like to post-stratify the sample weights—after applying the non-interview adjustment—to population totals that reflect the survivors of the population represented by the wave 1 sample. This is important because there are differences in the likelihood of attrition by age, sex, and race/ethnicity. Such population totals do not exist, however. But by post-stratifying the near-final weights to population totals for the *whole* population, we would simultaneously adjust for demographic differences in attrition and for the sample's under-representation of persons who entered the population after wave 1.

comparability of the two samples in each year, with the presumption that the CPS sample reflects the true population distribution. The point of using administrative records in the comparison is to make the comparison independent of the quality of the two surveys' measures of income and program participation. We could use SER, MBR, and SSR data to assess whether there are differences between the two weighted samples and, if so, how the differences change over the length of a panel.

Differential match bias between the two surveys could be an issue for comparisons done with administrative records matched to existing panels and CPS files, so it would be better to conduct such an evaluation using files that were matched to administrative records in the same way. This will not be possible until the first four or five waves are released from the next SIPP panel, which is scheduled to enter the field in early 2008.[6] Until then, however, it would be interesting to conduct such an evaluation with the 1996 SIPP panel, which had match rates to administrative records that were much better than those of the 2001 and 2004 panels and much closer to those achieved with the corresponding CPS files. We did not include such an evaluation in this project because it did not provide a way to separate the impact of attrition from population additions that we have to believe are not well represented. But even though such an evaluation would speak to only the combined bias from these sources, the documentation of SIPP longitudinal bias that it would provide would be valuable to SIPP users within SSA and to the Census Bureau staff that are undertaking a major redesign of the survey.

2. Additions to the Population

In lieu of refreshing the sample with new entrants, the Census Bureau post-stratifies the cross-sectional weights to estimates of the total population by age, sex, race, and Hispanic origin.

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[6] It is not possible to evaluate attrition bias until SIPP data for March of the second year are released.

This hides the fact that over its lifetime a SIPP panel excludes from representation a growing proportion of new and returning members of the population—that is, people who were absent from the survey universe at the start of the panel. These "new" (for short) members of the population are represented by a SIPP panel only if they join the households of people who were in the survey universe at the start of the panel. Operationally, they are represented in a SIPP panel by persons who join SIPP households after having been outside the survey universe in wave 1.

Births constitute the single largest source of additions to the population at about four million annually, and while births to young women are substantially underrepresented in the SIPP, the remaining births are almost fully represented (Czajka and Sykes 2006). The representation of other additions to the population—which may be as numerous, collectively, as births—is much less certain. These additions include new and returning immigrants, citizens moving back from temporary residence abroad, members of the armed forces returning to civilian life, and former inmates released from institutions, which include prisons as well as medical facilities. We suspect that these other additions are largely omitted from the SIPP, but the post-stratification of the cross-sectional sample weights precludes our using the survey data to develop an honest estimate of the representation of these additions in a SIPP panel sample. This may seem a moot point if the survey weights sum to the total population—and satisfy detailed population controls by age, sex, race, and Hispanic origin. But weighting up long-term members of the population to offset the insufficient number of new members is not a substitute for fuller representation of the latter and may contribute substantially to the discontinuities that we observe in SIPP poverty rates across panels.

Using just the longitudinal sample with the full panel weights, we can estimate the number and characteristics of the survivors of the wave 1 population at the end of the panel. The

survivors exclude all people who left the SIPP universe. These include not only decedents but people who moved out of the country or into institutions or who joined the armed forces and, in so doing, moved into military barracks or otherwise away from their families. By comparing the survivors to the cross-sectional sample, which is post-stratified to the total population, we can estimate the number of gross additions to the population over the length of the panel. These additions are not represented by the full panel sample, and they give us an outside estimate of the size of the population that is not represented by the cross-sectional sample as well.

Because births *are* captured by the panel to a large degree, we assigned full panel weights to all children born to full panel members after the common month of the first wave of the 1996 and 2001 panels, after first adjusting the weights of new mothers to correct for the under-representation of young mothers. The weighting adjustments, carried out under two earlier projects, are documented in Czajka and Sykes (2006) and Castner et al. (2007).

Tables V.7 and V.8 present estimates of the divergence between the full panel and cross-sectional sample estimates of the November 1999 and September 2003 populations, by age, sex, race, and Hispanic origin. Overall, the 1996 full panel sample underestimates the November 1999 population by 3.6 percent (4.5 percent for males and 2.8 percent for females) while the 2001 full panel sample underestimates the September 2003 population by 4.0 percent (5.0 percent for males and 3.0 percent for females). The shortfall in 1999 represents 9.9 million persons compared to 11.4 million in 2003.

The differences between the full panel and cross-sectional sample estimates vary substantially by age, sex, race and Hispanic origin. In the 1996 panel the shortfall for Hispanic males is 18 percent compared to 5 percent for black non-Hispanic, less than 2 percent for white non-Hispanic, and 10 percent for other Hispanic males. The shortfall for Hispanic females is nearly 17 percent compared to only 2 percent for black non-Hispanic, 0.5 percent for white non-

Hispanic and 10 percent for other non-Hispanic females. By age the greatest shortfall occurs among males 19 to 29, who are underestimated by the panel by 10 percent. Males 30 to 39 are underestimated by 7 percent while children under 4 are underestimated by 6 percent. We find the same 6 percent shortfall among females below age 4, but females 19 to 29 are underestimated by only half as much as their male counterparts at just over 5 percent while females 30 to 39 are underestimated by less than 5 percent.

Among both sexes the greatest shortfall for any combination of characteristics is found among Hispanics age 19 to 29. For males the panel underestimates the cross-section by 31 percent. For females the difference is 23 percent. The next biggest group in each sex consists of Hispanic children 4 to 18. We would not have predicted this from the age-specific patterns, as the shortfall in this age group is comparatively small overall. But among Hispanic males the shortfall is 20 percent compared to 17 percent for Hispanic females. Other non-Hispanic males and females both show large shortfalls among young adults, young children, and adults 62 to 74, but these differences are derived from small sample sizes, and they are more muted in the 2001 panel.

Lastly, elderly males and females 75 and older are *overestimated* by both panels, with differences of 7 and 6 percent among females in the 1996 and 2001 panels, respectively, and differences of 2 and 3 percent among males. This suggests that among the elderly the SIPP may retain healthier respondents to a greater degree than less healthy respondents, which results in lower mortality and perhaps lower rates of institutionalization as well.

The patterns in the 2001 panel are quite similar to those in the 1996 panel, but we see evidence of large sampling error among minority children under 4, with implausible differences by sex. That the 9-wave 2001 panel should yield differences as large as the 12-wave 1996 panel suggests that the volume of additions may have grown. But the population estimates that the

Census Bureau used to post-stratify its surveys also became more volatile for a time in the early 2000s with the transition to 2000 census-based controls and the more frequent revision of net immigration assumptions with the availability of the American Community Survey as a new source on which to base these assumptions.

Ideally, to assess how the estimated poverty rate is affected by including or excluding these population additions, we would start with a fully representative sample of the population, identify all sample member who were outside the survey universe three years earlier, and then calculate an overall poverty rate for the population with and without these persons. Unfortunately, neither the SIPP nor the CPS can identify people who have joined the survey universe since a specified date in the past. Questions on immigration come the closest to doing this, but these questions ask when the respondent arrived to stay rather than where the respondent was living at some earlier time period.

Lacking suitable data, we limit the scope of our assessment to asking whether the additions to the population are sufficiently numerous and distributed in a manner that could feasibly support the observed shifts in the estimated poverty rate across panels. In other words, could the poverty rate of the population additions that are not represented in the SIPP be high enough that their inclusion at the start of the next SIPP panel could raise the overall poverty rate by the magnitudes seen in Figure V.1?

In the aggregate the answer is yes. At 4 percent of the total population, the omitted populations would need a collective poverty rate that was 25 percentage points above the overall poverty rate in order to raise the overall poverty rate by a percentage point. This would imply a poverty rate of 39 percent, which is well beyond the level observed in any of the age groups in Figures V.2 through V.6 but not inconceivable for a population dominated by minorities and

young adults.[7] In earlier work with the 1996 panel, focusing on health insurance coverage, we found that the proportion of nonelderly persons without health insurance coverage in March 1996 among those with full panel weights was 20 percentage points higher among those who left the survey universe before the end of the panel than among those who remained in the universe (Czajka and Sykes 2006). Moreover, large differences were evident even within subgroups defined by age, sex, and Hispanic origin. In particular, among Hispanic persons 19 to 39, the uninsured rate among those panel members who remained in the survey universe was 40 percent, which is very high. Nevertheless, it was 73 percent among the subgroup members who left the survey universe. We believe that the characteristics of people leaving the survey universe, except for decedents, tell us something about those who enter the survey universe (apart from births), because many of those who leave—to go abroad, join the armed forces, or enter institutions—will eventually return.

While the omitted population could very well account for the discontinuity in poverty rates observed for the population as a whole, could it also account for the age-specific patterns seen in Figures V.2 through V.6? For children, there is no issue. One could infer from the poverty trends in Figure V.2 that there is no discontinuity in poverty rates among children other than what can be explained by the wave 1 effect. For young adults the omitted group is 7.5 percent of the population (averaged between the two sexes) in November 1999 and 9.5 percent in September 2003. At this magnitude, it would take only a 10 percentage point higher poverty rate to increase the age-group poverty rate by a percentage point. Now, in Figure V.3 the shift in poverty rates between panels that cannot be attributed to the wave 1 effect is between 2 and 3 percentage points. But given the size of the omitted population in this age group, a poverty rate

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[7] From the estimated size of the omitted population underlying our estimates in tables V.7 and V.8, we determined that minorities and young adults 19 to 29 accounted for 86 percent of the omitted population in November 1999 and 88 percent in September 2003.

high enough to produce a shift of this magnitude is as plausible as it is for the population as a whole.

Adults 25 to 39 show discontinuities between panels that are only half as large as those among younger adults after taking account of a sizable wave 1 effect, and the omitted population at 6 percent of the population in this age group is certainly large enough that its inclusion could boost the age group poverty rate by 1 to 1.5 percentage points. Adults 40 to 64 are the most problematic. The omitted group is only 2 to 3 percent of the age group population, but the upward shift in the poverty rate is easily a percentage point between the 1996 and 2001 panels and close to 2 percentage points between the 2001 and 2004 panels after taking account of the wave 1 effect. An omitted group representing only 3 percent of the population would require a poverty rate 66 percentage points higher than the rest of the population to raise the age group poverty rate by 2 percentage points. We find that implausible in this age group. At the same time, however, the upswing in poverty rates between the 2001 and 2004 panels shown in Figure V.5 also lacks plausibility even after dismissing the wave 1 poverty rate.

Finally, with the elderly there are too many whites of both sexes and too many black women represented in the panel, which means that the start of a new panel will reduce rather than increase their numbers. Discontinuity between panels does not seem to be an issue with the elderly in the 1996 and 2001 panels, and we have already discussed the impact of the shift to gross rather than net Social Security payments. A large upward shift in poverty between the 1992 and 1996 panels is left unexplained, but attrition seems an unlikely candidate to explain that shift, given that attrition is very low among the elderly.

In sum, this brief exercise was intended to make the point that the additions to the population that are omitted from a panel become large enough over time that when they are introduced into the SIPP sample at the start of the next panel, they could shift the poverty rate by

a sufficient margin to explain the discontinuity that we observe between the end of one panel and the next. To do so, they would have to have a substantially higher poverty rate than the rest of the population within their respective age groups. Given that many of the omitted people are recent immigrants, this is certainly plausible, and we pointed to our experience with health insurance coverage to support this point. Further work will be required to move this discussion from speculation about what is plausible to a demonstration of what is the reality.

D. CONCLUSION

While estimates of non-income-related characteristics of disabled workers and SSI recipients show high levels of consistency across the 1996 and 2001 SIPP panels, this is not true of poverty estimates, which show marked discontinuities that vary by age. These discontinuities have been attributed to the cumulative effects of attrition within a panel. While only one of the last three SIPP panels shows declining poverty estimates over time, each panel has started with a markedly higher poverty rate than the previous one. Upon exploring this phenomenon further, however, we find that we can attribute a substantial portion of the discontinuity to a tendency for SIPP panels since 1996 to obtain high estimates of poverty in the first wave, which then decline sharply in the second wave. Much of the remaining discontinuity could be due to a phenomenon which has been largely overlooked in assessments of the representativeness of panel surveys over time—namely, the bias arising from the general lack of representation of new entrants to the population. Our evidence of the potential bias resulting from this source is indirect at best, but we establish the more general point that the new entrants who are excluded from a panel over time constitute a distinctive group that is large enough and potentially unique enough to induce marked shifts in poverty when they are suddenly represented in full by a new panel.

In the next chapter we focus more sharply on the income component of poverty estimates. In doing so we bring in an external source, the CPS, and compare estimates of income receipt

and income amounts in the SIPP and CPS over time. The objective is to shed some light on comparative trends in the two surveys over a period that spans significant innovations in both surveys and a secular decline in respondents' willingness to report their income to survey interviewers.

TABLE V.1

CHARACTERISTICS OF DISABLED WORKERS: ESTIMATES FROM
THE 1996 AND 2001 SIPP PANELS

Characteristic	December 1998	December 1999	December 2001
Sex			
Male	59.1	60.1	54.9
Female	40.9	39.9	45.1
Age			
Under 25	0.6	0.4	1.6
25 to 34	7.7	6.4	7.3
35 to 44	18.8	17.3	18.9
45 to 54	31.2	33.0	33.6
55 and older	41.8	42.8	38.6
	99.5	99.5	98.4
Marital Status			
Married	51.3	51.2	48.4
Widowed	5.7	5.0	4.8
Divorced or separated	22.3	25.6	25.2
Never married	20.7	18.2	21.6
Family Size			
1 person	29.2	25.5	28.9
2 persons	36.2	39.6	36.9
3 to 4 persons	26.9	26.9	26.5
5 or more persons	7.8	7.9	7.6
Education			
Unknown[a]	0.2	0.0	0.0
0 to 8 years	12.5	12.0	11.0
9 to 11 years	17.8	18.3	14.3
12 years	36.1	35.1	38.9
13 to 15 years	22.9	24.4	26.7
16 or more	10.6	10.3	9.0
Health Insurance Coverage[b]			
Medicare	75.2	70.0	74.3
Medicaid	35.6	36.1	39.3
Private insurance	47.5	47.0	38.5
No insurance	4.1	6.1	5.1
Source of Individual Income[b,c]			
Earnings	23.1	21.7	18.5
SSI	21.2	20.5	25.2
Other public assistance	3.0	27.5	36.5
Property income	[d]	45.9	39.3
Other sources	[d]	89.4	38.0

Continued

Table V.1 continued

Characteristic	December 1998	December 1999	December 2001
Social Security as a Percentage of Individual Income			
. Under 25%	20.3	24.9	7.4
25% to under 50%	18.8	17.2	17.8
50% to under 75%	22.4	16.0	22.8
75 percent to under 100%	24.3	26.1	31.1
100%	14.3	15.8	20.8
Distribution of Annual Family Income by Source			
Social Security	45.2	35.5	52.6
Earnings	28.3	32.0	28.5
SSI	7.1	5.0	4.3
Other public assistance	1.2	1.6	1.1
Property income	2.1	2.8	1.0
All other sources	16.1	23.2	12.5
Family Income Relative to the Poverty Threshold			
Under 50%	2.5	6.5	1.0
50% to under 100%	19.6	16.4	15.6
100% to under 125%	7.5	8.6	9.3
125% to under 149%	6.9	6.6	8.3
150% to under 200%	13.7	14.7	15.0
200% to under 300%	19.1	24.2	20.7
300% or more	30.9	29.6	31.1

Source: Annual Statistical Report on the Social Security Disability Insurance Program, 2000 through 2002.

Note: For survey records that were matched to administrative records, the beneficiary status and benefit amounts were taken from SSA records in 1999 and 2001. For 1998 only the beneficiary status was taken from administrative records. For both 1998 and 1999, only matched records were used to produce these estimates. The SIPP sample weights were adjusted so that the weighted number of beneficiaries agreed with SSA estimates of the number of noninstitutionalized beneficiaries by age group. Because of the low match rate in the 2001 panel both matched and unmatched records were included in making these estimates. Beneficiary status and benefit amounts for unmatched records were based on the survey data. The SIPP sample weights were adjusted to reproduce SSA estimates of noninstitutionalized beneficiaries by age.

[a] Most children are classified as unknown on educational attainment.

[b] More than one source of coverage may apply.

[c] Percentage of disabled workers with income from each source.

[d] Category was added for 1999.

TABLE V.2

CHARACTERISTICS OF SSI RECIPIENTS: ESTIMATES FROM
THE 1996 AND 2001 SIPP PANELS

Characteristic	December 1998	December 1999	May-August 2001
Sex			
Male	42.9	44.2	41.2
Female	57.1	55.8	58.8
Age			
Under 18	13.4	13.3	13.4
18 to 64	58.2	59.5	56.5
65 and older	28.4	27.1	30.1
Race			
White	61.8	61.9	59.8
Black	29.9	29.8	31.5
American Indian, Alaska Native	2.9	2.7	2.2
Asian, Pacific Islander	5.4	5.7	6.5
Ethnicity			
Hispanic	16.4	18.3	17.9
Non-Hispanic	83.6	81.7	82.1
Marital Status			
Married	20.3	21.2	19.5
Widowed	14.5	13.6	17.5
Divorced or separated	21.0	20.8	23.2
Never married	44.1	44.4	39.8
Family Size			
1 person	[a]	32.4	35.1
2 persons	[a]	22.9	22.0
3 to 4 persons	[a]	27.3	27.5
5 or more persons	[a]	17.4	15.5
Education			
Unknown[b]	10.6	9.9	10.1
0 to 8 years	34.7	33.6	28.9
9 to 11 years	20.0	20.6	20.9
12 years	25.5	24.7	26.3
13 to 15 years	6.5	8.6	10.1
16 or more	2.6	2.5	3.7

Table V.2 continued

Characteristic	December 1998	December 1999	May-August 2001
Health Insurance Coverage[c]			
Medicare	41.4	39.9	34.1
Medicaid[d]	89.4	96.4	95.6
Private insurance	12.6	15.1	14.5
No insurance	3.9	3.0	2.3
Living Arrangement			
Lives alone	[a]	27.0	27.7
Lives with relatives	[a]	67.3	67.8
Lives only with nonrelatives	[a]	5.7	4.5
Ownership of Living Quarters			
Owned	[a]	39.7	40.6
Rented	[a]	60.3	59.4
Residence in Public Housing	[a]	12.6	14.1
Household Receipt in Month[c]			
Energy assistance	[a]	11.6	10.9
Housing assistance	[a]	10.6	9.8
Food stamps	[a]	44.1	39.9

Source: SSI Annual Statistical Report, 2001 through 2003.

Note: For survey records that were matched to administrative records, SSI
beneficiary status was taken from SSA records. Only matched records
were used to produce the estimates for 1998 and 1999. Because of the
low match rate in the 2001 panel both matched and unmatched records
were included in making the estimates for 2001. Beneficiary status for
unmatched records was based on the survey data. In 1999 and 2001 the SIPP
sample weights were adjusted so that the weighted number of beneficiaries
agreed with SSA estimates of the number of noninstitutionalized beneficiaries
by age group. The reference period for the 2001 estimates is the fourth
month of the second wave. Income in 2001 was calculated over just the four
reference months of wave 2 versus the full calendar year in 1998 and 1999,
so estimates of income amounts and recipiency by source are not comparable
across panels and, for that reason, are not included in this table.

[a] No estimates of this characteristic were produced for 1998.

[b] Most children are classified as unknown on educational attainment.

[c] More than one source of coverage may apply.

[d] In 1999 and 2001 the Medicaid coverage variable was recoded to reflect the fact
that SSI recipients in some states are automatically covered by Medicaid.

TABLE V.3

ESTIMATED POVERTY RATES AT THE END OF ONE SIPP PANEL
AND THE BEGINNING OF THE NEXT PANEL

Month and Year	SIPP Panel	Wave	Wave 1 Common Reference Month of Panel	Wave 2 Common Reference Month of Panel	Final Common Reference Month of Panel
January 1992	1992	1	14.2		
May 1992	1992	2		14.0	
September 1994	1992	9			13.9
March 1996	1996	1	16.0		
July 1996	1996	2		15.0	
November 1999	1996	12			12.6
January 2001	2001	1	14.6		
May 2001	2001	2		13.6	
September 2003	2001	9			13.6
January 2004	2004	1	16.6		
May 2004	2004	2		14.8	

Source: Mathematica Policy Research, from the 1992, 1996, 2001 and 2004 panels.

Note: The common reference month is the month that is shared by all four rotation
groups within the indicated survey wave.

TABLE V.4

TRANSITIONS INTO AND OUT OF POVERTY BETWEEN SUCCESSIVE WAVES OF THE 2004 SIPP PANEL

Population and Source of Change	Estimates of Transitions between Waves 1 and 2				Estimates of Transitions between Waves 2 and 3			
	< 10%	10% to < 50%	50% to < 100%	Total < 100%	< 10%	10% to < 50%	50% to < 100%	Total < 100%
Percent of total population								
First of two waves	4.69	4.04	7.84	16.57	3.98	3.42	7.37	14.77
Second of two waves	3.98	3.42	7.37	14.77	3.79	3.55	7.16	14.51
Net change	-0.71	-0.62	-0.46	-1.80	-0.19	0.13	-0.21	-0.27
Number of persons (1,000s)								
First of two waves	13,444	11,569	22,456	47,469	11,443	9,821	21,191	42,455
Second of two waves	11,443	9,821	21,191	42,455	10,940	10,241	20,645	41,826
Net change	-2,001	-1,748	-1,266	-5,014	-503	420	-546	-629
Persons with no transitions	5,688	4,169	9,937	19,795	4,813	3,896	10,045	18,754
Transitions within poverty								
Exits from relative income class	-2,542	-3,248	-2,495	-8,285	-2,334	-2,751	-2,782	-7,867
Entries into relative income class	1,909	2,850	3,526	8,285	2,028	2,987	2,852	7,867
Transitions out of poverty, by destination								
100% to under 200% of poverty	-1,653	-1,846	-5,485	-8,983	-1,334	-1,127	-4,647	-7,109
200% of poverty and above	-1,865	-1,097	-2,239	-5,201	-1,456	-937	-1,756	-4,149
Transitions into poverty, by origin								
100% to under 200% of poverty	1,161	1,003	3,768	5,933	1,175	1,331	3,691	6,197
200% of poverty and above	1,321	768	1,799	3,888	1,361	836	1,693	3,890
Sample changes								
Nonresponse to second interview	-1,696	-1,209	-2,301	-5,206	-1,506	-1,110	-1,960	-4,576
New or returning sample members	267	186	412	865	1,090	731	1,504	3,325
Weight adjustment for both	1,097	845	1,748	3,690	474	460	858	1,793
Decomposition of change in poverty								
Net effect of sample changes	-333	-178	-141	-651	57	81	403	541
Net effect of poverty transitions	-1,668	-1,570	-1,125	-4,363	-561	339	-949	-1,171
Transitions out of poverty	-3,518	-2,943	-7,724	-14,184	-2,790	-2,064	-6,404	-11,258
Transitions into poverty	2,482	1,771	5,567	9,821	2,536	2,167	5,384	10,087
Transitions within poverty	-633	-399	1,031	0	-306	236	70	0
Percentage of changes due to:								
Net effect of sample changes	16.6	10.2	11.1	13.0	-11.4	19.3	-73.8	-86.0
Net effect of transitions in poverty class	83.4	89.8	88.9	87.0	111.4	80.7	173.8	186.0

Source: Mathematica Policy Research, from the 2004 SIPP panel.

Note: Estimates are based on the common month of each wave: January for wave 1, May for wave 2, and September for wave 3. Estimates are weighted by the cross-sectional weight for the common month of the first wave in each pair of waves except for the estimates of persons in poverty in the second wave, new sample members, and the weight adjustment. The weight adjustment is the difference between the estimated number of persons--excluding new sample members--in a given poverty class in the second of the two waves based on the second versus the first wave weight.

TABLE V.5

ESTIMATED POVERTY RATES AT THE BEGINNING AND END OF EACH SIPP PANEL

Month and Year	Panel	Wave	Poverty Rate in Common Reference Month of Each SIPP Wave by Age				
			< 18	18 to 24	25 to 39	40 to 64	65+
January 1992	1992	1	21.3	18.3	12.6	9.6	8.5
May 1992	1992	2	21.2	17.5	12.1	8.9	10.0
September 1994	1992	9	21.2	16.3	12.0	9.1	10.5
March 1996	1996	1	22.7	20.3	14.5	10.9	12.5
July 1996	1996	2	22.0	17.2	13.7	10.3	11.8
November 1999	1996	12	17.9	14.5	11.3	9.1	10.4
January 2001	2001	1	20.0	19.8	13.7	10.4	11.1
May 2001	2001	2	19.0	17.3	12.8	9.7	10.9
September 2003	2001	9	19.4	15.7	13.3	10.0	10.4
January 2004	2004	1	22.7	21.2	16.3	13.3	9.3
May 2004	2004	2	20.5	17.8	14.1	11.8	9.6

Source: Mathematica Policy Research, from the 1992, 1996, 2001 and 2004 panels.

Note: The common reference month is the month that is shared by all four rotation groups within the indicated survey wave.

TABLE V.6

CHARACTERISTICS INCLUDED IN THE NON-INTERVIEW ADJUSTMENT FOR
LONGITUDINAL VERSUS CROSS-SECTIONAL SIPP WEIGHTS

Wave 1 Characteristic	Number of Categories	Included in Non-interview Adjustment for:	
		Full Panel Weight	Cross-sectional Weight
Person is white, non-Hispanic versus other	2	X	
Reference person is white, non-Hispanic versus other	2		X
Reference person is a female householder without a spouse and with her own children, a householder 65 or older, or other	3		X
Person's family income relative to poverty was less than or equal to 175 percent, 176 through 450 percent, or more than 450 percent	3	X	
Household income relative to the household poverty level was less than or equal to 175 percent, 176 through 450 percent, or more than 450 percent	3		X
Person was in household with someone covered by a means-tested program (defined as SSI, TANF, WIC, Food Stamps, Medicaid, or other welfare) or person received unemployment compensation, or neither	3	X	
Household income included welfare payments (AFDC, WIC, Food Stamps, Medicaid or other welfare) or not	2		X
Household size is 1, 2, 3, or 4 or more	4		X
Person was self-employed or not	2	X	
Person was in labor force at least one month of wave versus not	2	X	
Person was in household with someone receiving income from bond-type financial assets or not	2	X	X
Person's education level was less than 12 years, 12 to 15 years, or 16 or more years	3	X	
Reference person's education level was less than 8 years, 8 to 11 years, 12 to 15 years, or 16+	4		X
Household owns housing unit, is renter, or is living in a public housing project or receiving a government rent subsidy	3		X
Census division of household	9	X	X
Number of imputations in household wave 1 data was none, one, or more than one	3	X	X
Stratum code of household is poverty versus nonpoverty	2	X	

Source: U.S. Census Bureau (2001).

TABLE V.7

DIFFERENCE BETWEEN THE FULL PANEL AND CROSS-SECTIONAL SAMPLE ESTIMATES
OF THE NOVEMBER 1999 POPULATION BY AGE, SEX, AND RACE/ETHNICITY

Age	White Non-Hispanic	Black Non-Hispanic	Hispanic	Other Non-Hispanic	Total
			Male		
Under 4	-5.9	-3.8	-5.8	-17.5	-6.2
4 to 18	0.6	-0.1	-19.7	-9.7	-3.4
19 to 29	-5.2	-7.4	-31.0	-15.8	-10.1
30 to 39	-4.4	-15.1	-15.4	-5.4	-7.1
40 to 49	-0.1	-5.1	-13.5	-2.1	-1.9
50 to 61	-2.2	-1.5	-9.0	-8.4	-2.9
62 to 74	0.1	-4.9	-8.8	-19.2	-1.6
75 +	1.9	-3.3	-10.5	-12.0	0.6
Total	-1.8	-5.0	-18.1	-10.0	-4.5
			Female		
Under 4	-7.5	3.5	-3.7	-16.5	-5.7
4 to 18	0.6	-1.9	-17.0	-5.5	-3.0
19 to 29	-1.3	-1.3	-23.1	-18.9	-5.3
30 to 39	-2.5	-4.0	-14.4	-10.3	-4.6
40 to 49	-0.8	-4.0	-10.8	-7.7	-2.4
50 to 61	-1.3	-3.9	-12.6	-8.1	-2.8
62 to 74	0.9	0.2	-9.1	-11.5	-0.3
75 +	7.1	2.9	-7.9	0.0	6.0
Total	-0.5	-2.0	-15.0	-10.1	-2.8
Grand total	-1.1	-3.4	-16.6	-10.1	-3.6

Source: Mathematica Policy Research, from the 1996 SIPP panel.

Note: These estimates represent percentage differences between the full panel estimates of persons who were present in March 1996 and still in the SIPP universe in November 1999 and cross-sectional sample estimates of the November 1999 population. The former was estimated with a full panel weight developed by MPR and includes children who were born to members of the March 1996 population between April 1996 and November 1999. See Czajka and Sykes (2006).

TABLE V.8

DIFFERENCE BETWEEN THE FULL PANEL AND CROSS-SECTIONAL SAMPLE ESTIMATES
OF THE SEPTEMBER 2003 POPULATION BY AGE, SEX, AND RACE/ETHNICITY

Age	White Non-Hispanic	Black Non-Hispanic	Hispanic	Other Non-Hispanic	Total
			Male		
Under 4	-2.2	-15.5	-13.6	-0.2	-6.0
4 to 18	0.4	-2.2	-14.6	-6.7	-3.2
19 to 29	-8.9	-3.0	-29.5	-14.0	-12.5
30 to 39	-3.8	-8.2	-19.7	-4.7	-7.2
40 to 49	-1.7	-7.0	-17.2	-4.6	-4.2
50 to 61	-2.3	-3.4	-10.8	-5.3	-3.2
62 to 74	1.2	0.8	-9.9	-6.9	0.1
75 +	2.8	-4.1	-14.9	-3.6	1.0
Total	-2.2	-4.6	-18.3	-6.7	-5.0
			Female		
Under 4	-6.1	-0.3	6.5	-14.7	-4.0
4 to 18	0.4	-5.0	-12.4	-8.2	-3.3
19 to 29	-4.7	-1.9	-16.6	-9.2	-6.5
30 to 39	-3.2	-2.9	-13.9	-6.0	-5.0
40 to 49	-1.9	-0.9	-10.3	-4.9	-2.9
50 to 61	-0.2	-2.9	-11.4	-6.9	-1.7
62 to 74	-0.1	6.8	-9.4	-9.6	-0.5
75 +	5.7	-4.1	-7.5	6.7	4.3
Total	-1.1	-2.3	-11.9	-7.2	-3.0
Grand total	-1.6	-3.4	-15.2	-6.9	-4.0

Source: Mathematica Policy Research, from the 2001 SIPP panel.

Note: These estimates represent percentage differences between the full panel estimates of persons who were present in January 2001 and still in the SIPP universe in September 2003 and cross-sectional sample estimates of the September 2003 population. The former was estimated with a full panel weight developed by MPR and includes children who were born to members of the January 2001 population between February 2001 and September 2003. See Cody et al. (2007).

FIGURE V.1 SIPP MONTHLY POVERTY ESTIMATES, JANUARY 1992 TO SEPTEMBER 2004
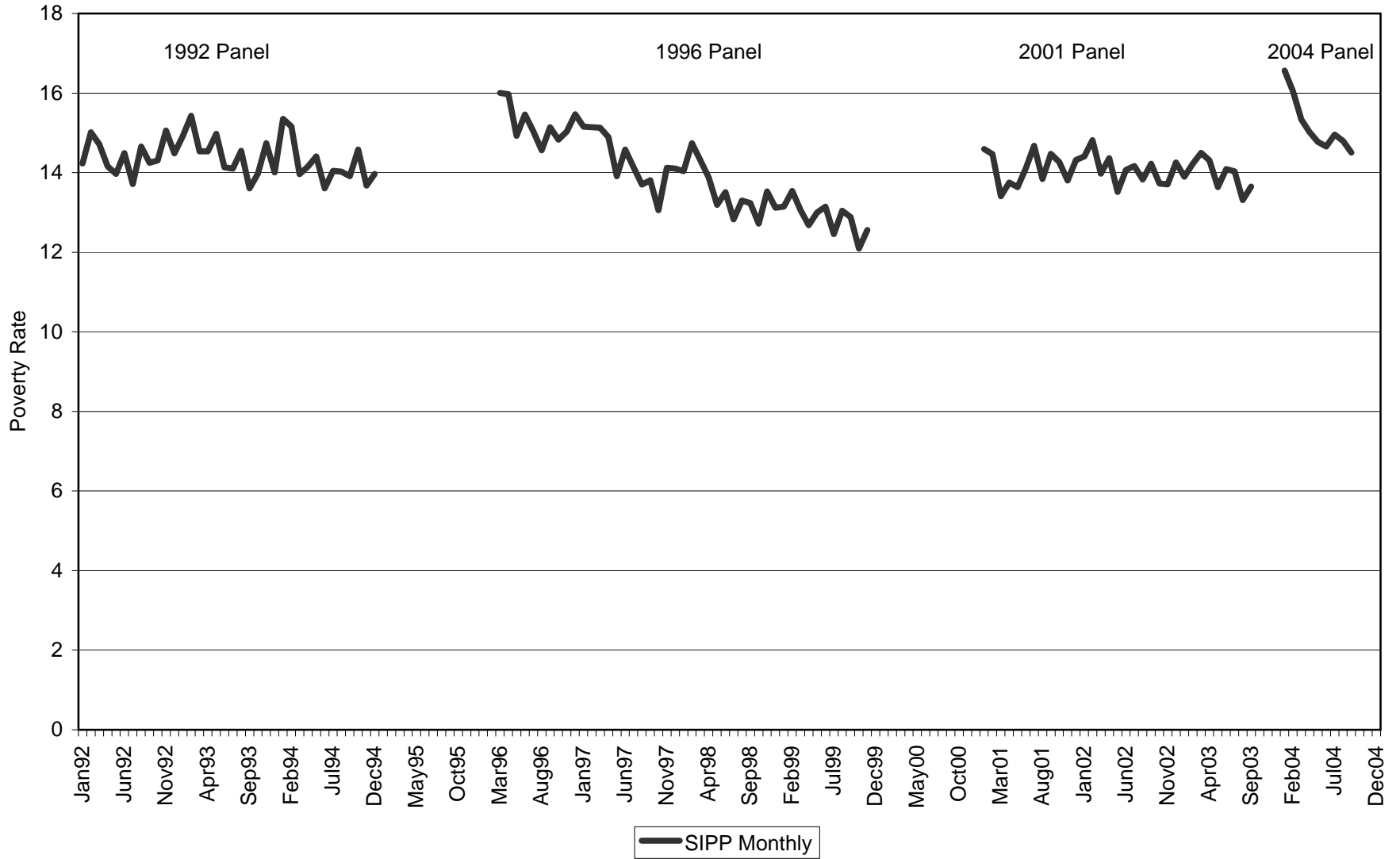
FIGURE V.2 SIPP MONTHLY POVERTY RATES, 1992 THROUGH 2004, CHILDREN UNDER 18
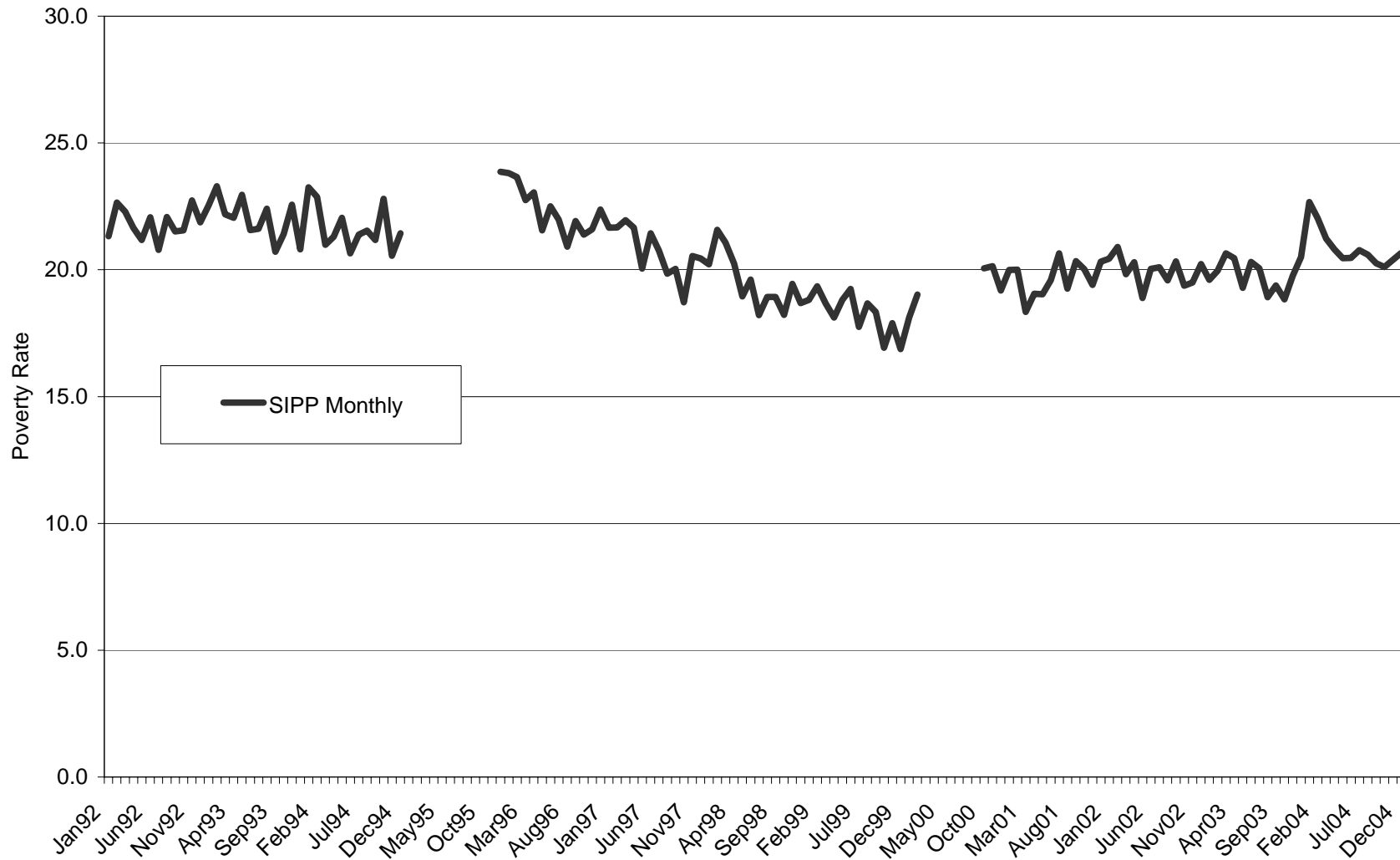
FIGURE V.3 SIPP MONTHLY POVERTY RATES, 1992 THROUGH 2004, ADULTS 18 TO 24
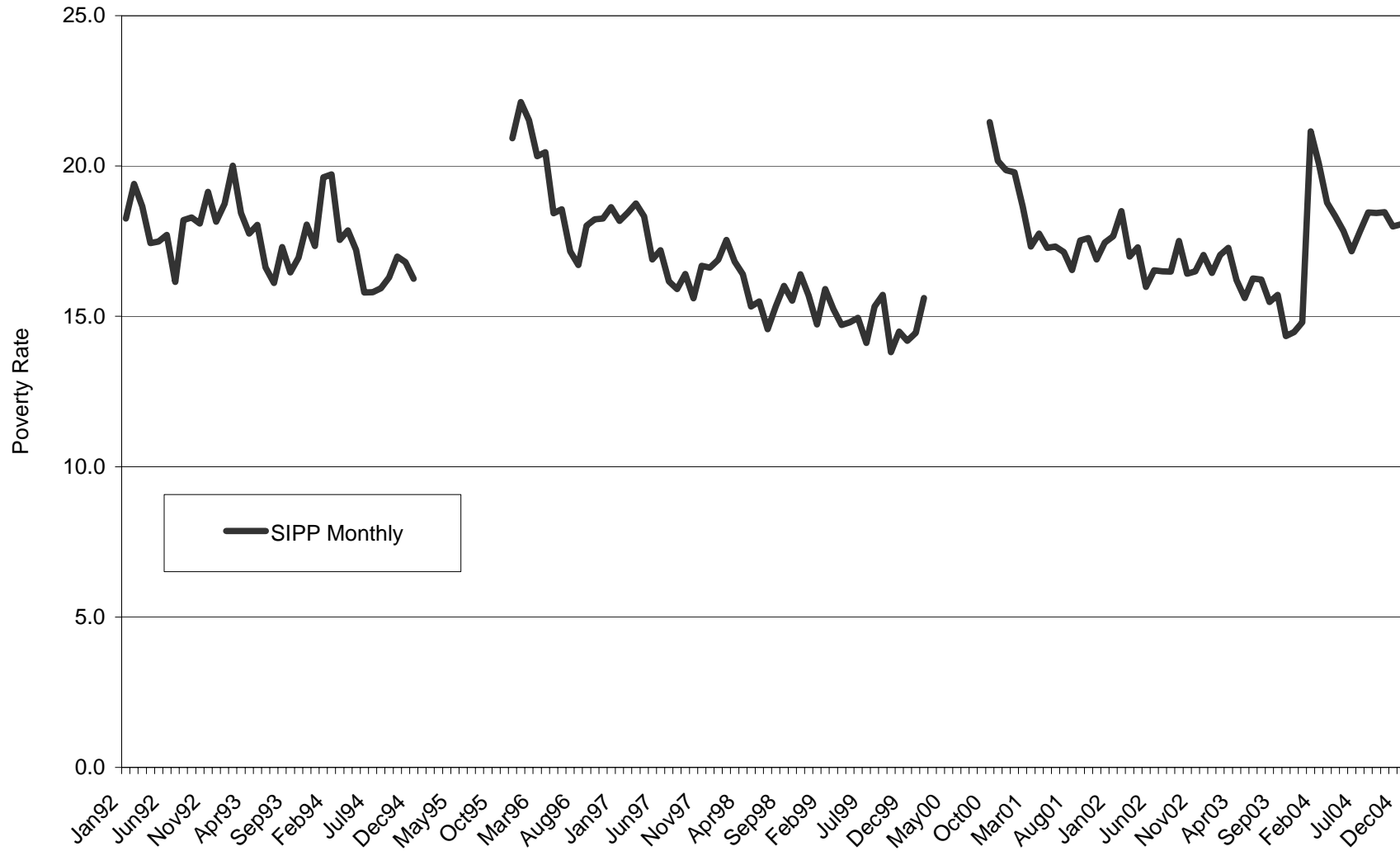
FIGURE V.4 SIPP MONTHLY POVERTY RATES, 1992 THROUGH 2004, ADULTS 25 TO 39
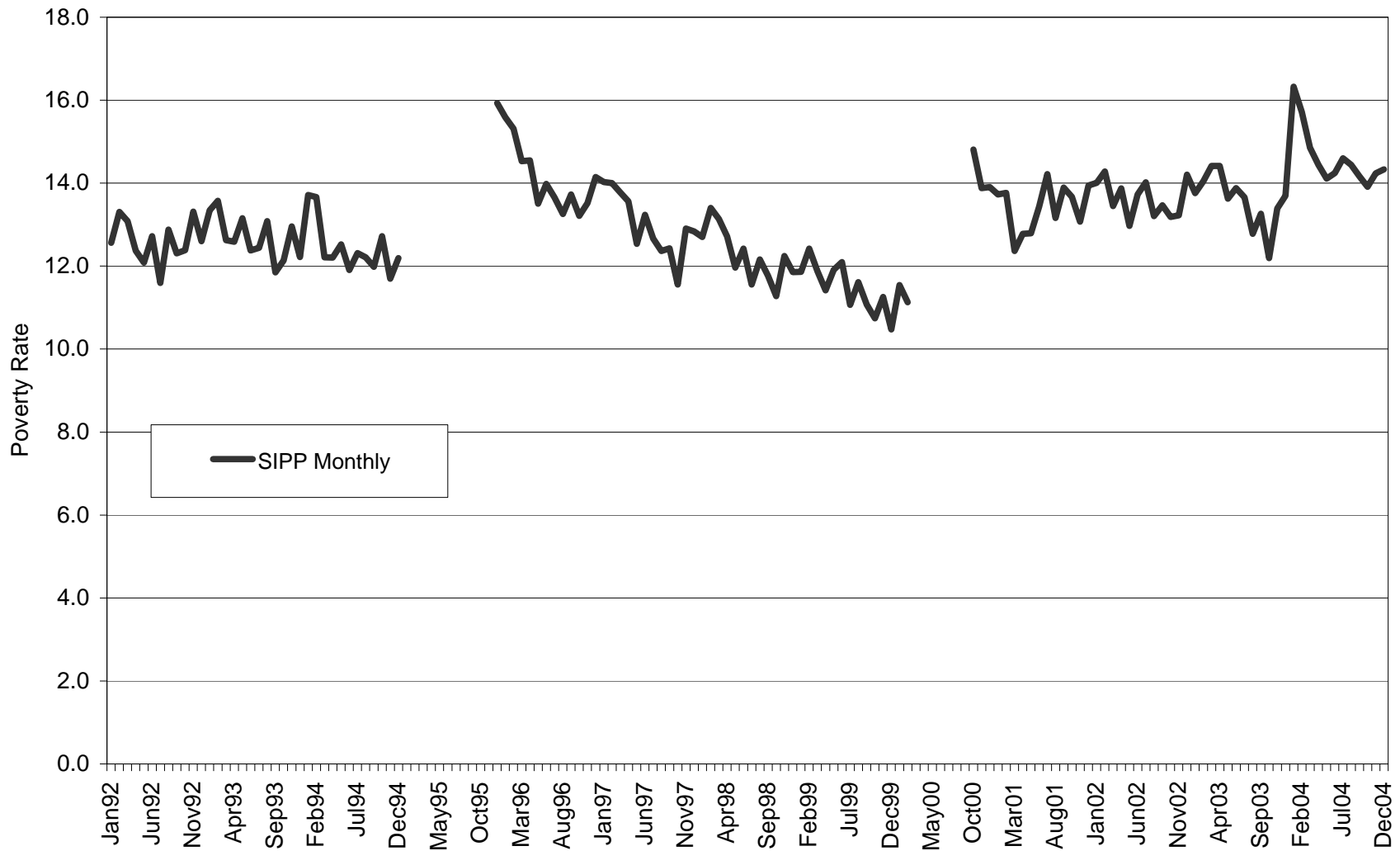
FIGURE V.5 SIPP MONTHLY POVERTY RATES, 1992 THROUGH 2004, ADULTS 40 TO 64
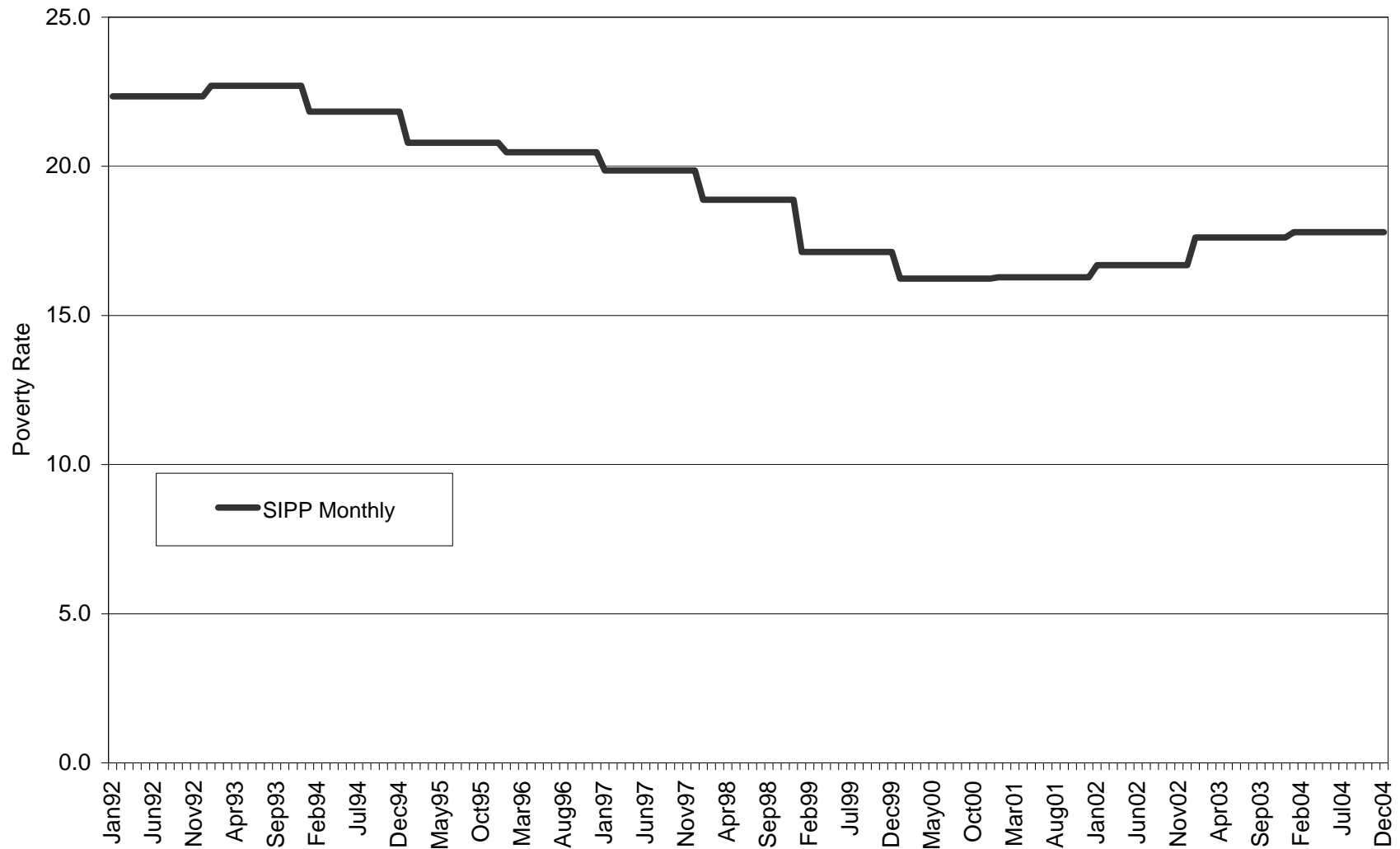
FIGURE V.6 SIPP MONTHLY POVERTY RATES, 1992 THROUGH 2004,
ADULTS 65 AND OLDER
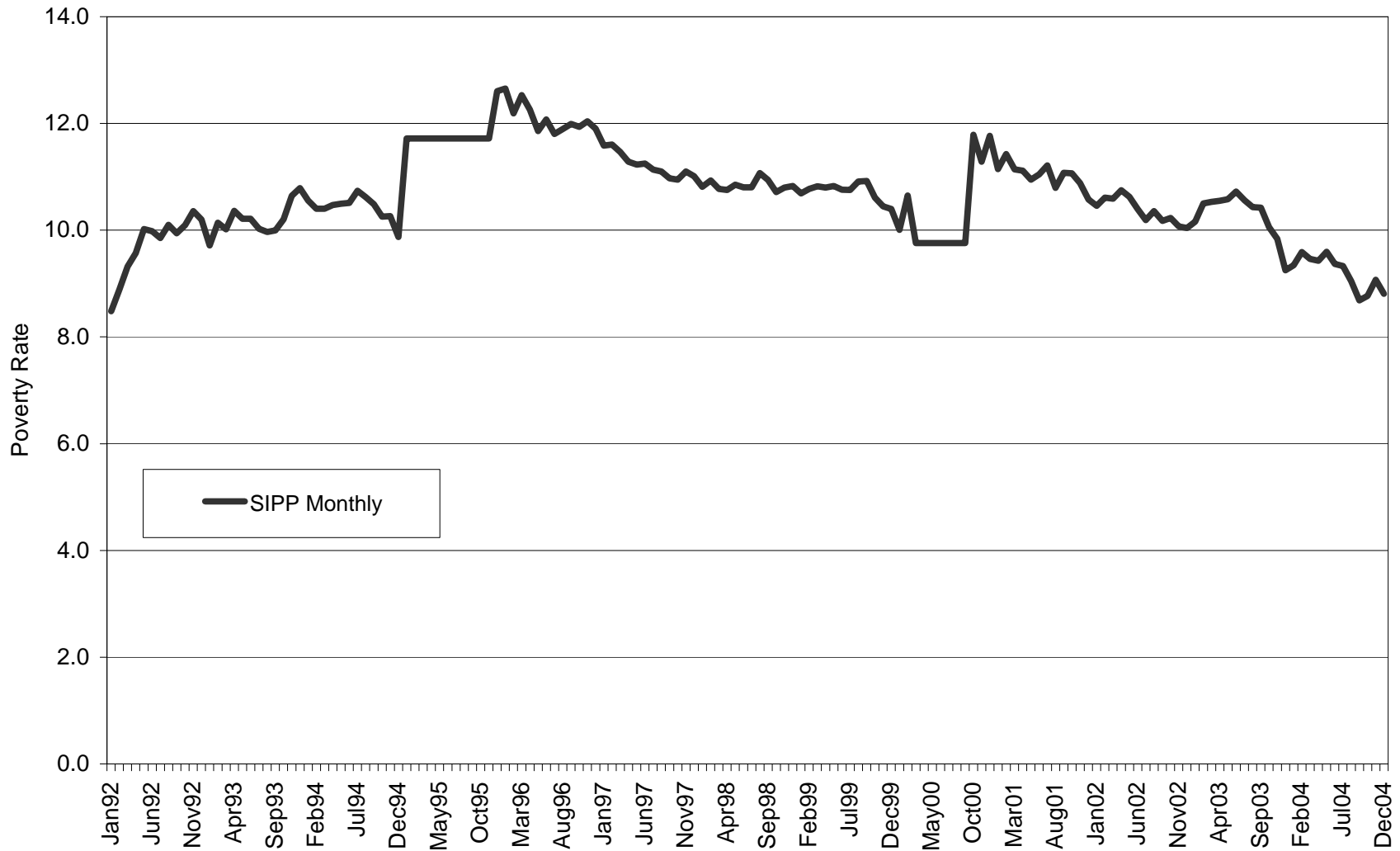
VI. MEASUREMENT OF ECONOMIC WELL-BEING IN THE SIPP AND CPS

In Chapter III we demonstrated that with a detailed demographic calibration, the subsample of SIPP records that could be matched to SSA administrative records provided an essentially unbiased representation of the full SIPP sample, whether longitudinal or cross-sectional. In Chapter IV we presented compelling evidence that, with respect to earnings and both Social Security and SSI benefit receipt, the SIPP full panel sample can represent an initial population through time with negligible bias. In Chapter V, however, we found reason to question how well the SIPP could represent the full cross-sectional population over time—something that the SIPP was not designed to do but which users have expected it to do. Even if matching bias and panel attrition do not present the problems that they were believed to present, should SSA be looking elsewhere to document the changing characteristics of its beneficiary populations over time— particularly their economic well-being?

Compared to the SIPP, the CPS provides a more fully and consistently representative sample from year to year, a larger sample size, and more timely and regular release of data. The CPS captures many of the same types of characteristics that SSA has obtained from the SIPP for descriptive analyses of its beneficiary populations. Prior to the March 2001 survey, the CPS did not collect information on the reason for social security benefit receipt, so retired workers, disabled workers, and other types of beneficiaries could not be differentiated except through linked administrative records. This deficiency has been addressed with the addition of a question on the reason for social security benefit receipt. Furthermore, the CPS collects information on SSI participation that has not been collected in the SIPP, which allows identification of the aged, blind, and disabled among reported SSI recipients. When the match rate to administrative records dropped below 60 percent in the SIPP 2001 panel, the CPS was matching 70 percent of

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adults and 90 percent of children under 15 (Chapter II). The match rate in both surveys is expected to rise to about 90 percent with the introduction of new methods of matching survey records to administrative records in 2006.

For ORES analysts who are accustomed to working with the SIPP, the principal issue with the CPS remains the quality of its income data relative to what is collected in the SIPP. Building on what we presented in the preceding chapter, this chapter focuses on the comparative strengths of the two surveys in describing the economic well-being of the population in general and elderly and lower-income persons in particular. In Section A we compare the two surveys with respect to their identification of sources of income, including their estimation of Social Security beneficiaries' reliance upon their Social Security benefits as a principal source of income. In Section B we turn from sources of income to amounts, comparing the two surveys in their capture of total income and its major components. In Section C we look at the measurement of income in relation to the poverty threshold, comparing the two surveys' estimates of poverty rates over time. Finally, in Section D we summarize our principal findings and conclusions.

A. SOURCES OF INCOME

Dating back to the first SIPP panel, one of the recognized strengths of the survey has been its identification of more sources of income than other surveys. Using SIPP and CPS data from the 1990s and early 2000s, we compare the two surveys with respect to (1) their estimates of Social Security beneficiaries' reliance upon Social Security benefits as their principal source of income and (2) their identification of combinations of income sources across the population.

1. Reliance upon Social Security Benefits

One of the applications of SIPP data identified by SSA involves estimates of Social Security beneficiaries' reliance upon Social Security as a principal source of income. The proportion of personal or family income derived from social security benefits can be estimated with both the

CPS and the SIPP and, therefore, provides a good basis for assessing whether CPS data can be substituted for SIPP data to address a question of interest to researchers and policymakers at SSA.

SIPP and CPS estimates of Social Security payments as a percentage of total personal income among retired workers in calendar year 2001 are compared in Table VI.1. While there are similarities in the estimates, the differences are more striking. Most notably, the CPS shows that social security payments accounted for 100 percent of the total personal income of 22 percent of retired workers whereas the SIPP shows less than 8 percent of retired workers having no income besides their social security payments. Roughly these same percentages are found for retired workers at ages under 65, 65 to 74, and 75 and older. If the SIPP shows substantially *fewer* retired workers receiving *all* of their reported personal income from Social Security payments, then the SIPP must show relatively *more* retired workers receiving *smaller* fractions of their income from Social Security payments. For retired workers under 65 the biggest difference occurs in the proportion receiving less than 25 percent of their income from Social Security payments. The SIPP finds 30 percent of retired workers receiving less than 25 percent of their income from Social Security payments compared to 18 percent for the CPS. Furthermore, since retired workers under 65 are not yet covered by Medicare, the fact that the 2001 SIPP panel collected net rather than gross Social Security benefits would not have contributed to the lower Social Security benefit share in the SIPP than the CPS. Among older retired workers, for whom the collection of net versus gross benefits in the SIPP was almost certainly a factor, there was no difference between the SIPP and the CPS in the proportion reporting Social Security payments less than 25 percent of their total personal income. Instead, the difference between the two surveys occurred in the proportion reporting benefits that were between 25 and 75 percent of their total personal income.

These patterns are repeated at the family level, where we measure the Social Security benefits received by each retired worker's *family* as a proportion of total *family* income (Table VI.2). Expanding the unit of analysis to the family reduces the relative importance of Social Security benefits because the incomes of non-beneficiaries are included with those of retired workers in some cases. Nevertheless, striking differences between the CPS and SIPP remain. Fewer than 4 percent of retired workers in the SIPP compared to 13 percent in the CPS reported no other family income in 2001 besides what they received in Social Security payments. As with personal income, these proportions varied little by the age of the worker. Here, too, retired workers under 65 in the SIPP were more likely than those in the CPS to report less than 25 percent of their family income as coming from Social Security payments: 43 percent versus 31 percent. Among older retired workers the difference between the SIPP and the CPS was concentrated among those receiving between 25 and 75 percent of their income from Social Security payments.

We tabulated both surveys to determine what accounted for the SIPP's smaller proportion of Social Security beneficiaries with no other sources of income. Results for family income are reported in Table VI.3. Retired workers in the SIPP were more likely than their counterparts in the CPS to report receiving each of the six additional sources that we examined: wages, self-employment, property income, pensions, SSI, and welfare.[1] Differences in the receipt of wages—13 percentage points among workers under 65—were small after age 65, but large differences in the receipt of property income and especially pensions were evident at all ages.

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[1] Because we wanted to look at combinations of sources, we excluded a number of other transfers that accounted for very small percentages of retired workers' family income. These included unemployment compensation, worker's compensation, veterans' payments, Black Lung, disability compensation, and other government income as well as child support, alimony, charity, casual earnings, miscellaneous cash income, and income from friends and roomers.

In addition to being less likely to report that their only source of family income was Social Security, retired workers at all ages in the SIPP were less likely than those in the CPS to report only one additional source of income. Retired workers under age 65 were equally likely in both surveys to report two additional sources, but those in the SIPP were more likely to report exactly three additional sources (33 percent versus 20 percent) or four or more additional sources (8 percent versus 2 percent).

The number of additional sources declines with age—largely because of workers withdrawing from the workforce. In the SIPP, the reduction in sources is seen in the proportion with three or more, which declines from 41 percent to 18 percent, producing a substantial increase in the proportion of retired workers with exactly two sources (from 38 to 54 percent) but only small increases in the proportion with no additional sources or only one additional source. In the CPS the reduction in the proportion of retired workers with three or more additional sources of income (from 22 percent to 8 percent) has little effect on the proportion with exactly two additional sources, which changes from 39 percent to 37 percent. Instead, the effect is seen on the proportion with even fewer sources. While the proportion of SIPP retired workers with only one additional source grows by only 5 percentage points (from 18 to 23 percent) with the worker's age, this same proportion in the CPS grows by 12 percentage points (from 26 to 38 percent).

The broad receipt of property income and pensions—the two most common additional sources among retired workers at all ages in both surveys—is evident in their prominence in the modal combinations of additional sources. Property income and pensions is the modal combination of two additional sources in both surveys at all ages, followed by wages and property income. The latter combination diminishes with age while the former combination grows. Wages, property income and pensions is the modal combination of three additional

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sources, with no other combination being close. In the SIPP but not the CPS, retired workers at every age are much more likely to have this combination of three sources than just wages and property income alone. In the CPS somewhat more retired workers under age 65 have all three sources than just wages and property income, but among older workers the proportions having all three versus just the two are the same.

These findings raise serious concerns about using the CPS to examine issues related to reliance on Social Security income and, more generally, the sources of financial support among retired workers. The SIPP's greater effectiveness in capturing income from multiple sources among Social Security retired workers supports the ORES analysts' preference for the SIPP over the CPS and demonstrates an important way in which the SIPP appears to provide a better vehicle for policy analysis.

2. Sources of Income among All Persons by Age

The SIPP's superiority in capturing sources of income extends beyond retired workers to persons of all ages although both surveys report the same frequency of wage and salary income—even among the elderly. Tables VI.4 through VI.7 compare CPS and SIPP estimates of the distribution of persons by sources of family income at three points in time—1992, 1997, and 2001. Each table presents estimates for one of four age groups: 65 and older, 40 to 64, 18 to 39, and under 19.

Among the elderly, the SIPP obtains slightly higher reports of Social Security and SSI recipiency, with the difference between the two surveys growing over time (Table VI.4). Between 1992 and 2001 the difference in the estimates of Social Security receipt grew from 1 percentage point to nearly 5 percentage points. For SSI the gap widened from 1 percentage point in 1992 to nearly 4 percentage points in 1997 as SSI reporting declined in the CPS but rose in the SIPP. The pattern for these two sources was repeated for self-employment and, with much lower

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rates of receipt, welfare. The biggest difference between the two surveys lies in their capture of property income and pensions. For property income, an 11 percentage point difference in 1992 grew to 16 percentage points in 2001. For pensions, the CPS shows reported recipiency declining from 49 percent to 44 percent between 1992 and 2001 while the SIPP shows a 16 percentage point increase, from 56 percent to 70 percent.

There is only a small difference between the SIPP and CPS in the proportion of elderly persons with no reported sources of income. Much bigger differences exist in the percentage reporting multiple sources. In 1992, only 0.2 percent of elderly persons in the CPS and 0.1 percent in the SIPP had no reported family income. The SIPP percentage did not change over time while the percentage in the CPS rose, slightly, to just under 1 percent. Elderly persons in the CPS were more likely to have only one or two reported sources of family income and less likely to have three or more. Over time, the CPS showed an increase in the proportion reporting only one source of income (from 12 to 17 percent versus a consistent 6 percent in the SIPP) and a reduction in the proportions reporting three or more sources (from 55 percent to 47 percent). The SIPP, by contrast, showed between 48 and 50 percent reporting exactly three sources of income, with an increase in the proportion reporting four our more sources (from 17 to 24 percent) and a reduction in the proportion reporting only two sources of income (from 28 to 20 percent). The modal combination of sources—Social Security, property income and pensions—declined from 28 percent to 22 percent in the CPS while rising from 36 percent to 38 percent in the SIPP.

That the SIPP improved relative to the CPS could be attributable to design changes in both surveys, with both transitioning to computer-assisted interviewing (in survey year 1994 for the CPS and 1996 for the SIPP) but the SIPP receiving a more substantial revision of its instrument.

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These design changes will be revisited in the next section of this chapter when we look at aggregate income.

Among adults 40 to 64, the reported frequency of wages held at 86 to 87 percent in the CPS while rising from 85 to 87 percent in the SIPP (Table VI.5). Self-employment declined from 16 to 13 percent in the CPS while holding steady at 22 percent in the SIPP, such that the frequency of *either* wage or self-employment earnings ran 1 to 2 percentage points higher in the SIPP than the CPS. The reported receipt of property income declined by 5 percentage points in both surveys, remaining 11 to 12 percentage points higher in the SIPP (75 versus 63 percent in 2001). Reported recipiency declined for all four of the remaining sources in the CPS but rose for three of these in the SIPP, so that what was initially a very small gap between the two surveys in 1992 grew in each case. Pensions showed the strongest relative gain for the SIPP, with recipiency in the CPS falling from 15 to 12 percent while rising from 17 to 21 percent in the SIPP. Social Security and SSI were reported very slightly more often in the SIPP than the CPS in 1992, but Social Security recipiency declined by a percentage point in the CPS while rising by that same amount in the SIPP. SSI remained steady in the CPS but rose by 2 percentage points in the SIPP. Lastly, welfare recipiency declined by 2 percentage points in both surveys with the SIPP remaining a percentage point higher than the CPS.

The proportion of adults 40 to 64 with no reported sources of family income reached 1.5 percent in the CPS while remaining at 0.5 percent in the SIPP. Around half of the persons in each survey had exactly two sources of family income, but the SIPP respondents were more likely to report three or more sources and less likely to report only one source. CPS respondents became less likely to report multiple sources over time, with the proportion reporting only one source rising from 20 percent to 26 percent. In the SIPP this proportion rose as well, but by only 2 percentage points, from 12 to 14 percent. In both surveys about 40 percent reported receiving

both wages and property income, which was the modal combination. Only in the CPS did any other combination of sources account for even half that frequency; the proportion of CPS respondents reporting only wages rose from 16 to 21 percent. SIPP respondents were as likely to report wages in combination with property income and self-employment as to report only wages—around 11 percent in each case in 2001.

Among younger adults, 18 to 39, the percentage reporting family wage income rose by a percentage point in both surveys, with the SIPP remaining a percentage point ahead of the CPS, but self-employment declined from 12 to 10 percent in the CPS while remaining at 17 percent in the SIPP. The frequency of any earnings approached 98 percent in the SIPP versus 95 percent in the CPS. Property income was reported less often than among older adults in both surveys, but the SIPP maintained a 15 to 16 percentage point edge, with 68 percent of SIPP respondents in 2001 reporting family incomes that included this source compared to 52 percent in the CPS. While the levels were small, pension receipt declined by 2 percentage points (to 3 percent) in the CPS while rising by a percentage point (to 8 percent) in the SIPP. Social Security receipt declined by a percentage point to 7 percent in the CPS while remaining at 10 percent in the SIPP whereas SSI recipiency was stable at 3 percent in the CPS but rose from 4 to 6 percent in the SIPP. Welfare recipiency declined by 4 percentage points in both surveys but was twice as high in the SIPP as in the CPS in 2001 (4.6 versus 2.3 percent).

With respect to the number of reported sources, the principal difference between the two surveys was in the reporting of multiple versus a single source of income. In the CPS the proportion of persons with no reported source of income grew from 1.5 to 2.4 percent compared to an average of 0.6 percent in the SIPP. The proportion reporting only one source of income rose in both surveys, as it did with adults 40 to 64, but the initial level was higher and the increase more substantial in the CPS than the SIPP. The proportion with only one source rose

from 30 to 38 percent in the CPS versus 17 to 22 percent in the SIPP. The proportion with exactly two sources declined by an offsetting amount in the SIPP (from 58 to 54 percent), such that the proportion reporting three or more sources did not change, remaining at 24 percent. In the CPS the proportion reporting exactly two sources declined by 4 percentage points as well (from 52 to 48 percent), but with the larger increase in the proportion reporting only one or no sources of income the proportion reporting three or more sources declined from 16 percent to 11 percent.

As with persons 40 to 64, the modal combination of sources was wages and property income, which accounted for between 41 and 43 percent of the CPS respondents and 46 to 49 percent of the SIPP respondents. Persons with wages as their only reported source of family income rose from 27 to 35 percent in the CPS and from 14 to 20 percent in the SIPP. The only other significant combination or single source in either survey was wages, property income and self-employment, held by 5 percent of CPS respondents, on average, and 10 percent of SIPP respondents.

Reported sources of family income among children differ only marginally from the reported sources among the families of adults 18 to 39, which include most of their parents. Children's families show higher receipt of welfare and self-employment along with lower receipt of wages and property income—all of these differentials stronger in 1992 than 2001—but similar levels of Social Security, pensions, and SSI. In all three years the SIPP showed a higher incidence of every reported source of income than the CPS, although the difference for wages was less than a percentage point (but very consistent across years). In addition, the SIPP was more likely to find multiple sources of income. While 38 percent of children's families in the CPS had only one source or no source of income in 2001, the corresponding figure for the SIPP was only 22 percent. In that same year 26 percent of children's families in the SIPP had three or more

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reported sources of income compared to just 11 percent in the CPS. The corresponding figures in 1992 were 25 percent for the SIPP and 16 percent in the CPS, so we again see a relative improvement for the SIPP.

On the whole then, this analysis indicates that across all age groups—but particularly children and the elderly—the SIPP has continued to identify more sources of family income than the CPS. Furthermore, the SIPP's evident superiority in this regard has grown since 1992, although a fall-off in the identification of sources in the CPS appears to have played a bigger role in broadening this differential than the recorded gains in the SIPP.

If the SIPP has continued to identify more sources of income than the CPS, has the SIPP also captured more income than the CPS? We turn next to estimates of aggregate income to address this question.

B. AGGREGATE INCOME

When the SIPP was new, comparisons of SIPP and CPS estimates of aggregate income—often in relation to independent benchmarks—established the comparative strengths of the two surveys with respect to the measurement of income. In one detailed assessment, the SIPP's aggregate estimate of regular money income (that is, income excluding certain lump sums) was 99.9 percent of the corresponding CPS aggregate, with the SIPP running about 5 percent lower on wages and salaries (nearly three-quarters of total CPS income) but substantially higher on virtually everything else (Vaughan 1993). The SIPP's superiority—both actual and potential— as a vehicle for the measurement of economic well-being was recognized in the recommendation of a National Academy of Sciences panel that the SIPP replace the CPS as the source of official poverty statistics in the U.S.

The work of Vaughan and others was updated by Roemer (2000), who compared estimates of aggregate income from the SIPP and CPS with independent benchmarks derived from

National Income and Product Accounts (NIPA) data over the period from 1990 to 1996. In the first subsection below we present comparative estimates of aggregate income derived from Roemer's work. Following that we extend the comparison to quintiles based on total income in order to compare the surveys' estimates of income by source at different parts of the income distribution. Lastly we examine trends in the proportion of aggregate income that is imputed in the two surveys. This, too, is presented by quintile of total income.

1. Comparative Estimates of Aggregate Income

By 1990, the SIPP estimate of total income had slipped below 98 percent of the CPS aggregate, and it fell further behind over the first half of the decade, ending at 92.5 percent of the CPS aggregate in 1996, the first year of the SIPP redesign (Table VI.8). Over this period the SIPP estimate of wage and salary income declined from 94 percent to 89 percent of the CPS estimate, matching the overall decline. But the SIPP fell most in its capture of property income. Excluding the two years when spikes in the SIPP estimates of dividends pushed the survey's estimate of total property income above the CPS, the SIPP aggregate dropped from 95 percent to 81 percent of the CPS aggregate. While the SIPP estimate of rent and royalties remained well above the CPS estimate throughout the period, SIPP dividend income eventually dropped below CPS dividend income while SIPP interest income, which started out below the CPS, fell further behind, going from 84 percent to just 60 percent of the CPS amount. SIPP estimates of transfer income also declined relative to the CPS, dropping from 105 percent to 98 percent of the CPS total. Only pension income as a class improved in the SIPP, growing from 95 percent of the CPS aggregate to 112 percent on the strength of gains in the capture of private pensions and military retirement income, although the 1996 estimate of the latter is clearly an outlier.

Did the CPS get better over this period, or did the SIPP get worse? Roemer's estimates of SIPP and CPS aggregates as a percentage of the NIPA benchmarks indicate that the answer

varies by source. Over all sources, SIPP aggregate income declined by 1 to 2 percentage points relative to the NIPA benchmark while the CPS improved by about 3 percentage points (Tables VI.9 and VI.10). For wage and salary income, SIPP declined by 2 percentage points relative to the benchmark between 1990 and 1995 but then rose by 3 percentage points between 1995 and 1996, for a net gain of 1 percentage point. The CPS estimate of wage and salary income rose by 6 percentage points over the entire period, with most of the increase occurring between 1992 and 1993, when the computer-assisted instrument was introduced. The SIPP increase also coincided with the introduction of computer-assisted interviewing in 1996.

Other sources of income present a mixed picture. Estimates of self-employment income declined substantially in relation to the NIPA benchmark in both surveys. Estimates of total property income declined by about 9 percentage points in the SIPP while increasing by 7 to 10 percentage points in the CPS. Estimates of all three component sources of property income declined in the SIPP, as did the CPS estimates of rent and royalties, but estimates of interest and dividends improved markedly in the CPS.

Transfer income in the SIPP fell by about 6 percentage points relative to the benchmark while holding steady in the CPS. Among the individual sources of transfer income, SIPP estimates of Social Security and Railroad Retirement, unemployment compensation, and veterans' payments deteriorated over the period. Estimates of worker's compensation declined substantially between 1990 and 1995 but showed a 20 percentage point rise between 1995 and 1996. SSI and other cash welfare also exhibited sharp increases between 1995 and 1996, but it remains to be seen if these gains will persist. The CPS estimates of worker's compensation fell off substantially over the period while veterans' payments improved. Most of the other sources were stable while other cash welfare rose to the level of the benchmark in 1993 through 1995 but then dropped below the 1990 level.

Lastly, pension estimates improved by a percentage point in the SIPP while declining by 12 percentage points in the CPS. Estimates of private pensions improved in the SIPP but fell off slightly in the CPS. Estimates of military retirement declined substantially in the CPS while holding steady in the SIPP until a 16 point increase between 1995 and 1996. State and local employee pensions showed a steady decline in the CPS while holding steady in the SIPP until a modest decline between 1995 and 1996.

On the whole, the transition to a computer-based instrument appears to have been more beneficial to the CPS than the SIPP. The CPS estimate of total income improved by nearly 4 percentage points relative to the benchmark in the year that computer-assisted interviewing was introduced (reference year 1993) and remained slightly above that level for the next three years. The SIPP estimate of total income improved by a percentage point when computer-assisted interviewing was introduced in 1996, but Roemer's data end in that year, so we cannot tell if the SIPP maintained that level of coverage relative to the benchmark.

2. Income by Quintile

While the CPS may have moved past the SIPP in its capture of aggregate income, despite finding lower levels of recipiency for most sources, estimates of aggregate income for many sources are affected disproportionately by respondents in the upper tail of the distribution, where the CPS appears to be much more successful than the SIPP (Roemer 2002; Czajka et al. 2003). For SSA's purposes, the SIPP's performance lower in the income distribution is far more important.

To examine how the SIPP and CPS compared in their estimates of aggregate income at different parts of the income distribution, we divided each sample into quintiles based on total

family income and performed comparisons within each quintile.[2] Benchmarks cannot be constructed for such purposes because the required data do not exist. We were limited, then, to comparing estimates between the two surveys, which we did at three points in time: 1993, 1997, and 2002. The SIPP estimates are from the 1992, 1996, and 2001 panels and, for consistency, are derived from the second year of data in each panel.[3] The CPS estimates are from the 1994, 1998, and 2003 supplements, so all three reflect the computer-assisted instrument.

Our estimates are based on public use data rather than the Census Bureau's internal files, so amounts are topcoded. This affects the SIPP estimates more than the CPS because of the way that topcodes are assigned in the two surveys. In the CPS, the topcodes that appear on the public use file are the means of the values that were replaced by topcodes, so that the sum of the topcoded values equals the sum of the values on the Census Bureau's internal file—that is, prior to topcoding.[4] In the SIPP, all topcoded amounts are simply truncated; thus the sum of topcoded amounts understates the sum of the corresponding reported amounts. In addition, our estimates from both surveys exclude the families of armed forces personnel, which should not favor either survey, but they also include certain lump sum pension payments, which tends to favor the SIPP. Finally, we used the 1992 SIPP panel for the 1993 estimates whereas Roemer used the 1993 panel. Despite these differences, our estimates line up reasonably well with Roemer's estimates for 1993. While there are differences by source, our estimate of SIPP aggregate income as a

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[2] More specifically, we classified people by their family income and assigned the bottom 20 percent of persons to the first quintile, the next 20 percent to the second quintile, and so on.

[3] As noted previously, the 1996 panel started two months late and did not collect data for all 12 months of 1996 for two of the four rotation groups.

[4] For earnings, separate means are calculated for 12 subpopulations defined by combinations of sex, race and Hispanic origin, and work experience so that users can reproduce the internal file means and totals for these important subgroups (U.S. Census Bureau 2003).

percentage of CPS aggregate income, at 94.5, compares quite closely to Roemer's estimate of 94.8.

While the ratio of SIPP to CPS total income declined from 94.5 percent to 89.0 percent between 1993 and 1997, there was no further decline between 1997 and 2002 (Table VI.11). SIPP wages and salaries declined from 84.6 percent to 82.4 percent of the CPS aggregate, but this was offset by small improvements in every other source. If we exclude the top quintile so as to eliminate the impact of topcoding and the CPS's more effective capture of very high incomes, mentioned earlier, we find that the SIPP does indeed reach a higher fraction of the overall CPS aggregate: 98.2 percent in 1993 versus 94.5 percent when all five quintiles are included (Table VI.12). Furthermore, the decline between 1993 and 1997 is smaller at 2.9 versus 5.5 percentage points. However, the SIPP estimate declines another percentage point, relative to the CPS, between 1997 and 2002.

Besides wages and salaries, three other sources show small declines in SIPP coverage between 1997 and 2002: property income, Social Security, and welfare. In both tables, though, the ratios of SIPP to CPS aggregates are generally quite similar between 1997 and 2002, suggesting some stabilization in the relative performance of the two surveys after the CPS's earlier gains.

Turning to the results by income quintile, we begin with the lowest quintile, where the SIPP has historically performed best in relation to the CPS. The conventional wisdom is that the combination of thrice-yearly interviews and the SIPP's collection of data for individual calendar months is more effective than the CPS's annual interviews in capturing irregular income flows, which are more characteristic of the lower end of the income distribution than the rest of the distribution. In 1993 the SIPP captured 20 percent more income from the lowest quintile than the CPS, including 25 percent more wages and salaries, 157 percent more self-employment

income (due in part to differences in how self-employment income is defined in the two surveys), 22 percent more property income, 7 percent more Social Security and Railroad Retirement, 12 percent more SSI, 24 percent more other transfers, and 44 percent more pension income (Table VI.13). Between 1993 and 1997, however, the SIPP's edge in total income dropped to 12 percentage points, and by 2002 it had fallen to just 6 percentage points.

With the exception of property income, welfare and other transfers, SIPP aggregates grew at a brisk rate between 1993 and 1997 and continued to show strong growth between 1997 and 2002, but the CPS aggregates grew even more rapidly. Only for SSI, welfare, and pensions did the SIPP hold steady or improve relative to the CPS between 1993 and 2002. The SIPP's estimate of aggregate wages and salaries, still the largest source of income in the lowest quintile but not nearly as dominant as at higher income levels, dropped from 125 percent of the CPS aggregate to 109 percent. Social Security and Railroad Retirement, the second largest source, dropped from 107 percent of the CPS aggregate to only 88 percent.

In the second income quintile, the SIPP captured 1.5 percent more aggregate income than the CPS in 1993, but this dropped to 96 percent by 1997 (Table VI.14). Unlike the first quintile, however, the SIPP held ground after that, gaining back a percentage point by 2002. The SIPP estimate of wages and salaries dropped from 100 percent of the CPS amount to 92 percent in 1997 but rose to 94 percent in 2002. Property income fell from 112 percent to 90 percent of the CPS amount while Social Security and Railroad Retirement fell from 97 percent to 90 percent. Other transfers dropped from 90 percent to 59 percent of the CPS amount. Sizable improvements relative to the CPS were recorded for self-employment, SSI, welfare, and pensions, however.

These basic patterns were repeated in the third and fourth quintiles, where the SIPP estimates of aggregate income fell by 2 to 3 percentage points relative to the CPS, ending up at

93 percent in the third quintile and 91 percent in the fourth quintile (Tables VI.15 and VI.16). There was one notable exception to the patterns by income source; the capture of Social Security and Railroad Retirement in the SIPP improved between 1997 and 2002 to the point where SIPP captured relatively more of such income in comparison to the CPS in 2002 than in 1993. In both cases, the SIPP aggregates in 2002 exceeded the CPS aggregates. Elsewhere, SIPP fell further behind the CPS in wages and salaries, property income and other transfers but improved in self-employment, SSI, welfare, and pensions. In both quintiles, SIPP captured 50 percent more pension income in 2002 than did the CPS.

In the top quintile the SIPP's estimate of aggregate Social Security and Railroad Retirement dropped relative to the CPS, as it did in the first and second quintiles, and the relative gain in the capture of pension income was more modest than in the lower quintiles (Table VI.17). Otherwise, the different sources improved or declined in the SIPP just as they did in the lower quintiles. Over all sources, the SIPP estimate of total income in the top quintile dropped from 89 percent of the CPS estimate in 1993 to 81 percent in 1997 but then rose to 83 percent in 2002.

3. Proportion of Income That Is Imputed

Item nonresponse is higher on income questions than on most other types of questions.[5] Missing amounts are imputed in both the SIPP and the CPS. The proportion of income that is imputed is a particularly good statistic for comparing the impact of nonresponse to income items on estimates of income across surveys. This measure gives greater weight to nonresponse on items and individual records that account for larger shares of total income. Item nonresponse rates are less effective for this purpose because the number of questions included in the income

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[5] Item nonresponse on asset questions is even higher.

battery varies substantially across surveys, and the likelihood of nonresponse to one or more questions increases with the number of questions.[6]

Two sets of SIPP estimates are presented in Table VI.18—one covering the four years 1992, 1993, 1997 and 2002 and the other two covering only the final two years. When an amount field in the SIPP is missing because of nonresponse to an earlier recipiency question, the allocation flag that is associated with the amount field may not identify the amount as imputed. For some amount fields it is necessary to work backwards through a complex chain of allocation flags to fully identify the imputed values. We did this for 1997 and 2002, but 1992 and 1993 presented complications because of instrument changes and a complete renaming of variables that attended the 1996 redesign. Consequently, we did not identify all of the imputed amounts in 1992 and 1993. Instead we replicated this more limited identification of imputed amounts on the 1997 and 2002 data, which gave us a consistent time series and a way of gauging how much imputed income we may have missed in 1992 and 1993.

The first set of SIPP estimates in Table VI.18 uses the more limited method of identifying imputed amounts in all four years. The second set reflects a full identification of imputed amounts in 1997 and 2002, which adds only 0.7 percentage points to the income imputation rate in 1997 and 0.4 percentage points in 2002. For four of the income sources the two sets of estimates are identical, and for two others they differ by only 0.2 to 0.3 percentage points. The differences between the two sets of estimates are somewhat larger for SSI (0.5 and 1.2 percentage points) but they are *substantially* larger for property income, which has the highest imputation rate by either measure and is estimated from a complex sequence of questions that give respondents a lot of difficulty, apparently. For all of the sources except property income,

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[6] Because of this, the proportion of respondents with any income items imputed is a particularly weak measure for comparative purposes

then, the trend in the version 1 estimates is either identical to or very similar to the trend that we would see with full identification of imputed income for all four years. For property income the large differences between the version 1 and version 2 estimates in 1997 and 2002 create substantial uncertainty about the full level of income imputation in the earlier years.

Table VI.18 presents two sets of CPS estimates as well, but each set covers all four years. The two sets differ in whether or not they include the income imputed to persons who responded to the monthly labor force survey but did not complete the supplement. When we exclude the whole person imputes from both the numerator and denominator, as we do in the middle panel of Table VI.18, the estimated proportion of income imputed reflects only item nonresponse to the income questions among the respondents to the supplement. If we want to assess the comparative impact of imputation for item nonresponse in the SIPP and CPS, then this is the most appropriate statistic with which to do so. If, on the other hand, our goal is to evaluate the total impact of income imputation in the two surveys, then it is important to include the income imputed to nonrespondents to the supplement, which we do in the bottom panel of Table VI.18.[7] Since all of the income for this segment of the CPS sample is imputed, these whole person imputations account for a substantial but largely fixed share of total income in the CPS. In 2002 the income imputed to this segment represented 10.7 percent of total CPS income, which is comparable to its share of the weighted sample.[8, 9]

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[7] The relationship between the two statistics is as follows. To calculate the imputation rate with whole person imputes included, we add the amount of income imputed to these respondents to both the numerator and denominator of the imputation rate *without* whole person imputes.

[8] Note that this is not the difference between the 34.2 percent imputation rate when whole person imputes are included and the 26.3 percent imputation rate when they are not included. The latter figure was calculated over a denominator that excluded the income due to whole person imputes. We must include this imputed income in the denominator in order to determine the share of total CPS income that is due to imputation for item nonresponse. This fraction was 23.5 percent in 2002.

[9] Nonrespondents to the supplement accounted for 10.0 percent of the weighted CPS sample in March 2002; we do not have a figure for the March 2003 sample.

In the SIPP's initial year, the proportion of aggregate income that was imputed was just over half the percentage imputed in the CPS—11.4 percent of aggregate regular money income for the SIPP compared to 20.1 percent in the CPS (Vaughan 1993).[10] From the tabulations presented in Table VI.18 it is apparent that imputation grew more rapidly in the SIPP than in the CPS over the next few years. By 1992, imputed income accounted for about 18 percent of total income in the SIPP versus 23 percent in the CPS (with whole person imputations included). Income imputation in both surveys grew substantially over the next 10 years, rising to 29 percent of total income in the SIPP and 34 percent in the CPS, but the difference between the two surveys remained at 5 percentage points.

When whole person imputes are excluded from the CPS numbers, we find that the income imputation rates in the SIPP were higher for every source of income in 1992, with a 5 percentage point difference for total income. For every income source, then, item nonresponse was a bigger problem in the SIPP than in the CPS, and this was true even with the incomplete identification of all the imputed income for some of the SIPP sources.

Between 1992 and 1993 the SIPP imputation rates rose for every income source, with a 3 percentage point increase overall. The fact that the estimates for the two years are from the same panel might suggest that the increase is a panel phenomenon.[11] However, the CPS shows a similar increase without the whole person imputes. When the whole person imputations are included, the CPS shows less than a percentage point increase between the two years. Apparently, nonresponse to the income items rose between 1992 and 1993, but unit nonresponse to the supplement declined. This latter is noteworthy because 1993 represents the first year of

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[10] Judging from its magnitude, the CPS figure includes income allocated as a result of whole person imputations (about 8 percent of supplement sample households, unweighted; see Table II.4).

[11] This could be explored with the 2001 panel, but we have not done so.

computer-assisted interviewing in the CPS. Some have speculated that with computer-assisted interviewing the transition from the labor force questionnaire to the supplement became almost seamless, giving respondents less opportunity to refuse the supplement. Any such impact was not long lasting, however. Between 1997 and 2002, the CPS shows about the same increase in its income imputation rate whether or not the whole person imputes are included.

Between 1993 and 2002, the proportion of total income that was imputed increased by 8 percentage points in the SIPP and by 10 to 11 percentage points in the CPS, depending on whether whole person imputes were included or not. In the CPS, the imputation rates for all but two sources increased by about the same amount. The exceptions were property income, for which the imputation rate increased by 23 percentage points, and SSI, for which the increase was only 4 percentage points. For property income the increased raised the imputation rate to 58 percent without the whole person imputes.

For the SIPP the increase in imputation rates by income source was very uneven. The income imputation rates for welfare, other transfers and pensions surged between 1993 and 1997. The imputation rate for welfare more than doubled, rising from 14 percent to 31 percent. The imputation rates for other transfers and pensions increased by more than half, reaching 33 percent for other transfers and 37 percent for pensions. In addition, the imputation rate for property income reached 56 percent when the amounts imputed with recipiency were fully counted, although the trend in the less complete estimates of property income imputation suggests that this may have been achieved in 1992. The imputation rate for pension income grew another 10 percentage points between 1997 and 2002 while the imputation rates for welfare and other transfers grew by only 1 to 2 percentage points. In contrast to these other sources, the imputation rates for both sources of earnings and for Social Security and Railroad Retirement

grew by a more modest 7 percentage points between 1993 and 2002 while the imputation rate for SSI grew by 11 percentage points.

By 2002 the imputation rates for wages and salaries, self-employment, property income, and Social Security and Railroad Retirement were nearly identical between the SIPP (with full accounting for amounts imputed with recipiency) and the CPS when we exclude whole person imputes. This represents a comparative gain for the SIPP relative to 1992, when the imputation rate for every income source was higher in the SIPP than in the CPS. For SSI the imputation rate remained about five percentage points higher in the SIPP. For welfare, other transfers, and pensions, however, the imputation rates in 2002 were about 50 percent higher in the SIPP, which represents a comparative weakening of the SIPP relative to the CPS.

Were there significant changes to the SIPP questions on income from welfare, other transfers, and pensions that could account for the increased imputation rates? Almost certainly there were changes to the survey questions (at a minimum, an increase in their number) but we doubt that even with hindsight would it be evident why these changes may have generated an increase in nonresponse. In any event, this is something that the Census Bureau is better positioned to answer than we are, as the Census Bureau can draw on relevant internal documents, including pretest results and perhaps cognitive test results, to ascertain whether there was any hint that the question changes might lead to increased nonresponse.

Could the increased amount of imputation help to explain why the growth of aggregate income in the bottom quintile of family income did not keep pace with the growth of aggregate income in the bottom quintile of the CPS? Or did the CPS, which had lagged well behind the SIPP on some of these sources, simply get better?

One thing stood out when we examined the amount of dollars imputed by quintile within each source. In 2002, an excessive amount of welfare income was imputed to the highest income

quintile: $1.1 billion, to be precise (Table VI.19). This was more than the aggregate welfare income imputed to persons in the lowest income quintile, which received $0.9 billion in that year. By contrast, the CPS, which imputed substantially less welfare income overall ($1.1 billion versus $2.9 billion in the SIPP), imputed only $0.01 billion to the highest quintile. Comparing the SIPP imputations over time suggests that something went awry with the welfare imputations in 2002, which could mean the entire 2001 panel. The amount of welfare income imputed to the highest income quintile in the SIPP rose from $36 million in 1992 and $80 million in 1993 to $287 million in 1997 and, finally, $1,135 million in 2002. The amount imputed to the lowest quintile grew from $1,511 million in 1992 to $3,149 million in 1997 as the imputation rate rose sharply. But the amount that was imputed to the lowest quintile dropped to $911 million in 2002, which is about half of what this quintile should have received, given the 44 percent decline in the total amount of welfare income imputed.

Could this misallocation of imputed welfare help to explain why the SIPP's estimate of aggregate income in the lowest quintile declined relative to the CPS? Apparently not. Even in the lowest quintile, cash welfare in 2002 was a very minor source of income, accounting for barely more than 1 percent of total income in that quintile (see Table VI.13). Furthermore, a review of other sources indicates that welfare was peculiar with respect to the shift over time in the proportion of total imputed income that was allocated to the highest quintile. Between 1992 and 2002, the proportion of imputed welfare that went to the highest quintile grew from 1.5 percent to 38.5 percent (Table VI.20). SSI shows a sharp drop in the proportion of imputed income allocated to the lowest quintile between 1993 and 1997, from 56 percent to 36 percent, but the 20 percent that shifted was distributed in successively smaller proportions across quintiles 2 through 5. The increase in the proportion allocated to the highest quintile was only 2 percentage points, and that was largely reversed in 2002. The remaining sources show fairly

consistent proportions allocated to each quintile over time. For total income, the proportion allocated to the lowest quintile did not deviate by more than 0.3 percentage points from the 1992 proportion while the proportion allocated to the highest quintile also dropped slightly between 1992 and 2002.

In sum, while there appears to be a problem in the imputation of welfare income in the 2001 panel, and there may be a problem with the imputation of SSI benefits as well, neither of these problems nor any other evident change in imputation outcomes in the SIPP can explain why the amount of aggregate income among persons in the lowest family income quintile declined in comparison to the CPS. This unexplained decline in aggregate income—relative to the CPS—among families in the bottom fifth of the income distribution will remain of interest as we turn to an examination of SIPP and CPS estimates of trends in poverty.

C. POVERTY RATES

Trends in monthly poverty rates estimated from four SIPP panels were presented in Chapter V to document the discontinuities that exist between the end of one panel and the beginning of the next. We drew three main conclusions. First, a substantial portion of the observed discontinuity between successive panels can be attributed to atypically high poverty rates in the first wave of each panel since the 1996 redesign. Second, people who move into the population between the beginning and end of a SIPP panel and are largely unrepresented until the next panel starts could account for a significant part of the remaining discontinuity between panels. Third, the shift to collecting gross rather than net Social Security payments in the 2004 panel had a pronounced impact on elderly poverty in that panel. All of this was evident from an examination of SIPP monthly poverty rates in isolation from other poverty data. But to understand other aspects of the measurement of economic well-being in the SIPP, it is helpful to compare the SIPP poverty estimates with those from the CPS, which represent the official estimates of

poverty in the U.S. We begin with a comparison of trends for the population as a whole and then turn to poverty rates within broad age groups, as we did in the preceding chapter.

1. Poverty Trends in the SIPP and CPS

The SIPP monthly poverty rates for January 1992 through December 2004, presented in Chapter V, are repeated in Figure VI.1 along with annual poverty rates from the CPS for all 13 years and annual poverty rates from the SIPP for those years with complete data.[12] Monthly poverty rates run higher than annual poverty rates because families' annual incomes are not received in uniform, monthly amounts, typically. Even families with annual incomes several times the poverty level can have months with so little income that they would be classified as poor in those months. More commonly, though, monthly poverty rates are boosted by families with annual incomes between 100 and 200 percent of poverty but with interruptions in earnings or cash transfers during the year.

The relationship between SIPP- and CPS-based estimates of poverty shifted with the 1996 SIPP panel. Prior to the 1996 panel, SIPP annual poverty rates ran two to three percentage points below the CPS annual rates.[13] In the 1996 SIPP panel, monthly poverty estimates exceeded the CPS-based annual poverty estimates for nearly the entire reference period of the

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[12] Annual poverty rates in the SIPP were estimated for the population represented by the cross-sectional sample in December of each year, and they reflect the calendar year income of the members of each sample family in that month and the poverty threshold for a family of that size and composition. Calendar year estimates were not produced for 1996 because the late start of the 1996 panel meant that two of the four rotation groups were missing one or two months at the beginning of the year. Calendar year estimates were not produced for the final year of each panel (and for the 2004 calendar year as well) because three of the four rotation groups were not present in December of that year.

[13] The 1992 panel is consistent with earlier SIPP panels in the relationship between SIPP and CPS annual poverty. For example, Census Bureau analysis of data from the 1987 and 1988 SIPP panels obtained annual poverty rates that were 2.3 to 2.6 percentage points below the corresponding CPS poverty rates for the nonelderly population and 3.6 percentage points below the CPS poverty rate for the elderly (U.S. Census Bureau 1991). The Census Bureau's estimates of SIPP annual poverty rates accounted for month-to-month changes in family composition and the associated poverty thresholds whereas the estimates presented in this report fix the family composition at the end of the year, similar to the CPS. Accounting for changes in family composition would tend to increase the gap between the SIPP and CPS estimates of the annual poverty rate.

SIPP, with differences running as high as two to three percentage points—particularly in the first months of the panel. Over the course of the panel, monthly poverty rates declined in step with the CPS-based poverty rates, and the SIPP annual poverty rates did the same, but the SIPP annual rates were less than two percentage points below the CPS rates.

In the 2001 panel, SIPP monthly poverty rates continued to exceed the CPS annual rates but by an even bigger margin, on average, that they did in the 1996 panel. The largest differences were again observed in the early months of the panel. Unlike the 1996 panel, however, the monthly poverty rates remained relatively flat over the course of the panel while the CPS annual poverty rates showed a steady if slow increase from 2000 through 2004. The SIPP annual rate was nearly identical to the CPS annual rate in 2001 but dropped slightly in 2002 while the CPS rate rose. On average, the SIPP annual rates were only 0.5 percentage points below the CPS poverty rate over the two years, reflecting a substantial shift since the early 1990s in the relative magnitudes of estimated poverty in the two surveys. Initial estimates from the 2004 panel once again show large differences between the SIPP monthly and CPS annual poverty rates in the initial months of the panel, very much like the 2001 panel.

That the annual poverty rate measured in the 1992 SIPP panel should be appreciably lower than the CPS poverty rate is consistent with that SIPP panel's greater effectiveness in capturing income among low-income families, documented earlier in this chapter. A possible explanation for the subsequent convergence between SIPP and CPS annual poverty rates, also supported by findings presented earlier in this chapter, is that the gap between the two surveys' collection of income from low-income families narrowed. Whether this was due to a reduction in effectiveness on the part of the SIPP or to gains on the part of the CPS cannot be discerned from the data, which tell us only that aggregate income in the bottom quintile of each survey's family income distribution rose more rapidly in the CPS than the SIPP.

While this explanation fits some of what we see in Figure VI.1, it does not explain the divergent trends in the two surveys during the period covered by the 2001 panel. Building on our findings from Chapter V, however, we suggest that the SIPP trends reflect a combination of the true underlying trends in poverty and the SIPP's declining representation of segments of the low-income population over the life of each panel. During the period covered by the 1996 SIPP panel, poverty in the U.S. declined sharply, due to a booming economy. The 1996 SIPP panel captured this decline, but the tendency for SIPP poverty rates to decline within a panel amplified the true downward trend, causing the SIPP poverty rate to decline more rapidly than the CPS poverty rate. The 2001 panel tells a different story. With the collapse of the 1990s boom, poverty rates began to rise again. This time the secular trend and the SIPP within-panel trend ran counter to one another. The SIPP poverty rate fell slightly because the survey's capture of the modest secular rise in poverty was more than offset by the within-panel decline in measured poverty. It is too early to tell how the 2004 panel will compare to the CPS over its length, as only four waves have been released to date (the fourth after the estimates in Figure VI.1 were prepared). Given that the secular trend during this period was weak, however, we would expect the within-panel trend to dominate the secular trend even more than it did with the 2001 panel, yielding a steeper decline in poverty than we saw with the 2001 panel.

2. Poverty Trends by Age

The relationship between poverty trends in the SIPP and CPS shown in Figure VI.1 is not replicated across all age groups. Children and adults 25 to 39 mirror the patterns for the population as a whole, but younger adults and older adults deviate from these patterns to varying degrees (Figures VI.2 through VI.6).

CPS poverty rates among children declined steadily from 1993 through 2000 and then rose slightly between 2001 and 2003 before leveling off (Figure VI.2). SIPP annual poverty rates

converged with the CPS rates, ultimately rising above the CPS rates in the first year of the 2001 panel. Because of this convergence with the CPS rates, the SIPP annual poverty rates show a more muted downward trend through the 1990s. While the CPS annual poverty rate among children dropped by 6 percentage points between 1993 and 2000, the SIPP annual poverty rate in 2001 is only 3 percentage points below the 1993 poverty rate.[14] Lastly, it appears from the SIPP monthly poverty rates in 2003 and 2004 that the SIPP will show a rise in annual poverty between 2002 and 2004 when the 2004 data become available, but this could be due to a further reduction in the SIPP's capture of income among low-income families between the 2001 and 2004 panels rather than the SIPP's following the CPS trend.

Adults 25 to 39 mirror the CPS and SIPP trends for all ages even more closely than do children, but even here there is one notable difference. The adults show a small rise in the SIPP annual poverty estimate between 2001 and 2002—following the CPS—whereas the child poverty rate was flat over these two years, and the poverty rate for the whole population showed a small decline (Figure V.4). In addition, with the convergence of the SIPP and CPS poverty rates, there is even less variation across the SIPP annual poverty rates for adults than for children. This is particularly striking between 1993 and 1998,when the CPS annual poverty rate declines by nearly 2 percentage points while the SIPP annual poverty rate declines by less than a third that much.

Among young adults 18 to 24 the monthly and annual SIPP poverty rates exhibit much steeper declines than the corresponding CPS poverty rates (Figure V.3). We noted the pronounced within-panel decline in monthly poverty rates in this age group in Chapter V, where we observed that the SIPP's under-representation of new members of the population was

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[14] If we were to produce a SIPP annual poverty rate for 1999 based on the three rotation groups with data for December of that year, we suspect that it would should another 1 to 2 percentage point decline, making the rise in poverty rates between the 1996 and 2001 panels more evident.

strongest among young adults. Attrition, too, is highest at these ages and could play a role in the observed patterns if the corrections incorporated into the cross-sectional weights are indadequate. Young adults also show the most prominent wave 1 effects, which contributes to the downward trend over the life of each panel from 1996 to 2004. Finally, and perhaps most puzzling, there is little indication of a convergence of SIPP and CPS annual poverty rates over the period of the 1990s and early 2000s. The SIPP annual poverty rate is nearly 4 percentage points below the CPS poverty rate in 2002 compared to just over 4 percentage points in 1993.

Adults 40 to 64 and 65 and older show a narrowing of the gap between the SIPP and CPS annual poverty rates between the 1992 and 1996 panels, but there is no further convergence in the 2001 panel in either age group (Figures V.5 and V.6). The monthly SIPP poverty rates are well above the CPS poverty rates in both the 1996 and 2001 panels among adults 40 to 64 but not among the elderly, for whom the relationship between the SIPP and CPS poverty rates differs in a number of respects from that of the other age groups. In 1992 the SIPP annual poverty rate was only two-thirds the CPS poverty rate, and even the monthly poverty rates were 3 percentage points below the CPS poverty rate. The monthly and annual SIPP poverty rates trended upwards during the 1992 panel while the CPS poverty rates trended down. Both the size of the gap in poverty rates and the difference in trends were unique among the elderly. Between 1996 and 2004 the CPS poverty rate for the elderly was essentially flat—even more so than among young adults—while the SIPP monthly and annual rates trended down in both panels. As we explained in Chapter V, the continuation of the downward trend between the 2001 and 2004 panels— unique among the elderly—is due to a change in how the SIPP collects SSA payment amounts, which would have increased Social Security payments among elderly beneficiaries.

Users of either the SIPP or the CPS to study economic well-being among the elderly should be especially concerned about the information conveyed by Figure VI.6. First, the essentially

flat CPS poverty rates from 1995 through 2004, when the country experienced a prolonged economic boom followed by a recession, run counter to what we see in every other age group. If the elderly relied entirely on transfer payments that were indexed for inflation, the flat trend might be believable, but this description of the elderly overlooks their other sources of income, and it fails to explain how the elderly poverty rate could decline by nearly three percentage points before the economic expansion gathered strength.[15] Second, the decline in the SIPP poverty rates in the 1996 panel is more consistent with the state of the economy than the flat CPS poverty rates, but if the downward trend in the SIPP poverty rates is due to the economy, what explains the downward trend in the 2001 panel? Third, neither attrition nor population dynamics would be expected to induce much of a downward trend in SIPP poverty rates among the elderly because attrition rates are very low for the elderly, and movement into the elderly population from outside the SIPP universe is almost negligible. Fourth, any such explanations of the downward trend in SIPP poverty rates in the 1996 and 2001 panels are contradicted sharply by the reverse trend in the 1992 SIPP panel. Users of either the SIPP or the CPS must be left to wonder what to make of these divergent trends—both within and across the two surveys.

D. CONCLUSION

The findings presented in the first part of this chapter raise serious concerns about using the CPS to examine issues related to reliance on Social Security income and, more generally, the sources of financial support among retired workers. The SIPP's greater effectiveness in capturing income from multiple sources among Social Security retired workers supports the

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[15] Note, however, that, compared to the SIPP, the CPS finds a greater proportion of Social Security beneficiaries with no other income besides their Social Security payments. Other things being equal, this would induce a difference between CPS and SIPP trends in poverty.

ORES analysts' preference for the SIPP over the CPS and demonstrates an important way in which the SIPP appears to provide a better vehicle for policy analysis.

Across all age groups—but particularly children and the elderly—the SIPP has continued to identify more sources of family income than the CPS. Among the elderly, the frequency of multiple reported sources grew over time in the SIPP but not the CPS. At younger ages, however, the frequency of multiple reported sources declined over time in both surveys, although somewhat more so in the CPS than the SIPP.

With respect to income amounts, however, the SIPP has lost ground to the CPS since the initial SIPP panel. From 1993 on, the most significant losses have occurred in the bottom income quintile, where the SIPP has historically performed best relative to the CPS. In 1993 the SIPP captured 20 percent more aggregate income from this income than did the CPS. By 2002, however, the SIPP's advantage had fallen to just 6 percent. These losses were distributed across most income sources. Only for SSI, welfare and pensions did the SIPP maintain or improve its advantage.

The transition to computer-based data collection appears to have been more beneficial to the CPS than the SIPP. The CPS estimate of total income improved by nearly 4 percentage points relative to the benchmark in the year that computer-assisted interviewing was introduced (reference year 1993) and remained slightly above that level over the next three years. The SIPP estimate of total income improved by a percentage point when computer-assisted interviewing was introduced in 1996, but Roemer's data end in that year, so we cannot tell if the SIPP maintained that level of coverage relative to the benchmark.

The proportion of income that is imputed rose substantially in both surveys between 1993 and 2003. Three sources of income in the SIPP experienced particularly large increases. While there was evidence of a deterioration in the quality of imputations for one or two of these sources

in the SIPP, differences in imputation outcomes between the two surveys do not appear to have played a role in the decline in the SIPP's capture of income among families in the bottom quintile of the income distribution.

The SIPP's reduced capture of income among lower-income families, relative to the CPS, appears to have had an impact on comparative poverty estimates between the two surveys. Over the whole population, the SIPP's annual estimates of the proportion of persons in poverty, which once ran 2 to 3 percentage points below the corresponding CPS poverty rates, converged on the CPS rates between the 1992 and 2001 panels. Differences between the two surveys vary by age group, however, and nowhere are the differences more troubling than among the elderly, where trends not only across the two surveys but within each survey's estimates over time.

While we began the chapter with evidence strongly supporting a preference for the SIPP over the CPS with respect of measures of economic well-being, and we demonstrated that the SIPP has maintained its edge in identifying sources of income, we went on to show that the SIPP has lost ground relative to the CPS in the capture of income amounts. Finally, a comparison of poverty trends in the two surveys raised a number of concerns about the use of *either* survey for the measurement of trends in economic well-being. These concerns are strongest for estimates of the elderly, which makes these findings particularly important for staff in ORES who rely on the SIPP—and, to a lesser extent, the CPS—for a wide range of applications.

TABLE VI.1

SOCIAL SECURITY PAYMENTS AS A PERCENTAGE OF TOTAL PERSONAL
INCOME IN CY2001 AMONG RETIRED WORKERS IN THE 2001 SIPP PANEL
AND THE MARCH 2002 CPS, BY AGE

Characteristic	Total	Age In March 2002		
		Under 65	65 to 74	75 +
		March 2002 CPS		
Annual Social Security Payments as a Percentage of Total Personal Income				
Under 25 percent	12.3	18.5	14.7	8.2
25 to under 50 percent	20.6	25.7	22.6	17.2
50 to under 75 percent	19.6	16.5	19.4	20.5
75 to under 100 percent	25.3	17.7	22.6	30.1
100 percent	22.2	21.5	20.7	24.0
		SIPP 2001 Panel		
Annual Social Security Payments as a Percentage of Total Personal Income				
Under 25 percent	13.7	30.1	14.9	8.7
25 to under 50 percent	26.1	32.1	27.9	22.8
50 to under 75 percent	26.0	15.7	25.9	28.6
75 to under 100 percent	26.5	14.8	23.8	31.9
100 percent	7.7	7.3	7.5	8.0
		Difference (CPS minus SIPP)		
Annual Social Security Payments as a Percentage of Total Personal Income				
Under 25 percent	-1.4	-11.6	-0.2	-0.5
25 to under 50 percent	-5.5	-6.4	-5.3	-5.6
50 to under 75 percent	-6.4	0.8	-6.5	-8.1
75 to under 100 percent	-1.2	2.9	-1.2	-1.8
100 percent	14.5	14.2	13.2	16.0

Source: Mathematica Policy Research, from the 2002 CPS ASEC supplement and
the 2001 SIPP panel.

Note: SIPP estimates are based on observations with 2001 calendar year weights and
present all 12 months of the calendar year. Age is defined as of March 2002 to
match the CPS.

TABLE VI.2

FAMILY SOCIAL SECURITY PAYMENTS AS A PERCENTAGE OF TOTAL FAMILY
INCOME IN CY2001 AMONG RETIRED WORKERS IN THE 2001 SIPP PANEL
AND THE MARCH 2002 CPS, BY AGE

Characteristic	Total	Age In March 2002		
		Under 65	65 to 74	75 +
		March 2002 CPS		
Family Annual Social Security Payments As a Percentage of Total Family Income				
Under 25 percent	20.6	31.1	22.9	15.4
25 to under 50 percent	24.9	30.8	27.5	20.5
50 to under 75 percent	21.3	15.1	21.5	22.6
75 to under 100 percent	20.2	11.6	16.8	26.0
100 percent	13.1	11.4	11.4	15.4
		SIPP 2001 Panel		
Family Annual Social Security Payments As a Percentage of Total Family Income				
Under 25 percent	21.8	42.6	23.0	15.8
25 to under 50 percent	30.8	34.1	34.1	26.5
50 to under 75 percent	25.6	14.2	25.2	28.6
75 to under 100 percent	18.1	7.2	14.2	24.5
100 percent	3.8	1.9	3.5	4.6
		Difference (CPS minus SIPP)		
Family Annual Social Security Payments As a Percentage of Total Family Income				
Under 25 percent	-1.2	-11.5	-0.1	-0.4
25 to under 50 percent	-5.9	-3.3	-6.6	-6.0
50 to under 75 percent	-4.3	0.9	-3.7	-6.0
75 to under 100 percent	2.1	4.4	2.6	1.5
100 percent	9.3	9.5	7.9	10.8

Source: Mathematica Policy Research, from the 2002 CPS ASEC supplement and
the 2001 SIPP panel.

Note: SIPP estimates are based on observations with 2001 calendar year weights and
present all 12 months of the calendar year. Age is defined as of March 2002 to
match the CPS.

TABLE VI.3

DISTRIBUTION OF SOCIAL SECURITY RETIRED WORKERS BY ADDITIONAL SOURCES OF FAMILY INCOME:
CPS AND SIPP, BY AGE, 2001 CALENDAR YEAR

	CPS			SIPP		
Sources of Income in Addition to Social Security	Under 65	65 - 74	75+	Under 65	65 - 74	75+
Any additional source						
Wages	45.9	36.8	18.9	58.8	39.7	19.8
Self-employment	8.1	6.7	3.1	13.5	12.0	5.5
Property income	61.8	65.6	65.2	73.3	79.4	82.8
Pensions	49.5	47.8	45.1	67.2	74.3	70.9
SSI	4.9	3.3	3.4	12.1	6.0	5.7
Welfare	1.1	0.5	0.3	1.8	1.3	1.4
No additional source of income[a]	13.2	12.5	17.6	2.7	3.7	5.4
Only one additional source	26.0	31.0	37.7	17.8	17.0	22.8
Wages	8.0	7.1	3.8	5.1	2.4	1.0
Self-employment	0.7	0.7	0.3	0.5	0.8	0.2
Property income	8.0	14.2	22.8	3.6	6.1	13.6
Pensions	7.6	7.4	9.0	7.5	6.4	6.1
SSI	1.7	1.7	1.8	1.1	1.2	1.8
Welfare	0.1	0.0	0.0	0.0	0.1	0.2
Two additional sources	38.9	41.1	36.5	38.4	47.8	53.8
Property income and pensions	18.1	22.8	27.4	19.6	34.3	46.9
Wages and property income	12.0	11.5	6.1	9.7	6.0	3.6
Wages and pensions	4.4	3.0	1.2	3.5	3.2	1.1
Self-employment and property income	2.0	1.7	0.6	1.8	1.8	0.9
Wages and SSI	0.6	0.4	0.3	1.3	0.6	0.3
All other combinations of two additional sources	1.8	1.6	0.9	2.5	2.0	1.0
Three additional sources	20.0	14.1	7.6	32.7	26.5	15.8
Wages, property income and pensions	15.2	11.2	5.6	23.4	19.8	10.5
Wages, property income and SSI	0.6	0.2	0.4	2.3	0.4	0.3
Wages, self-employment and property income	2.0	1.1	0.5	2.2	1.2	0.5
Property, pensions and self-employment	1.3	1.0	0.7	1.5	3.7	2.0
Wages, pensions and SSI	0.1	0.1	0.0	1.1	0.2	0.1
All other combinations of three additional sources	1.0	0.6	0.3	2.3	1.3	2.5
Four or more additional sources	1.9	1.3	0.6	8.4	5.1	2.2
Wages, property, pensions, and self-employment	1.1	1.1	0.5	4.2	3.0	1.1
Wages, property, pensions, and SSI	0.5	0.1	0.1	2.7	1.3	0.5
All other combinations of four or more sources	0.3	0.1	0.1	1.6	0.8	0.6

Source: Mathematica Policy Research, from the 1993, 1998, and 2002 CPS March and ASEC supplements and the 1992, 1996 and 2001 SIPP panels.

Note: Pension income includes selected lump sum income.

[a] Estimates are larger than in Table VI.2 because other transfers are excluded; see the text.

TABLE VI.4

DISTRIBUTION OF PERSONS BY SOURCES OF FAMILY INCOME: CPS AND SIPP, BY YEAR,
ADULTS 65 AND OLDER

	CPS			SIPP		
Income Sources	1992	1997	2001	1992	1997	2001
Any occurrence of source						
Earnings (wages or SE)	31.4	32.8	33.9	31.8	34.6	36.3
Wages	28.0	30.1	31.1	27.8	29.9	31.2
Self-employment	6.2	5.0	5.2	7.6	8.7	9.0
Property income	72.2	67.3	63.1	82.8	79.1	79.1
Social Security	94.3	92.3	92.3	95.0	95.9	96.9
Pensions	48.8	45.2	43.6	56.3	66.7	70.3
SSI	7.2	5.6	4.8	8.1	9.2	7.6
Welfare	1.2	0.7	0.6	1.4	1.6	1.5
No source of income	0.2	0.9	0.8	0.1	0.1	0.1
Only one source of income	11.7	15.2	17.1	6.3	5.9	5.8
Wages	0.7	1.2	1.5	0.2	0.2	0.2
Self-employment	0.0	0.0	0.1	0.0	0.0	0.0
Property income	0.3	0.4	0.5	0.2	0.1	0.1
Social Security	9.9	12.6	14.0	5.2	4.9	4.9
Pensions	0.2	0.2	0.4	0.1	0.1	0.1
SSI	0.6	0.8	0.6	0.6	0.6	0.6
Welfare	0.1	0.0	0.0	0.0	0.0	0.0
Two sources of income	33.1	33.7	34.6	27.7	22.8	20.4
Social Security and property income	18.4	17.9	16.6	17.5	11.1	8.7
Social Security and pensions	5.3	6.2	7.4	3.0	5.7	6.0
Social Security and SSI	3.1	1.9	1.9	2.5	2.3	1.8
Social Security and wages	3.1	4.1	5.5	1.9	1.6	1.8
All other combinations of two sources	3.3	3.6	3.2	2.8	2.1	2.0
Three sources of income	41.4	38.2	36.5	48.6	48.4	49.8
Social Security, property income and pensions	27.8	24.1	22.0	35.7	36.9	38.4
Social Security, property income and wages	7.3	8.3	8.8	6.3	4.6	4.9
Social security, wages and pensions	1.7	2.0	2.0	0.9	1.7	2.2
Social security, property income and self-employment	1.3	1.1	1.2	1.8	1.2	1.2
All other combinations of three sources	3.3	2.7	2.6	3.8	3.9	3.1
Four sources of income	12.2	11.1	10.0	15.3	19.9	20.5
Social Security, property, pensions and wages	8.6	8.3	7.7	10.8	13.6	14.4
Social Security, property, pensions and self-employ.	1.3	0.8	0.8	1.3	2.5	2.8
Social Security, property, wages and self-employ	1.1	0.9	0.7	1.4	1.4	1.0
All other combinations of four sources	1.2	1.1	0.9	1.8	2.5	2.2
Five or more sources	1.4	0.9	0.9	2.0	2.9	3.5

Source: Mathematica Policy Research, from the 1993, 1998, and 2002 CPS March and ASEC supplements and the 1992,
1996 and 2001 SIPP panels.

Note: Pension income includes selected lump sum income.

TABLE VI.5

DISTRIBUTION OF PERSONS BY SOURCES OF FAMILY INCOME: CPS AND SIPP, BY YEAR,
ADULTS 40 TO 64

Income Sources	CPS			SIPP		
	1992	1997	2001	1992	1997	2001
Any occurrence of source						
Earnings (wages or SE)	89.9	90.5	89.9	90.6	91.6	92.0
Wages	86.4	87.3	86.8	85.4	86.7	87.0
Self-employment	15.7	13.9	12.8	21.5	22.6	22.3
Property income	68.4	65.9	63.0	79.2	76.6	74.7
Social Security	18.6	17.6	17.3	19.1	20.1	20.2
Pensions	15.0	12.4	11.8	17.0	21.8	20.6
SSI	4.3	4.3	4.2	5.1	6.7	7.2
Welfare	3.3	2.0	1.3	4.5	3.9	2.7
No source of income	1.0	1.2	1.5	0.6	0.5	0.5
Only one source of income	20.4	22.9	26.1	12.3	12.4	14.3
Wages	16.1	18.5	21.1	8.9	9.8	11.2
Self-employment	0.9	0.8	1.0	0.8	0.7	1.0
Property income	0.6	0.6	0.8	0.7	0.3	0.4
Social Security	1.3	1.6	1.8	0.9	0.6	0.6
Pensions	0.2	0.2	0.3	0.1	0.2	0.3
SSI	0.7	0.8	0.9	0.5	0.5	0.6
Welfare	0.6	0.3	0.2	0.5	0.3	0.1
Two sources of income	51.2	52.5	51.1	51.5	48.5	50.1
Wages and property income	39.5	40.8	39.9	40.3	37.5	37.0
Self-employment and property income	1.6	1.7	1.3	3.2	2.5	2.5
Wages and self-employment	2.0	1.9	2.0	1.8	1.9	2.2
Wages and Social Security	2.1	2.7	2.9	1.2	1.2	1.4
All other combinations of two sources	6.1	5.5	5.0	5.1	5.4	7.0
Three sources of income	21.2	18.6	17.1	26.7	27.2	26.4
Wages, property income and self-employment	7.7	7.2	6.0	11.3	11.5	11.0
Wages, property income and pensions	4.4	3.7	3.5	4.8	5.9	5.8
Wages, property income and Social Security	3.7	3.5	3.4	3.6	2.8	3.1
Property income, Social Security and pensions	1.8	1.3	1.4	2.5	2.0	1.8
All other combinations of three sources	3.6	3.0	2.8	4.6	5.1	4.8
Four sources of income	5.6	4.4	4.0	7.8	9.6	8.9
Wages, property income, Social Security and pensions	3.0	2.7	2.3	4.1	4.6	4.3
Wages, property income, self-employ. and pensions	0.8	0.5	0.5	1.1	1.6	1.4
All other combinations of four sources	1.8	1.2	1.2	2.6	3.4	3.2
Five or more sources of income	0.6	0.4	0.4	1.0	1.7	1.9

Source: Mathematica Policy Research, from the 1993, 1998, and 2002 CPS March and ASEC supplements and the 1992,
1996 and 2001 SIPP panels.

Note: Pension income includes selected lump sum income.

TABLE VI.6

DISTRIBUTION OF PERSONS BY SOURCES OF FAMILY INCOME: CPS AND SIPP, BY YEAR,
ADULTS 18 TO 39

Income Sources	CPS			SIPP		
	1992	1997	2001	1992	1997	2001
Any occurrence of source						
Earnings (wages or SE)	94.4	94.9	94.9	95.7	96.6	97.6
Wages	92.1	93.3	93.2	93.1	94.1	94.9
Self-employment	12.2	9.9	9.7	17.2	18.6	17.1
Property income	58.4	55.0	51.8	73.6	69.6	68.4
Social Security	8.1	7.8	7.2	9.7	10.1	9.6
Pensions	5.2	4.0	3.4	6.1	8.5	7.5
SSI	2.9	3.5	2.9	3.9	5.8	5.9
Welfare	6.8	4.3	2.3	8.1	6.8	4.6
No source of income	1.5	1.8	2.4	0.7	0.5	0.6
Only one source of income	30.5	34.1	37.9	17.2	19.1	21.7
Wages	26.8	31.3	35.3	14.3	16.9	20.0
Self-employment	0.8	0.7	0.9	0.8	0.7	0.7
Property income	0.3	0.4	0.5	0.3	0.3	0.3
Social Security	0.4	0.4	0.5	0.2	0.2	0.1
Pensions	0.0	0.1	0.0	0.0	0.0	0.0
SSI	0.3	0.4	0.4	0.1	0.3	0.2
Welfare	1.9	0.9	0.4	1.5	0.8	0.3
Two sources of income	52.1	51.1	48.5	58.2	54.6	54.3
Wages and property income	42.7	42.5	40.6	49.4	45.3	45.9
Wages and self-employment	2.3	2.1	2.3	1.9	2.6	2.4
Wages and Social Security	1.5	1.8	2.0	1.0	1.0	1.0
Self-employment and property income	1.2	0.8	0.7	1.6	1.3	1.5
Wages and welfare	2.4	1.9	1.0	2.6	2.1	1.4
All other combinations of two sources	2.0	2.1	1.8	1.7	2.2	2.0
Three sources of income	12.8	10.7	9.4	18.6	19.1	17.9
Wages, property income and self-employment	6.3	5.2	4.7	10.4	10.6	9.6
Wages, property income and pensions	1.7	1.1	1.1	1.8	2.4	2.3
Wages, property income and Social Security	1.9	1.9	1.6	2.3	1.8	1.7
All other combinations of three sources	3.0	2.5	2.1	4.2	4.3	4.3
Four sources of income	2.7	2.0	1.6	4.6	5.5	4.4
Wages, property income, Social Security and pensions	1.3	0.9	0.9	2.1	1.9	1.7
Wages, property income, Social Security and SSI	0.2	0.2	0.2	0.4	0.7	0.7
All other combinations of four sources	1.2	0.9	0.6	2.1	2.9	2.0
Five or more sources of income	0.3	0.3	0.2	0.8	1.2	1.3

Source: Mathematica Policy Research, from the 1993, 1998, and 2002 CPS March and ASEC supplements and the 1992,
1996 and 2001 SIPP panels.

Note: Pension income includes selected lump sum income.

TABLE VI.7

DISTRIBUTION OF PERSONS BY SOURCES OF FAMILY INCOME: CPS AND SIPP, BY YEAR,
CHILDREN UNDER 18

Income Sources	CPS			SIPP		
	1992	1997	2001	1992	1997	2001
Any occurrence of source						
Earnings (wages or SE)	90.1	92.2	93.7	91.7	93.9	96.0
Wages	87.3	90.1	91.3	87.9	90.6	91.9
Self-employment	13.3	11.3	11.6	19.5	20.6	20.4
Property income	54.5	52.5	52.0	67.1	65.6	65.6
Social Security	7.4	8.0	7.1	9.2	9.9	10.3
Pensions	3.7	3.1	3.0	4.2	7.2	6.7
SSI	3.3	4.0	3.2	4.6	6.9	6.7
Welfare	14.0	9.1	4.7	16.3	12.8	8.5
No source of income	1.7	2.4	2.8	0.9	1.0	1.1
Only one source of income	31.0	32.7	35.5	19.4	19.4	20.9
Wages	24.0	28.2	32.3	13.5	15.9	18.5
Self-employment	0.9	0.8	1.0	1.0	0.8	1.0
Property income	0.3	0.2	0.4	0.1	0.2	0.2
Social Security	0.4	0.6	0.5	0.4	0.3	0.2
Pensions	0.0	0.0	0.1	0.0	0.1	0.0
SSI	0.2	0.3	0.3	0.0	0.2	0.2
Welfare	5.1	2.4	0.9	4.3	2.0	0.8
Two sources of income	51.6	51.4	49.1	55.3	52.3	52.4
Wages and property income	39.0	39.6	39.6	42.4	40.5	40.8
Wages and self-employment	2.3	2.3	2.5	2.1	2.6	2.8
Wages and welfare	4.5	3.7	1.8	4.8	3.7	2.7
Self-employment and property income	1.5	1.1	1.1	2.5	1.9	2.4
Wages and Social Security	1.5	2.0	2.0	1.1	1.2	1.1
All other combinations of two sources	2.9	2.8	2.2	2.5	2.6	2.5
Three sources of income	13.6	11.7	10.9	19.9	21.0	19.9
Wages, property income and self-employment	7.0	6.1	5.8	11.5	11.6	10.9
Wages, property income and pensions	1.2	1.0	1.0	1.1	1.8	2.0
Wages, property income and Social Security	1.9	1.7	1.6	2.1	1.7	1.8
Wages, property income and welfare	1.0	0.5	0.4	2.0	1.5	1.2
All other combinations of three sources	2.6	2.4	2.1	3.2	4.3	4.1
Four sources of income	1.8	1.7	1.0	3.8	5.1	4.6
Wages, property income, Social Security and pensions	0.6	0.6	0.5	1.2	1.3	1.5
All other combinations of four sources	1.3	1.1	0.4	2.6	3.9	3.1
Five or more sources of income	0.2	0.1	0.1	0.8	1.2	1.2

Source: Mathematica Policy Research, from the 1993, 1998, and 2002 CPS March and ASEC supplements and the 1992,
1996 and 2001 SIPP panels.

Note: Pension income includes selected lump sum income.

TABLE VI.8

SIPP AGGREGATE INCOME AS A PERCENTAGE OF MARCH CPS AGGREGATE INCOME, 1990 TO 1996

Income Source	Survey Reference Year						
	1990	1991	1992	1993	1994	1995	1996
Total Income	**97.5**	**98.3**	**96.5**	**94.8**	**91.3**	**92.0**	**92.5**
Earnings	**96.3**	**97.7**	**95.2**	**92.2**	**89.6**	**91.2**	**92.0**
Wages and salaries	94.0	93.9	92.2	89.3	86.8	87.1	89.3
Self-employment	124.2	144.9	132.6	129.4	128.6	154.6	131.4
Property Income	**104.0**	**94.7**	**95.7**	**110.3**	**91.5**	**80.8**	**80.9**
Interest	84.5	82.9	83.6	77.9	71.0	61.1	59.9
Dividends	160.9	116.6	102.6	176.6	114.5	105.1	85.9
Rent and royalties	133.1	122.4	130.1	139.9	125.0	117.9	139.9
Transfers	**105.0**	**104.3**	**106.5**	**104.4**	**98.1**	**97.5**	**97.7**
Social Security and Railroad Retirement	107.2	107.2	107.5	105.6	98.4	98.8	95.9
SSI	105.3	104.7	112.5	98.5	110.3	111.8	120.4
Family Assistance	101.6	102.7	96.8	116.6	119.4	121.7	112.7
Other cash welfare	95.7	130.2	99.6	95.4	75.3	100.1	141.6
Unemployment Compensation	97.0	101.2	113.2	111.2	93.7	82.9	85.0
Worker's Compensation	75.8	69.0	83.2	76.9	74.4	73.9	114.4
Veterans' payments	112.4	95.1	102.3	90.6	89.3	76.6	81.4
Pensions	**95.2**	**102.8**	**102.2**	**103.9**	**102.0**	**108.4**	**111.9**
Private pensions	93.4	89.0	89.9	98.1	101.1	106.0	105.4
Federal employee pensions	91.8	108.7	100.1	104.4	110.0	113.6	93.6
Military retirement	102.1	108.7	112.2	121.8	114.0	121.0	174.6
State and local employee pensions	97.6	122.9	124.8	114.8	129.2	125.9	118.3

Source: Tables VI.9 and VI.10.

TABLE VI.9

SURVEY INCOME AS A PERCENTAGE OF INDEPENDENT (NIPA) BENCHMARKS: SIPP, 1990 TO 1996

Income Source	Survey Reference Year						
	1990	1991	1992	1993	1994	1995	1996
Total Income	**87.1**	**87.9**	**84.9**	**86.9**	**84.8**	**84.8**	**85.7**
Earnings	**89.6**	**90.9**	**86.9**	**87.4**	**86.4**	**86.7**	**88.4**
Wages and salaries	90.1	90.5	88.1	89.0	88.5	88.3	91.0
Self-employment	85.1	94.6	77.7	76.2	70.5	75.0	69.1
Property Income	**65.3**	**60.2**	**60.5**	**77.0**	**60.1**	**58.9**	**56.6**
Interest	56.7	56.6	56.5	62.1	51.3	51.3	50.2
Dividends	65.8	53.3	50.5	95.9	62.5	65.8	51.0
Rent and royalties	113.1	90.7	90.8	91.2	81.0	69.2	82.0
Transfers	**92.0**	**90.5**	**89.0**	**89.4**	**87.8**	**87.0**	**86.3**
Social Security and Railroad Retirement	97.1	95.0	93.6	92.7	90.8	90.9	87.9
SSI	83.1	88.6	84.9	82.9	86.0	86.2	101.4
Family Assistance	75.6	76.4	69.9	89.1	87.3	85.8	76.3
Other cash welfare	81.9	100.9	81.3	96.6	79.2	95.9	114.0
Unemployment Compensation	77.5	83.5	82.4	86.3	84.3	75.7	69.4
Worker's Compensation	67.8	61.5	68.6	59.2	57.8	51.2	71.7
Veterans' payments	83.1	78.8	79.5	77.5	75.6	72.7	72.9
Pensions	**84.6**	**87.9**	**84.9**	**86.9**	**84.8**	**84.8**	**85.7**
Private pensions	91.8	85.7	86.7	96.9	103.8	99.5	98.1
Federal employee pensions	75.9	89.8	84.6	86.3	89.0	88.5	75.6
Military retirement	87.4	92.0	83.4	87.3	87.1	85.4	101.6
State and local employee pensions	76.8	84.2	80.1	76.6	77.0	74.3	67.8

Source: Roemer (2005), table 3b; data from the 1990, 1991, 1993 and 1996 SIPP panels.

Note: Survey estimates are based on the Census Bureau's internal data, without top-coding; however, there are limits on the amount of income that can be reported, which vary by source.

TABLE VI.10

SURVEY INCOME AS A PERCENTAGE OF INDEPENDENT (NIPA) BENCHMARKS: MARCH CPS, 1990 TO 1996

Income Source	Survey Reference Year						
	1990	1991	1992	1993	1994	1995	1996
Total Income	**89.3**	**89.4**	**88.0**	**91.7**	**92.9**	**92.2**	**92.6**
Earnings	**93.0**	**93.0**	**91.3**	**94.8**	**96.4**	**95.1**	**96.1**
Wages and salaries	95.9	96.4	95.6	99.7	101.9	101.4	101.9
Self-employment	68.5	65.3	58.6	58.9	54.8	48.5	52.6
Property Income	**62.8**	**63.6**	**63.2**	**69.8**	**65.7**	**72.9**	**70.0**
Interest	67.1	68.3	67.6	79.7	72.3	83.9	83.8
Dividends	40.9	45.7	49.2	54.3	54.6	62.6	59.4
Rent and royalties	85.0	74.1	69.8	65.2	64.8	58.7	58.6
Transfers	**87.6**	**86.8**	**83.6**	**85.6**	**89.5**	**89.2**	**88.3**
Social Security and Railroad Retirement	90.6	88.6	87.1	87.8	92.3	92.0	91.7
SSI	78.9	84.6	75.5	84.2	78.0	77.1	84.2
Family Assistance	74.4	74.4	72.2	76.4	73.1	70.5	67.7
Other cash welfare	85.6	77.5	81.6	101.3	105.2	95.8	80.5
Unemployment Compensation	79.9	82.5	72.8	77.6	90.0	91.3	81.6
Worker's Compensation	89.5	89.1	82.5	77.0	77.7	69.3	62.7
Veterans' payments	73.9	82.9	77.7	85.5	84.7	94.9	89.6
Pensions	**88.9**	**85.5**	**83.1**	**83.6**	**83.1**	**78.2**	**76.6**
Private pensions	98.3	96.3	96.4	98.8	102.7	93.9	93.1
Federal employee pensions	82.7	82.6	84.5	82.7	80.9	77.9	80.8
Military retirement	85.6	84.6	74.3	71.7	76.4	70.6	58.2
State and local employee pensions	78.7	68.5	64.2	66.7	59.6	59.0	57.3

Source: Roemer (2005), table 2b; data from the 1991 through 1997 March supplements to the CPS.

Note: Survey estimates are based on the Census Bureau's internal data, without top-coding; however, there are limits on the amount of income that can be reported, which vary by source.

TABLE VI.11

COMPARISON OF SIPP AND CPS AGGREGATE AMOUNTS OF INCOME FOR SELECTED YEARS BY SOURCE:
ALL FAMILY INCOME QUINTILES

Income Source	SIPP Aggregate ($Billions)			CPS Aggregate ($Billions)			SIPP as Percent of CPS		
	1993	1997	2002	1993	1997	2002	1993	1997	2002
Total Income	3,643.5	4,571.0	5,783.0	3,854.8	5,138.0	6,468.4	94.5	89.0	89.4
Wages and Salaries	2,522.1	3,232.2	4,142.5	2,837.1	3,819.8	5,026.3	88.9	84.6	82.4
Self-Employment	341.9	491.2	617.6	213.3	296.7	328.0	160.3	165.6	188.3
Property Income	188.6	168.6	138.8	226.0	344.1	265.1	83.5	49.0	52.3
Social Security and Railroad Retirement	257.7	299.3	371.5	252.0	319.7	389.6	102.2	93.6	95.4
SSI	18.2	28.7	33.9	18.5	22.7	25.8	98.2	126.5	131.5
Welfare	19.9	17.6	9.4	20.4	12.1	6.4	97.6	145.0	146.7
Other Transfers	109.2	69.2	103.3	124.2	126.4	178.1	87.9	54.7	58.0
Pensions	185.9	264.3	365.9	163.2	196.4	249.0	113.9	134.5	147.0

Source: Mathematica Policy Research, from the 1992, 1996, and 2001 SIPP panels and the 1993, 1998, and 2003 CPS March and ASEC supplements.

Note: All income from families with Armed Forces members is excluded. Pension amounts include lump sum payments requested in both surveys. Other transfers include other cash welfare, unemployment compensation, worker's compensation, and veterans' payments.

TABLE VI.12

COMPARISON OF SIPP AND CPS AGGREGATE AMOUNTS OF INCOME FOR SELECTED YEARS BY SOURCE:
BOTTOM FOUR FAMILY INCOME QUINTILES

Income Source	SIPP Aggregate ($Billions)			CPS Aggregate ($Billions)			SIPP as Percent of CPS		
	1993	1997	2002	1993	1997	2002	1993	1997	2002
Total Income	2,292.0	2,773.8	3,469.3	2,334.6	2,910.3	3,681.7	98.2	95.3	94.2
Wages and Salaries	1,554.9	1,916.8	2,407.0	1,654.6	2,115.1	2,717.2	94.0	90.6	88.6
Self-Employment	134.3	180.5	239.8	96.6	113.2	146.9	139.0	159.5	163.2
Property Income	103.1	99.8	80.3	98.9	131.5	113.9	104.2	75.9	70.5
Social Security and Railroad Retirement	234.2	274.0	336.5	230.2	286.2	352.5	101.8	95.7	95.4
SSI	17.5	27.5	32.1	17.8	21.8	25.0	98.5	125.7	128.5
Welfare	19.5	16.8	8.1	20.1	12.0	6.3	97.0	140.4	128.4
Other Transfers	89.0	55.9	86.4	96.4	94.2	138.6	92.3	59.3	62.4
Pensions	139.5	202.6	279.1	120.0	136.3	181.3	116.3	148.6	153.9

Source: Mathematica Policy Research, from the 1992, 1996, and 2001 SIPP panels and the 1993, 1998, and 2003 CPS March and ASEC supplements.

Note: All income from families with Armed Forces members is excluded. Pension amounts include lump sum payments requested in both surveys. Other transfers include other cash welfare, unemployment compensation, worker's compensation, and veterans' payments.

TABLE VI.13

COMPARISON OF SIPP AND CPS AGGREGATE AMOUNTS OF INCOME FOR SELECTED YEARS BY SOURCE:
LOWEST FAMILY INCOME QUINTILE

Income Source	SIPP Aggregate ($Billions)			CPS Aggregate ($Billions)			SIPP as Percent of CPS		
	1993	1997	2002	1993	1997	2002	1993	1997	2002
Total Income	263.4	318.4	391.8	220.4	283.8	370.5	119.5	112.2	105.7
Wages and Salaries	110.1	140.0	183.3	88.2	125.3	167.6	124.8	111.7	109.4
Self-Employment	9.2	13.2	18.6	3.6	6.2	8.5	257.4	214.7	219.5
Property Income	9.0	10.3	9.5	7.4	9.1	9.1	121.7	112.6	104.7
Social Security and Railroad Retirement	75.0	93.6	107.9	70.0	93.6	123.2	107.2	100.0	87.6
SSI	11.8	16.3	19.2	10.6	13.3	15.2	111.6	122.0	126.6
Welfare	14.4	11.3	5.1	14.5	9.2	4.2	99.0	122.4	119.5
Other Transfers	21.9	12.8	20.4	17.7	17.9	28.7	123.5	71.6	70.9
Pensions	12.0	20.9	27.7	8.4	9.1	14.0	143.6	229.0	198.4

Source: Mathematica Policy Research, from the 1992, 1996, and 2001 SIPP panels and the 1993, 1998, and 2003 CPS March and ASEC supplements.

Note: All income from families with Armed Forces members is excluded. Pension amounts include lump sum payments requested in both surveys. Other transfers include other cash welfare, unemployment compensation, worker's compensation, and veterans' payments.

TABLE VI.14

COMPARISON OF SIPP AND CPS AGGREGATE AMOUNTS OF INCOME FOR SELECTED YEARS BY SOURCE:
SECOND FAMILY INCOME QUINTILE

Income Source	SIPP Aggregate ($Billions)			CPS Aggregate ($Billions)			SIPP as Percent of CPS		
	1993	1997	2002	1993	1997	2002	1993	1997	2002
Total Income	505.0	604.1	753.4	497.6	629.2	774.1	101.5	96.0	97.3
Wages and Salaries	313.2	379.2	481.3	313.0	413.4	513.0	100.1	91.7	93.8
Self-Employment	23.8	36.1	48.6	17.9	23.7	29.9	133.3	152.2	162.4
Property Income	22.9	23.5	19.5	20.4	25.9	21.6	112.4	90.6	90.0
Social Security and Railroad Retirement	76.2	86.0	102.7	78.2	96.4	113.6	97.4	89.3	90.4
SSI	3.2	6.1	6.6	4.1	4.8	5.5	77.8	126.1	121.3
Welfare	2.7	2.7	1.4	3.7	1.9	1.3	72.4	143.5	109.4
Other Transfers	24.5	15.6	23.0	27.4	26.6	39.1	89.5	58.7	58.8
Pensions	38.6	54.9	70.3	33.0	36.5	50.2	116.9	150.5	140.2

Source: Mathematica Policy Research, from the 1992, 1996, and 2001 SIPP panels and the 1993, 1998, and 2003 CPS March and ASEC supplements.

Note: All income from families with Armed Forces members is excluded. Pension amounts include lump sum payments requested in both surveys. Other transfers include other cash welfare, unemployment compensation, worker's compensation, and veterans' payments.

TABLE VI.15

COMPARISON OF SIPP AND CPS AGGREGATE AMOUNTS OF INCOME FOR SELECTED YEARS BY SOURCE:
THIRD FAMILY INCOME QUINTILE

Income Source	SIPP Aggregate ($Billions)			CPS Aggregate ($Billions)			SIPP as Percent of CPS		
	1993	1997	2002	1993	1997	2002	1993	1997	2002
Total Income	669.3	808.0	1,012.1	698.0	861.0	1,090.2	95.9	93.8	92.8
Wages and Salaries	474.2	586.3	726.9	512.3	653.2	845.6	92.6	89.7	86.0
Self-Employment	42.9	51.3	70.0	33.3	33.5	43.6	128.8	153.0	160.5
Property Income	30.3	29.6	22.8	29.9	39.6	32.3	101.5	74.7	70.7
Social Security and Railroad Retirement	50.6	57.9	74.7	51.4	59.4	71.5	98.6	97.4	104.4
SSI	1.5	2.8	3.8	2.0	2.3	2.7	75.6	121.7	139.4
Welfare	1.6	1.5	0.9	1.4	0.6	0.5	114.6	267.2	176.4
Other Transfers	22.2	14.8	23.3	26.2	25.7	36.3	84.6	57.7	64.2
Pensions	46.0	63.9	89.7	41.6	46.7	57.6	110.6	136.9	155.7

Source: Mathematica Policy Research, from the 1992, 1996, and 2001 SIPP panels and the 1993, 1998, and 2003 CPS March and ASEC supplements.

Note: All income from families with Armed Forces members is excluded. Pension amounts include lump sum payments requested in both surveys. Other transfers include other cash welfare, unemployment compensation, worker's compensation, and veterans' payments.

TABLE VI.16

COMPARISON OF SIPP AND CPS AGGREGATE AMOUNTS OF INCOME FOR SELECTED YEARS BY SOURCE:
FOURTH FAMILY INCOME QUINTILE

Income Source	SIPP Aggregate ($Billions)			CPS Aggregate ($Billions)			SIPP as Percent of CPS		
	1993	1997	2002	1993	1997	2002	1993	1997	2002
Total Income	854.2	1,043.4	1,312.1	918.6	1,136.3	1,446.8	93.0	91.8	90.7
Wages and Salaries	657.5	811.3	1,015.5	741.1	923.1	1,191.0	88.7	87.9	85.3
Self-Employment	58.3	79.9	102.6	41.9	49.8	64.9	139.3	160.5	158.1
Property Income	40.9	36.5	28.5	41.3	56.8	50.8	99.0	64.2	56.0
Social Security and Railroad Retirement	32.4	36.5	51.2	30.6	36.9	44.2	105.7	99.1	115.9
SSI	1.0	2.3	2.5	1.1	1.4	1.6	89.5	166.7	152.6
Welfare	0.8	1.3	0.8	0.4	0.3	0.3	180.2	420.1	246.6
Other Transfers	20.4	12.6	19.8	25.1	24.1	34.5	81.2	52.5	57.4
Pensions	42.9	62.9	91.3	37.0	44.1	59.5	115.9	142.9	153.5

Source: Mathematica Policy Research, from the 1992, 1996, and 2001 SIPP panels and the 1993, 1998, and 2003 CPS March and ASEC supplements.

Note: All income from families with Armed Forces members is excluded. Pension amounts include lump sum payments requested in both surveys. Other transfers include other cash welfare, unemployment compensation, worker's compensation, and veterans' payments.

TABLE VI.17

COMPARISON OF SIPP AND CPS AGGREGATE AMOUNTS OF INCOME FOR SELECTED YEARS BY SOURCE:
TOP FAMILY INCOME QUINTILE

Income Source	SIPP Aggregate ($Billions)			CPS Aggregate ($Billions)			SIPP as Percent of CPS		
	1993	1997	2002	1993	1997	2002	1993	1997	2002
Total Income	1,351.5	1,797.2	2,313.7	1,520.2	2,227.6	2,786.7	88.9	80.7	83.0
Wages and Salaries	967.1	1,315.4	1,735.6	1,182.6	1,704.8	2,309.1	81.8	77.2	75.2
Self-Employment	207.7	310.7	377.9	116.7	183.5	181.1	178.0	169.3	208.6
Property Income	85.6	68.8	58.4	127.1	212.6	151.3	67.3	32.4	38.6
Social Security and Railroad Retirement	23.5	25.2	35.1	21.8	33.4	37.1	107.4	75.5	94.5
SSI	0.7	1.2	1.8	0.7	0.8	0.8	91.5	149.0	222.9
Welfare	0.4	0.8	1.3	0.3	0.2	0.1	141.0	509.9	1415.5
Other Transfers	20.3	13.3	16.9	27.8	32.2	39.5	72.9	41.4	42.8
Pensions	46.4	61.7	86.8	43.2	60.2	67.7	107.3	102.6	128.3

Source: Mathematica Policy Research, from the 1992, 1996, and 2001 SIPP panels and the 1993, 1998, and 2003 CPS March and ASEC supplements.

Note: All income from families with Armed Forces members is excluded. Pension amounts include lump sum payments requested in both surveys. Other transfers include other cash welfare, unemployment compensation, worker's compensation, and veterans' payments.

TABLE VI.18

PROPORTION OF INCOME IMPUTED, BY SOURCE, FOR SELECTED YEARS: SIPP AND CPS

Income Source	Survey Reference Year					
	1992	1993	1997	2002	1997	2002
	SIPP Version 1[a]				Version 2[b]	
Total Income	17.7	20.8	24.0	28.6	24.7	29.0
Wages and Salaries	14.7	17.7	20.5	24.9	20.8	25.1
Self-Employment	25.9	29.3	32.7	36.4	32.7	36.4
Property Income	37.9	42.4	42.9	49.7	56.2	59.8
Social Security and Railroad Retirement	18.8	22.6	22.7	28.8	22.9	29.1
SSI	12.5	13.2	16.4	22.6	16.9	23.8
Welfare	12.3	13.8	31.2	32.8	31.2	32.8
Other Transfers	19.9	20.8	33.0	33.6	33.0	33.6
Pensions	19.6	23.7	37.3	47.3	37.3	47.3
	CPS without Whole Person Imputes					
Total Income	12.9	15.6	20.6	26.3		
Wages and Salaries	10.9	13.3	17.6	23.9		
Self-Employment	18.4	25.7	32.0	37.8		
Property Income	31.2	34.3	47.3	57.8		
Social Security and Railroad Retirement	13.6	16.0	20.7	28.1		
SSI	8.1	14.6	11.3	18.7		
Welfare	8.2	11.3	10.8	19.8		
Other Transfers	13.7	14.6	17.2	22.8		
Pensions	15.6	17.1	20.2	28.0		
	CPS with Whole Person Imputes					
Total Income	23.0	23.8	27.8	34.2		
Wages and Salaries	20.6	21.5	24.8	32.0		
Self-Employment	30.1	34.6	39.5	44.7		
Property Income	41.4	42.4	52.8	62.6		
Social Security and Railroad Retirement	24.4	24.1	27.9	35.5		
SSI	19.7	22.9	19.7	28.0		
Welfare	18.7	19.8	18.1	29.2		
Other Transfers	23.6	23.3	23.9	31.4		
Pensions	26.1	24.2	27.0	35.4		

Source: Mathematica Policy Research, from 1992, 1996 and 2001 SIPP panels and the 1993, 1994, 1998 and 2003 CPS March and ASEC supplements.

[a] Incomplete accounting for amounts imputed with recipiency; see the text.
[b] Full accounting for amounts imputed with recipiency.

TABLE VI.19

AMOUNT OF WELFARE INCOME ALLOCATED BY FAMILY INCOME QUINTILE
SIPP AND CPS, SELECTED YEARS
($Millions)

| Survey Reference Year | Family Income Quintile | | | | | Total |
	Lowest	2nd	3rd	4th	Highest	
			SIPP			
1992	1,511	414	236	177	36	2,375
1993	1,794	459	183	153	80	2,669
1997	3,149	962	582	287	287	5,268
2002	911	428	228	242	1,135	2,945
			CPS			
1992	611	339	265	49	70	1,333
1993	1,053	676	270	75	18	2,092
1997	761	268	125	22	24	1,199
2002	627	332	112	47	10	1,127

Source: Mathematica Policy Research, from the 1992, 1996, and 2001 SIPP
panels and the 1993, 1994, 1998, and 2003 CPS March and ASEC supplements.

TABLE VI.20

DISTRIBUTION OF SIPP IMPUTED INCOME BY FAMILY INCOME QUINTILE:
SELECTED SOURCES OF INCOME BY YEAR

| Survey Reference Year | Family Income Quintile | | | | | Total |
	Lowest	2nd	3rd	4th	Highest	
			Welfare			
1992	63.6	17.4	9.9	7.5	1.5	100.0
1993	67.2	17.2	6.8	5.7	3.0	100.0
1997	59.8	18.3	11.0	5.5	5.4	100.0
2002	31.0	14.5	7.7	8.2	38.5	100.0
			SSI			
1992	60.1	14.5	8.3	12.6	4.5	100.0
1993	55.9	18.9	10.1	9.2	5.9	100.0
1997	36.4	27.0	16.1	12.2	8.3	100.0
2002	39.7	25.1	17.5	11.4	6.3	100.0
			Pensions			
1992	6.6	21.9	22.6	25.6	23.3	100.0
1993	6.4	21.7	23.4	24.4	24.1	100.0
1997	7.2	19.5	24.1	23.8	25.4	100.0
2002	6.9	18.2	24.1	26.0	24.8	100.0
			Other Transfers			
1992	17.8	19.8	23.9	18.2	20.3	100.0
1993	19.5	19.8	19.1	19.9	21.5	100.0
1997	12.7	21.6	16.3	19.6	29.8	100.0
2002	15.5	18.4	23.2	20.2	22.7	100.0
		Social Security and Railroad Retirement				
1992	27.2	30.7	17.4	14.8	9.9	100.0
1993	25.7	30.2	19.7	15.1	9.3	100.0
1997	28.0	30.8	19.7	13.3	8.2	100.0
2002	24.4	28.7	22.1	14.7	10.1	100.0
			Wages and Salaries			
1992	4.0	11.5	18.9	24.3	41.3	100.0
1993	4.4	12.7	17.8	25.5	39.6	100.0
1997	4.4	11.6	17.2	25.0	41.8	100.0
2002	4.5	11.0	16.7	25.1	42.7	100.0
			Total Income			
1992	6.7	13.1	17.5	22.0	40.7	100.0
1993	6.8	13.8	17.2	22.6	39.5	100.0
1997	6.6	13.4	16.9	22.5	40.5	100.0
2002	6.4	13.0	17.4	23.1	40.2	100.0

Source: Mathematica Policy Research, from the 1992, 1996 and 2001 SIPP panels.

FIGURE VI.1 SIPP MONTHLY AND ANNUAL POVERTY RATES VERSUS CPS ANNUAL POVERTY RATES, 1992 THROUGH 2004
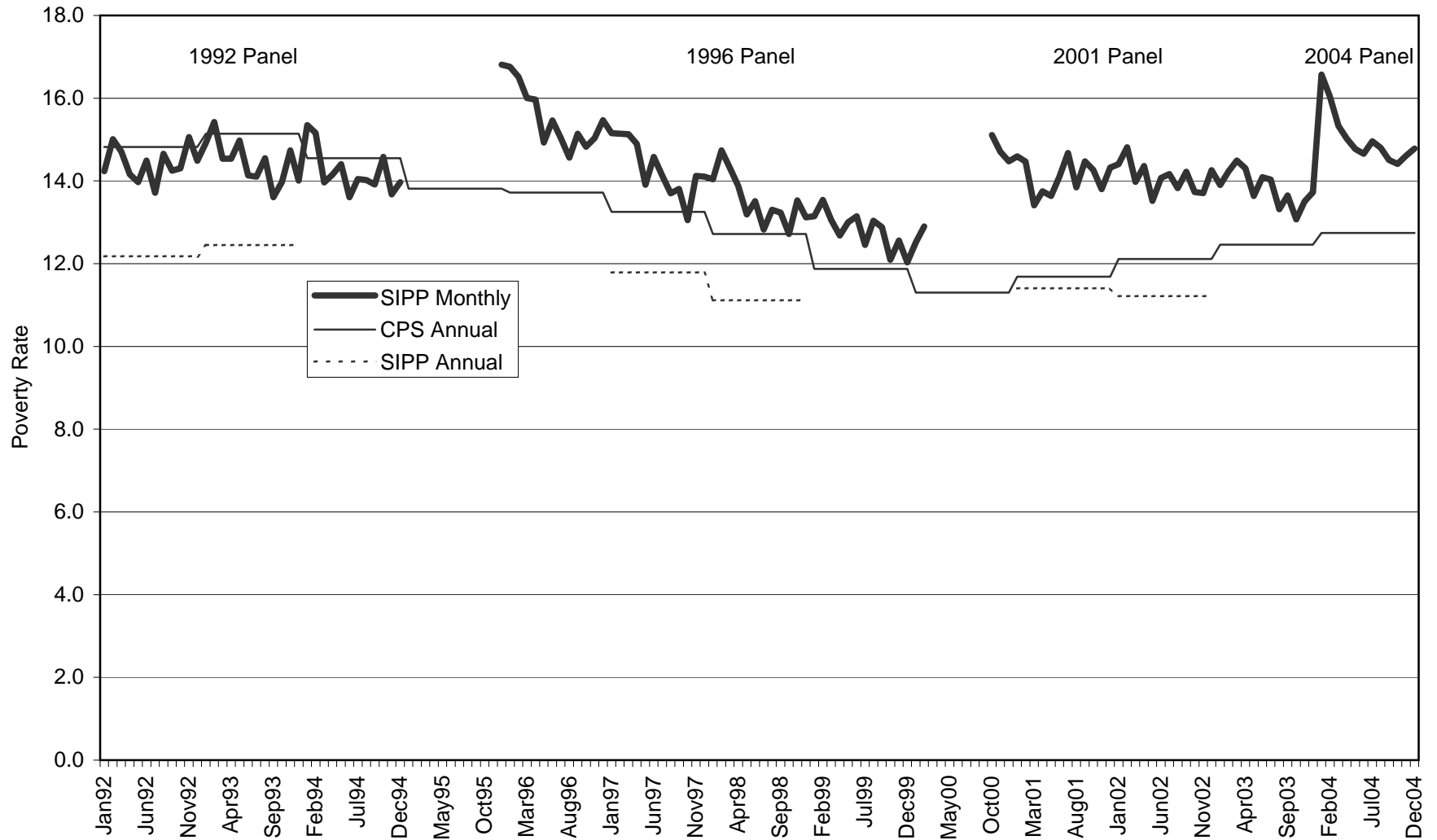
FIGURE VI.2 SIPP MONTHLY AND ANNUAL POVERTY RATES VERSUS CPS ANNUAL POVERTY RATES, 1992 THROUGH 2004, CHILDREN UNDER 18
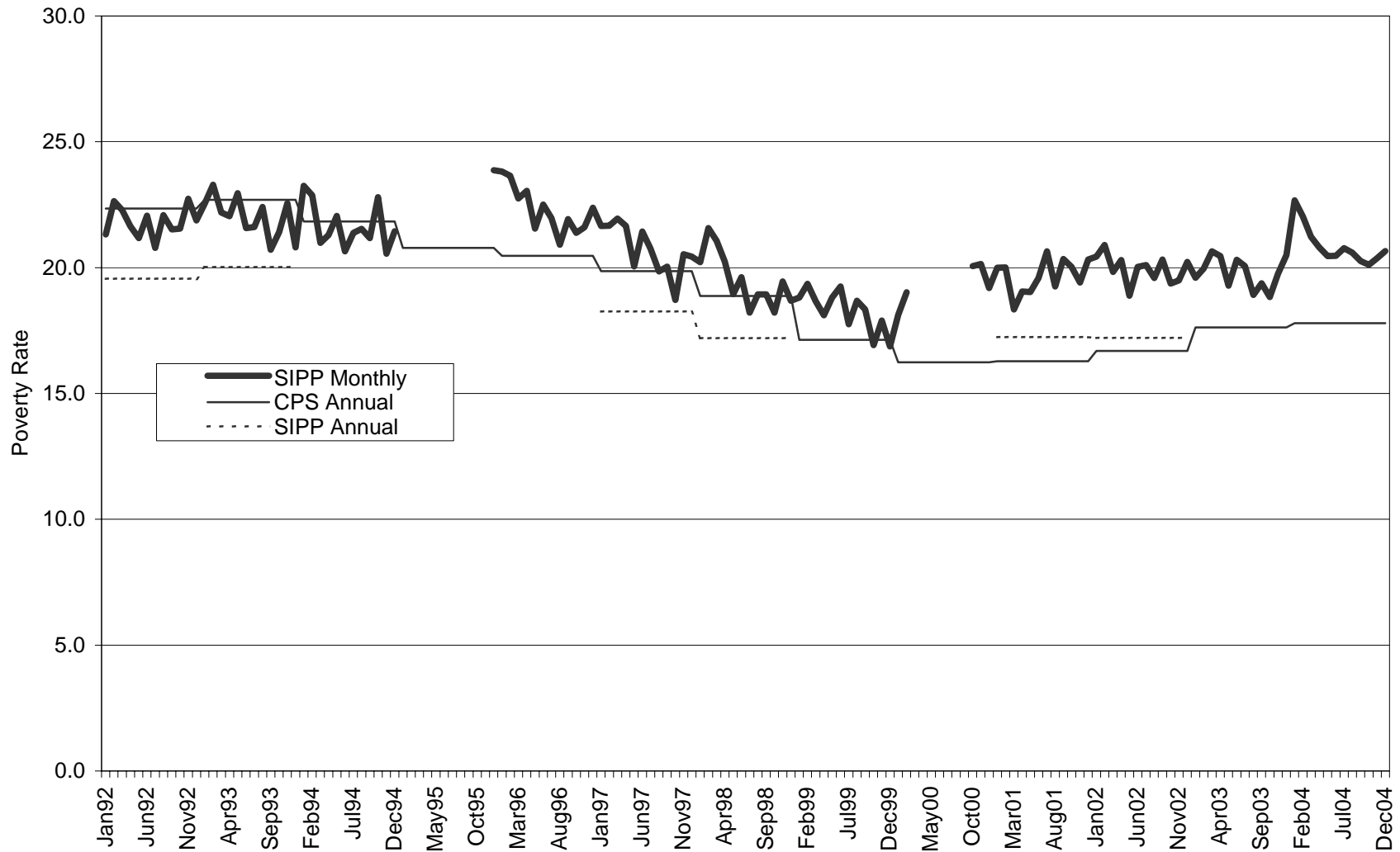
FIGURE VI.3 SIPP MONTHLY AND ANNUAL POVERTY RATES VERSUS CPS ANNUAL POVERTY RATES, 1992 THROUGH 2004, ADULTS 18 TO 24
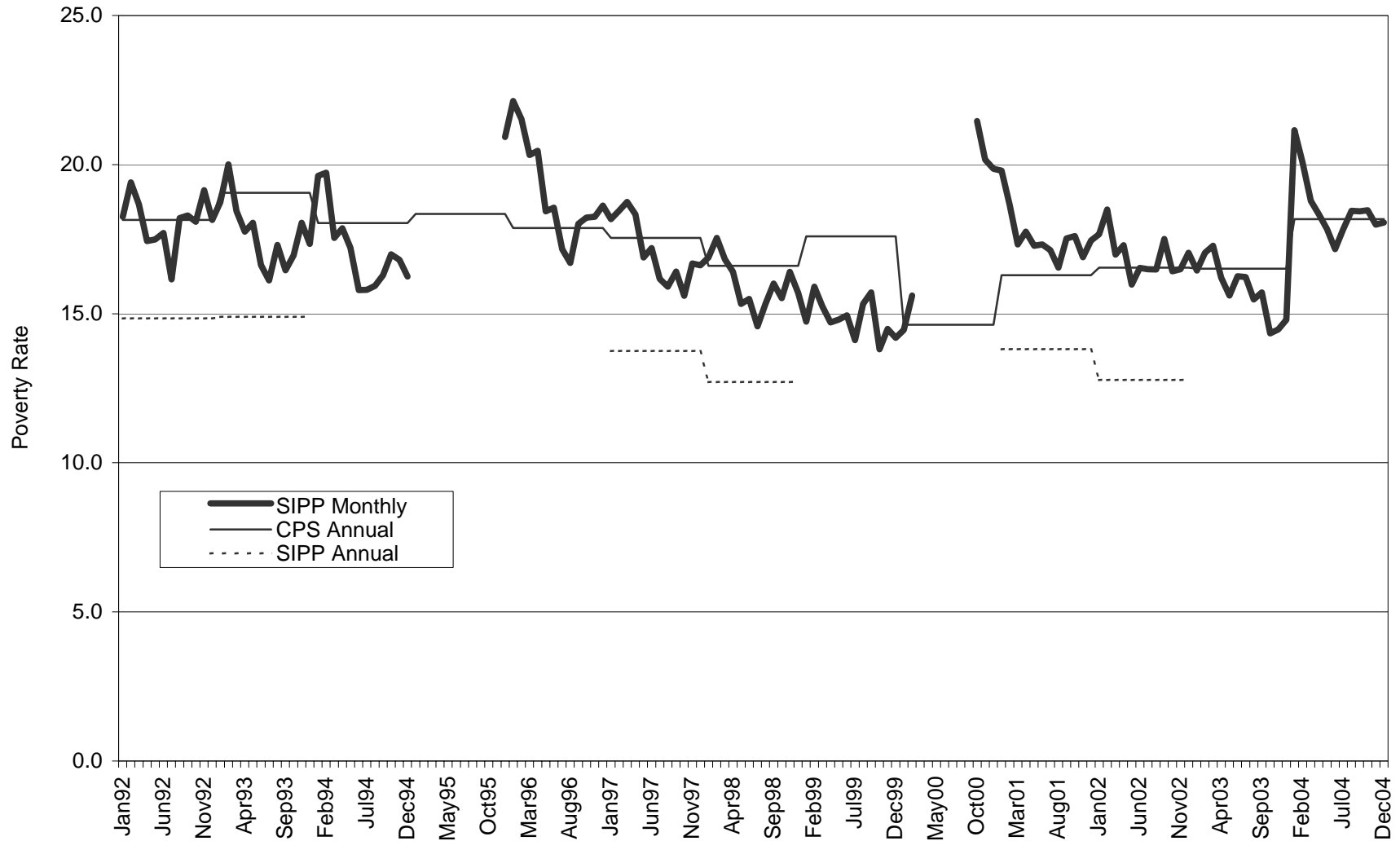
FIGURE VI.4 SIPP MONTHLY AND ANNUAL POVERTY RATES VERSUS CPS ANNUAL POVERTY RATES, 1992 THROUGH 2004, ADULTS 25 TO 39
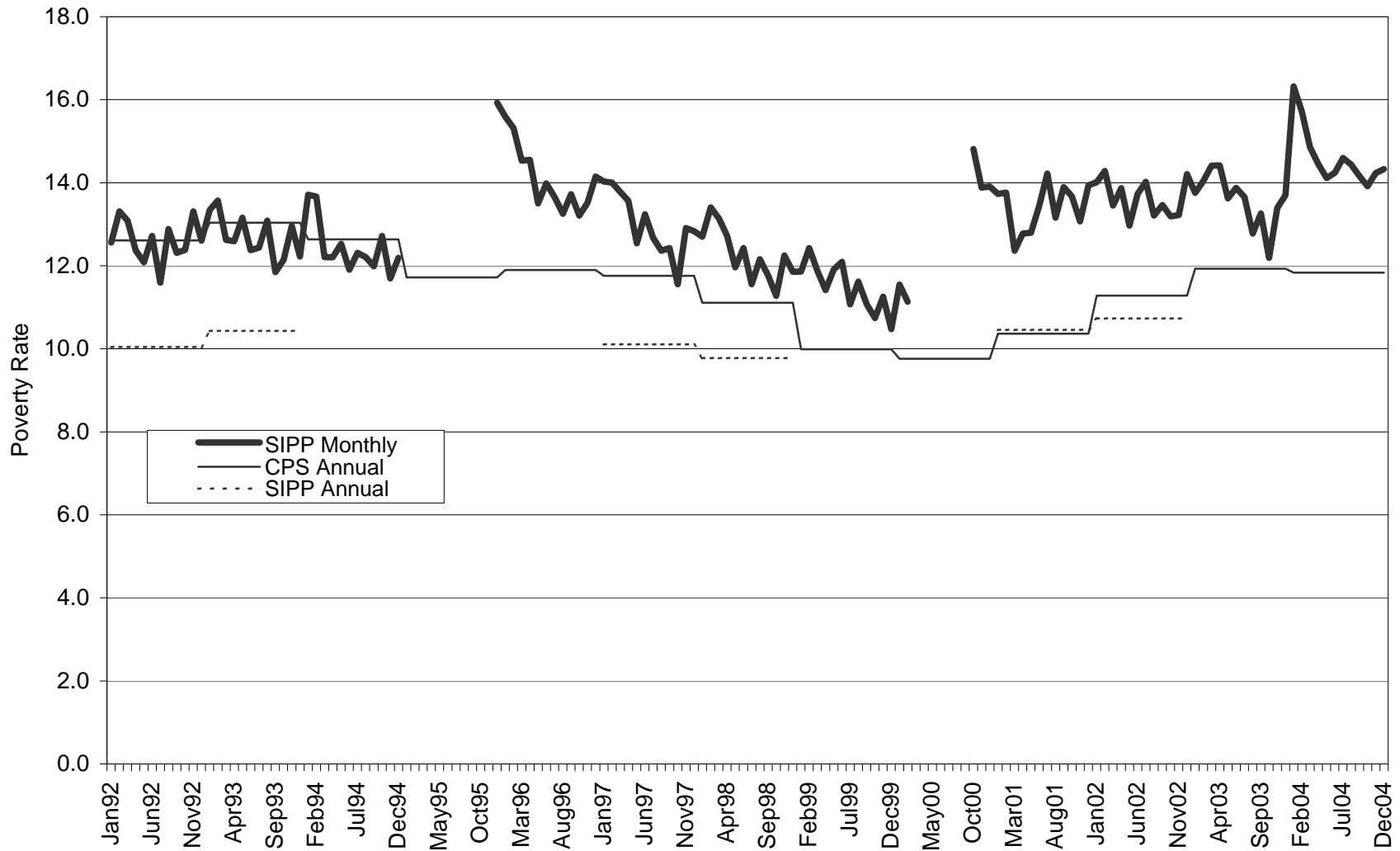
FIGURE VI.5 SIPP MONTHLY AND ANNUAL POVERTY RATES VERSUS CPS ANNUAL POVERTY RATES, 1992 THROUGH 2004, ADULTS 40 TO 64
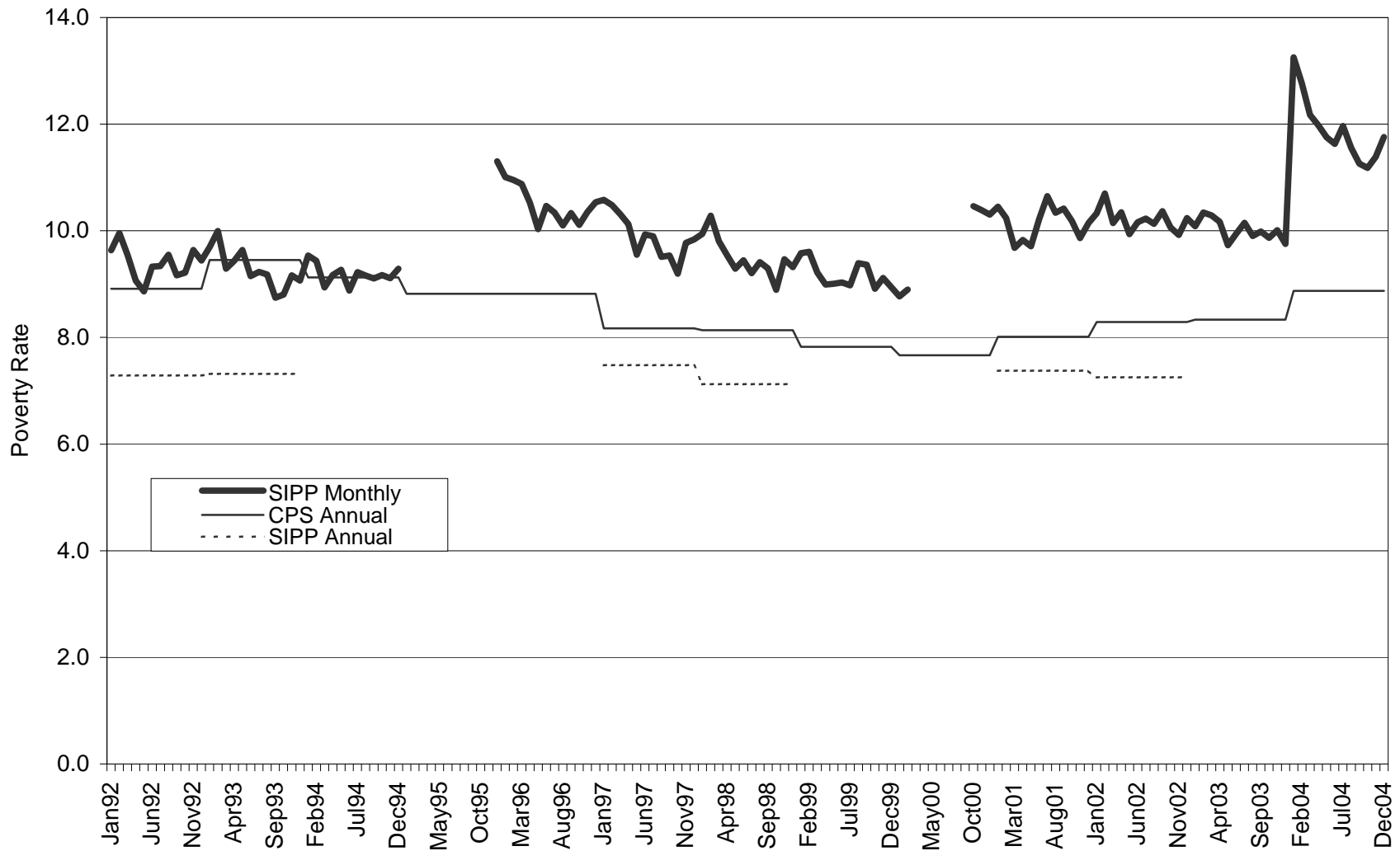
FIGURE VI.6 SIPP MONTHLY AND ANNUAL POVERTY RATES VERSUS CPS ANNUAL POVERTY RATES, 1992 THROUGH 2004, ADULTS 65 AND OLDER
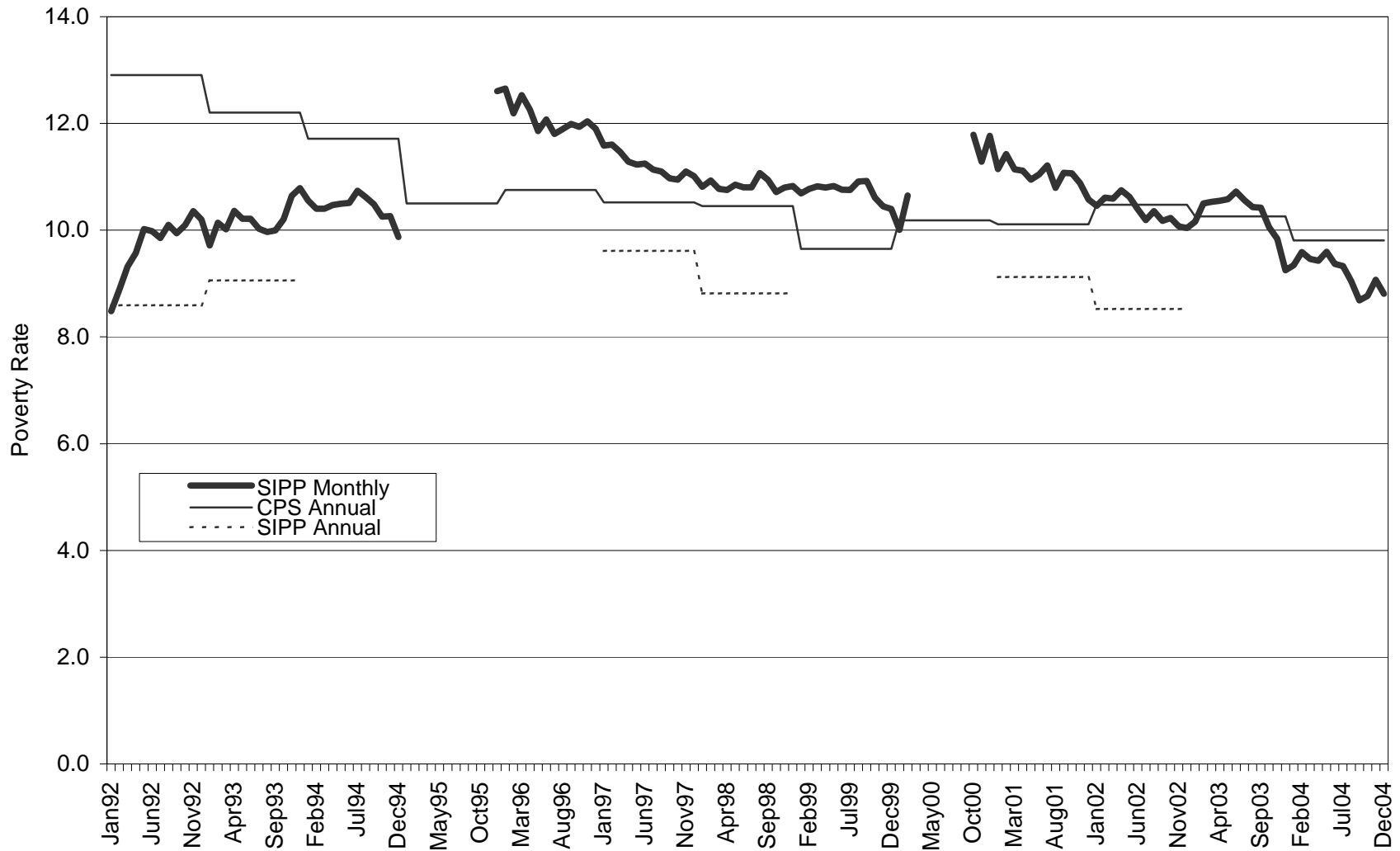
VII. CONCLUSION AND RECOMMENDATIONS

The principal findings from this evaluation of sample loss in the SIPP and CPS can be summarized succinctly. Basically, we find no evidence that attrition bias or match bias in the linking of administrative records to survey data has increased in the SIPP since the 1996 panel. Furthermore, we find that the Census Bureau's non-interview adjustment is highly effective in controlling attrition bias in the SIPP's longitudinal weights, and we find that by replicating the Census Bureau's SIPP and CPS calibration adjustments we can largely eliminate match bias from matched samples of records obtained from both surveys. Our recommendation to prospective users of SIPP data at SSA is that they should not hesitate to use the 2001 SIPP panel any more than they would hesitate to use the 1996 panel. Neither attrition bias nor match bias provides any more reason to avoid the 2001 panel than the earlier panel.

That being said, however, there are other issues that SIPP users need to understand when using the data from 1996 and later panels. One, there seems to have emerged a "wave 1 effect" that elevates poverty rates and possibly other indicators during the first wave of each new panel. The result is a distortion of trends both within and across panels and an exaggeration of gross change among panel members between the first and second waves. Two, the new entrants to the population who are largely unrepresented in a SIPP panel over time could be a major source of discontinuity in SIPP estimates of poverty and other characteristics between the end of one SIPP panel and the beginning of the next panel. Third, SIPP estimates of aggregate income showed a decline relative to independent benchmarks from the initial SIPP panel in 1984 through the mid-1990s. SIPP estimates of aggregate income have continued to decline relative to the CPS, but without independent benchmarks after 1996 we cannot determine how much of this relative decline is due to CPS gains versus SIPP losses. The decline relative to the CPS is particularly

striking in the bottom income quintile, where the SIPP captured 20 percent more income than the CPS in 1993 but only 6 percent more than the CPS in 2002. The SIPP has continued to identify more sources of income, however, and this is especially true among the elderly. The seeming paradox of capturing more sources but less total income remains unexplained. For all of these reasons, SIPP users need to understand the comparative strengths and weaknesses of the SIPP and the CPS and tailor their uses of the two surveys accordingly.

While we did not find it necessary to develop complex adjustment methodologies to reduce attrition bias and match bias to acceptable levels, we do recommend that SSA analysts make use of the calibration procedures that we applied to reweight matched subsamples of SIPP and CPS records to agree with full sample population totals by selected demographic characteristics. These procedures are documented in Appendix A and utilize programs that are stored on a personal computer at SSA.[1] We recommend that SSA analysts apply the calibration procedures to their matched samples before applying any additional controls to meet program administrative totals. This will ensure that the matched data receive the benefits of a detailed demographic calibration while still reproducing program administrative controls. In applications to CPS data, the SSA analysts may want to consider further restricting the matched sample to respondents who completed the supplement—that is, excluding the whole person imputes discussed in Chapters II and III.

An issue that arose in SSA's use of matched data from the 2001 SIPP panel was whether to restrict the analytical sample to matched records, as had been done with the 1996 panel, or whether to compensate for the reduced match rate and the potentially greater match bias by including both matched and unmatched records in the analytic sample. Our findings with respect

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[1] There are separate programs for calibrating SIPP and CPS matched samples, as the Census Bureau's calibration procedures—and the demographic controls that they employ—differ between the two surveys.

to match bias support restricting the analytic sample to just the matched records, as there appears to be no additional bias—after calibration—as a result of the reduced match rate. Restricting the analytic sample to matched cases allows the SSA analysts to use Social Security program data in place of survey data for all Social Security beneficiaries in the analytic sample.

The Census Bureau has addressed the declining match rates between survey and administrative records by developing a probabilistic record linkage methodology that can be applied to link survey respondents to their SSNs, which then allows the survey records to be linked to other SSN-based administrative records. With this new methodology it is no longer necessary to ask survey respondents for their SSNs, and we understand that, as a result, very few survey respondents are refusing to give their consent to linkages between their survey data and their administrative records. There is a reasonable expectation that match rates may approach 90 percent again after having fallen into the 70s in the CPS and to 60 percent in the SIPP.

Match errors based on the new methodology are likely to be higher than match errors based on SSNs because the new approach uses a probabilistic record-linkage approach rather an exact match. As matched data using the new methodology become available, SSA should plan to conduct analyses of match quality and devise methods to identify bad matches using the information provided by comparisons between the survey and administrative reports of Social Security beneficiary status. In addition, based on what we see for children, it may turn out that the income differential in match rates among adults is increased when probabilistic matching is extended to that population. For this reason we would encourage SSA to re-estimate Table II.6 when matched data from the March 2006 CPS become available. More generally, the new methodology may introduce new forms of match bias that users need to understand. As a prominent user of matched data, SSA should take the lead in undertaking an evaluation of match bias with the new methods.

The major findings presented in this report would have to be characterized as surprising. They run counter to what was expected, and they suggest that there are significant misconceptions about the SIPP. With the Census Bureau undertaking a complete re-engineering of the SIPP, this report is especially timely. It is critically important that the Census Bureau and SIPP users who might be moved to influence the design of the new SIPP understand the current survey's strengths and limitations, or the re-engineering effort will not achieve all that it could achieve. Indeed, if the re-engineering focuses on the wrong features, the new survey could prove to be decidedly inferior to the current survey.

Two areas of concern stand out. The first is the wave 1 effect that we documented in Chapter V. Only the Census Bureau is in a position to explore this further, as the source of the problem may lie in field operations or the survey processing that occurs after the data have come in from the field. If the Census Bureau moves to an annual interview in the re-engineered SIPP, it is critical that the initial interview not reflect the same problem that we are seeing with the wave 1 SIPP interview.

The second area of concern stems from the divergent trends in elderly poverty portrayed in the last chapter. The findings presented therein challenge users to reassess their reliance on either the CPS or the SIPP to measure the material well-being of the elderly either cross-sectionally or over time. We recommend that ORES encourage the Census Bureau to undertake an assessment of how these two surveys can present such inconsistent pictures of changes in elderly poverty over time. Only with a better understanding of the causes of these inconsistencies can users of either survey feel confidence in the information that they are able to extract from SIPP or CPS data.

Lastly, to bring these issues to the Census Bureau's attention in a manner that will increase the likelihood of the Census Bureau's giving them adequate attention, we recommend that SSA

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take the initiative to set up a briefing of Census Bureau staff with responsibility for the SIPP.

The briefing should cover the major findings from this report but with a particular focus on those

findings that carry the most important implications for the re-engineering of the SIPP.

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APPENDIX A

CALIBRATION OF SAMPLES

CALIBRATION OF SAMPLES

A. INTRODUCTION

The weights that are assigned to matched samples of survey and administrative records (and, for the CPS, the subset of sample members who responded to the annual supplement and, therefore, did not have to have all of their supplement variables imputed) must be calibrated so that they sum to the same population control totals as the corresponding full sample weights. Calibration adjusts each matched sample to compensate for differential match rates by sex, age, race and ethnicity (and, for the CPS, by state of residence as well).

We created these calibrated samples:

1. Matched full panel sample for 1996 and 2001

2. Matched calendar-year samples for 1996, 1997, 1998, 2001, and 2002

3. Matched core-wave samples for March 1996 (wave 1), July 1996 (wave 2), November 1996 (wave 3), November 1997 (wave 6), November 1998 (wave 9), May 2001 (wave 2), September 2001 (wave 3), September 2002 (wave 6), and September 2003 (wave 9)

4. Wave 1/wave 2 sample (i.e. present in common month of wave 1 and present all 4 months of wave 2) for 1996 and 2001

5. Matched wave 1/wave 2 sample (i.e. present in common month of wave 1 and present all 4 months of wave 2) for 1996 and 2001

6. CPS supplemental sample (i.e. persons with FL_665 = 1) for 1996, 1997, 2001, 2002, and 2003

7. Matched CPS full sample for 1996, 1997, 2001, 2002, and 2003

8. Matched CPS supplemental sample for 1996, 1997, 2001, 2002, and 2003

For each SIPP sample we calibrated the sample weight and the 108 replicate weights that are associated with the sample weight. Calibration of the replicate weights is necessary if they are to be used in conjunction with the calibrated sample weight to calculate standard errors. Table A.1 lists the SIPP and CPS sample weights that we calibrated and, for the SIPP, the replicate weights that we calibrated along with the sample weights.

B. CALIBRATION METHODOLOGY

Our calibration procedures were designed to replicate the final stage in the Census Bureau's calculation of sample weights and replicate weights for the SIPP and sample weights for the CPS March or ASEC supplement. Calibration adjusts the sample weights by the application of "raking" (alternating ratio—or multiplicative—adjustments) so that they sum to a cross-classification of the survey universe by a set of demographic characteristics. For the SIPP, the

calibration matrix also includes the survey rotation group. Tables A.2 through A.6 show the potential calibration cells (prior to collapsing, discussed below) for the SIPP calibration. Table A.2 shows the potential calibration cells for Hispanic children and adults. (Note that Hispanic children are raked with all children while Hispanic adults are raked with adult males and adult females.) Table A.3 shows the potential calibration cells for children 15 by race, sex, and age. Table A.4 shows the potential calibration cells for adult females by race and age, and Table A.5 shows the same for adult males. Lastly, Table A.6 shows the potential calibration cells for the household relationship code by race and sex. Through calibration, the weights are adjusted so that they satisfy all of the applicable control totals. For example, for nonblack females the applicable control totals would be found in tabulations corresponding to Tables A.4 and A.6 while the control totals for all adult females broken down by Hispanic versus non-Hispanic would be found in the tabulation corresponding to Table A.2.

The raking algorithm is iterative. Raking programs can be set up to run for a fixed number of iterations, or they can be devised to run to convergence—that is, until the control totals are fit to within a specified tolerance. We opted to write our programs to run for a fixed number of iterations. The number of iterations is parameterized. This parameter is currently set to 10. We have found that 10 iterations are sufficient to match the control totals to within one or two persons (with most of the deviations being zero).

If there is an inconsistency in the control totals—for example, if one set of matrices yields a different total number of persons than another set—the raking algorithm will not converge. Therefore, it is advisable to check the specified controls for internal inconsistencies before running the calibration program. The calibration programs re-estimate the control matrices with the calibrated weights and calculate differences between these matrices and the control matrices. The user should check that these differences are predominantly zero and never exceed 2 (or an alternative acceptable maximum).

The SIPP calibration matrices include more detailed age groups than the sample may be able to support—even with all of the observations. Therefore, it is necessary for the user to review a tabulation of weighted sample records by the calibration matrices in order to determine if the Census Bureau used all of the possible age detail in calibrating the full sample weights or if some collapsing was done.[1] The Census Bureau rakes the SIPP weights to convergence, so it is easy to determine what control totals were used to calibrate a given sample weight. The subtotals for a given age group or household relationship code within race and sex will be identical across the four rotation groups if that age group was used without collapsing. Table A.7 shows the original calibration tabulation for adult black males for wave 2 of the 2001 SIPP panel and, in the bottom panel of the table, the collapsing of age groups that was necessary to achieve identical sums across the four rotation groups.

If the matched subsample represents much less than 90 percent of the full population that corresponds to a given sample weight, some additional collapsing of age groups or relationship codes beyond may be desirable to avoid excessive weight adjustments. After establishing how the Census Bureau collapsed the age groups and relationship codes, the user may want to examine the sample sizes and preliminary weighted totals obtained when the matched subsample

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[1] The household relationship codes may have been collapsed as well. These must be examined separately.

is distributed across the control matrices. Some of the programs listed in the next section can be used to produce such tabulations.

C.   IMPLEMENTATION OF THE CALIBRATION METHODOLOGY

Calibration of the SIPP weights requires several steps. The first step is to extract the control variables and cross-sectional weights from the SIPP core-wave files and obtain the full panel and calendar year weights from the longitudinal weight file. If replicate weights are to be calibrated as well, they must be extracted from files provided by the Census Bureau, converted to SAS, and renamed.[2] A pair of tabulation programs is then run to produce preliminary control totals, which are written to Excel spreadsheets (for example, calibration_wave01_1996_wpfinwgt.xls) named with the wave and panel and type of weight. These tabulations must be reviewed to determine if the Census Bureau performed any collapsing across age or relationship to the householder. The user can examine the following files that are produced by the tabulation programs listed later in this section:

Calibration_waveWAVE_PANEL_WGT.xls
Calibration_cyYEAR_WGT.xls
HR-code_cyYEAR_WGT.xls
HR-code_waveWAVE_PANEL_WGT.xls
Match_Calibration_waveWAVE_PANEL_WGT.xls
Match_Calibration_cyYEAR_WGT.xls
Match_HR-code_cyYEAR_WGT.xls
Match_HR-code_waveWAVE_PANEL_WGT.xls

Where WAVE is the wave number (for example, 01), PANEL is the SIPP panel (for example, 2001), YEAR is the calendar year within the panel (for example, 2002), and WGT is the name of the weight variable used.

The user may also want to consider additional collapsing to improve the statistical properties of the calibrated weights.[3] Ultimately, the user determines whether or not to manually collapse some of the rows in the preliminary control totals in order to obtain final control totals.

The final control totals are then copied into a set of Excel worksheets that are used by the calibration programs. Three Excel files contain the full set of controls for a given SIPP weight.

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[2] The replicate weights are not posted to a Census Bureau website. They must be requested from the Demographic Statistical Methods Division. The names assigned to the replicate weights are not standardized, so Table A.1 does not list the original variable names.

[3] In addition to ensuring that the collapsed control totals produce identical cell counts across rotation groups, one could collapse even further to reduce the variability of the calibrated weights. Programs that tabulate various matched subsamples can be used to obtain weighted and unweighted sample tabulations that are useful for such analysis. For example, if some of the cells end up with much smaller sample counts than other cells in the same row, one could collapse across rows to make the cell counts more nearly equal. We did not do this because we were concerned that using less detailed controls for the matched subsample versus the full sample would contribute to estimated match bias. In an application of matched data to a research problem, however, there might be reason to prefer less variable weights in order to improve the precision of estimates from the matched subsample.

For example, the controls used to calibrate the wave 1 sample from the 2001 SIPP panel are found in:

Calibration_controls_for_adults_2001_wave01_A.xls
Calibration_controls_for_kids_2001_wave01_A.xls
HR-code_controls_2001_wave01_A.xls

Here the "A" differentiates the most detailed set of wave 1 controls from a less detailed set of January 2001 controls that might be used to calibrate the full panel sample. Less detailed controls may be required when calibration is used to compensate for substantial sample loss, as with a full panel sample or the extent of nonmatching that occurred with the 2001 SIPP panel.

Replicate weights are calibrated in the same set of programs as the sample weights to which they correspond. If replicate weights are to be calibrated along with the sample weight, then "_repwgts" is appended to the name of the calibration control file, as in:

Calibration_controls_for_adults_2001_wave01_A_repwgts.xls
Calibration_controls_for_kids_2001_wave01_A_repwgts.xls
HR-code_controls_2001_wave01_A_repwgts.xls

There is no difference in the contents of the control files—just their names. Likewise, except for a small quality assurance step described below, the only difference in the output is that 109 rather than just one set of adjusted weights will be written to an output file. Tables designed to confirm that the calibrated sample weight matches the control totals are not repeated for the replicate weights, as the calibration procedure applied to the sample weights is simply repeated for each of the 108 sets of replicate weights.

Depending on the weight that is being calibrated, the user then selects one of five sets of calibration programs to read the collapsed version of the control totals and calibrate the sample weight—and corresponding replicate weights if they are being calibrated as well. The calibration method for adults (persons 15 and older) differs from that for children. Therefore, one program calibrates the weights for adults; another calibrates the weights for children; and a third program combines the two sets of weights and renames them. Each of the two calibration programs also tabulates the calibrated sample weights and writes the calibrated estimates to a separate set of worksheets in the control totals Excel file. These worksheets have "(2)" in the name. As a quality assurance check, to ensure that we iterated enough times in the calibration, each program subtracts the final calibrated estimates from the control totals and writes the differences into worksheets with "(3)" in the name.[4] The third program also performs a simple quality control check of the calibrated replicate weights. Sums of the 1st, 50th, and 108th calibrated replicate weights are written to a file, which the user can manually inspect to ensure that these sums are identical to each other and to the sum of the calibrated sample weight. Given that the same methodology is applied to calibrate all 109 weights, these totals require only a cursory review.

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[4] In our applications, all totals based on the calibrated weights were the same or very close to the control totals.

The specific programs are as follows:[5]

A. Extract Data from SIPP

   XT_PM.SAS

B. Make Replicate weights from Census Bureau files

   1. MK_REPWGTS_FOR_1996_LGTPNLWT.SAS

   2. MK_REPWGTS_FOR_2001_LGTPNLWT.SAS

   3. MK_REPWGTS_LGTCYWT.SAS

   4. MK_REPWGTS_WPFINWGT.SAS

C. Extract Data from SIPP

   XT_PM.SAS

D. Make Replicate weights from Census Bureau files

   1. MK_REPWGTS_FOR_1996_LGTPNLWT.SAS

   2. MK_REPWGTS_FOR_2001_LGTPNLWT.SAS

   3. MK_REPWGTS_LGTCYWT.SAS

   4. MK_REPWGTS_WPFINWGT.SAS

E. Tabulate Preliminary Control Totals for Cross-sectional Weights

   1. TB_CALIBRATION.SAS

   2. TB_HR-CODE.SAS

F. Tabulate Preliminary Control Totals for Calendar Year Weights

   1. TB_CY_CALIBRATION.SAS

   2. TB_CY_HR-CODE.SAS

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[5] The programs were designed to be re-used as much as possible. Parameters, located at the beginning of the program, identify the panel, the analysis date, the input files, and the output files.

G. Tabulate Initial Set of Matched Sample Control Totals

    1. TB_MATCH_CALIBRATION.SAS

    2. TB_MATCH_HR-CODE.SAS

    3. TB_MATCH_CY_CALIBRATION.SAS

    4. TB_MATCH_CY_HR-CODE.SAS

H. Calibrate Matched Full Panel Sample (CBFPWGT)

    1. CALIBRATE_FP_MATCH_ADULTS_REPWGTS.SAS

    2. CALIBRATE_FP_MATCH_KIDS_REPWGTS.SAS

    3. MK_CBFPWGT_REPWGTS.SAS

I. Calibrate Matched Calendar-Year Samples for 1996, 1997, 1998, 2001, and 2002 (CBCYWGT)

    1. CALIBRATE_CY_MATCH_ADULTS_REPWGTS.SAS

    2. CALIBRATE_CY_MATCH_KIDS_REPWGTS.SAS

    3. MK_CBCYWGT_REPWGTS.SAS

J. Calibrate Matched Core-Wave Samples for March 1996, July 1996, November 1996, November 1997, November 1998, May 2001, September 2001, September 2002, and September 2003 (CBCWWGT)

    1. CALIBRATE_MATCH_ADULTS_REPWGTS.SAS

    2. CALIBRATE_MATCH_KIDS_REPWGTS.SAS

    3. MK_CBCWWGT_REPWGTS.SAS

K. Calibrate Wave 1-Wave 2 Sample (i.e. present in common month of wave 1 and present all 4 months of wave 2) for 1996 and 2001 (CBW1W2WTA)

    1. CALIBRATE_W1W2_ADULTS_REPWGTS.SAS

    2. CALIBRATE_W1W2_KIDS_REPWGTS.SAS

    3. MK_CBW1W2WT_REPWGTS.SAS

L. Calibrate Matched Wave 1-Wave 2 Sample (i.e. present in common month of wave 1 and present all 4 months of wave 2) for 1996 and 2001 (CBW1W2WTB)

1. CALIBRATE_MATCH_W1W2_ADULTS_REPWGTS.SAS

2. CALIBRATE_MATCH_W1W2_KIDS_REPWGTS.SAS

3. MK_MATCH_CBW1W2WT_REPWGTS.SAS

Calibration of the CPS does not require either external control totals or external weights, so the calibration of the CPS sample weight for all three subsamples can be accomplished in a single program, CPS_CALIBRATION.SAS. The CPS calibration matrices are documented in Tables A.8 through A.10. There is no provision for collapsing any of the rows in the CPS calibration program. One difference between the CPS and SIPP calibration should be noted, although it has no bearing on the user, as this difference is incorporated into the programs. Both the CPS and the SIPP include roughly 800,000 members of the armed forces who are living with civilian adults (15 and older). These members of the armed forces are excluded from the CPS calibration, meaning that their weights are not adjusted. This can produce small differences between the weighted totals for the matched and full CPS samples. In the SIPP, these members of the armed forces are included in the calibration totals. Their weights are adjusted, so the weighted totals for the matched and full SIPP samples will be identical.

D. PREPARATION OF THE CALIBRATION PROGRAMS FOR SSA USE

Each of the programs provided to SSA has been documented to direct the user to a list of parameters that must be altered to enable the program to find the appropriate data files and to output the results. Except for the programs used to calibrate the wave 1/wave 2 samples, each of the programs listed above was tested on an SSA machine by an MPR systems analyst who had not participated in their creation but was familiar with SIPP and CPS data. Only the documented changes were necessary, and each program ran without error.

TABLE A.1

SIPP AND CPS WEIGHTS THAT WERE CALIBRATED
FOR APPLICATION TO MATCHED SUBSAMPLES

Survey and Subsample	Sample Weight To Be Calibrated	Calibrated Weight	Calibrated Replicate Weights
1996 SIPP Panel			
Matched full panel sample	LGTPNLWT	CBFPWGT	CBFPWGT0-CBFPWGT108
Matched calendar year sample			
1996	LGTCY1WT	CBCYWGT	CBCYWGT0-CBCYWGT108
1997	LGTCY2WT	CBCYWGT	CBCYWGT0-CBCYWGT108
1998	LGTCY3WT	CBCYWGT	CBCYWGT0-CBCYWGT108
Matched core-wave sample			
March 1996 (wave 1)	WPFINWGT	CBCWWGT	CBCWWGT0-CBCWWGT108
July 1996 (wave 2)	WPFINWGT	CBCWWGT	CBCWWGT0-CBCWWGT108
November 1996 (wave 3)	WPFINWGT	CBCWWGT	CBCWWGT0-CBCWWGT108
November 1997 (wave 6)	WPFINWGT	CBCWWGT	CBCWWGT0-CBCWWGT108
November 1998 (wave 9)	WPFINWGT	CBCWWGT	CBCWWGT0-CBCWWGT108
Wave 1/wave 2 sample [a]	WPFINWGT	CBW1W2WTA	CBW1W2WTA0-CBW1W2WTA108
Matched wave 1/wave 2 sample [a]	WPFINWGT	CBW1W2WTB	CBW1W2WTB0-CBW1W2WTB108
2001 SIPP Panel			
Matched full panel sample	LGTPNWT3	CBFPWGT	CBFPWGT0-CBFPWGT108
Matched calendar year sample			
2001	LGTCY1WT	CBCYWGT	CBCYWGT0-CBCYWGT108
2002	LGTCY2WT	CBCYWGT	CBCYWGT0-CBCYWGT108
Matched core-wave sample			
May 2001 (wave 2)	WPFINWGT	CBCWWGT	CBCWWGT0-CBCWWGT108
September 2001 (wave 3)	WPFINWGT	CBCWWGT	CBCWWGT0-CBCWWGT108
September 2002 (wave 6)	WPFINWGT	CBCWWGT	CBCWWGT0-CBCWWGT108
September 2003 (wave 9)	WPFINWGT	CBCWWGT	CBCWWGT0-CBCWWGT108
Wave 1/wave 2 sample [a]	WPFINWGT	CBW1W2WTA	CBW1W2WTA0-CBW1W2WTA108
Matched wave 1/wave 2 sample [a]	WPFINWGT	CBW1W2WTB	CBW1W2WTB0-CBW1W2WTB108
March/ASEC Supplement to CPS			
Supplement respondents [b]			
1996	MARSUPWT	SUPPWT	NA
1997	MARSUPWT	SUPPWT	NA
2001	PERSUPWT	SUPPWT	NA
2002	MARSUPWT	SUPPWT	NA
2003	MARSUPWT	SUPPWT	NA
Matched full sample			
1996	MARSUPWT	MFULLWT	NA
1997	MARSUPWT	MFULLWT	NA
2001	PERSUPWT	MFULLWT	NA
2002	MARSUPWT	MFULLWT	NA
2003	MARSUPWT	MFULLWT	NA
Matched supplement respondents [b]			
1996	MARSUPWT	MSUPPWT	NA
1997	MARSUPWT	MSUPPWT	NA
2001	PERSUPWT	MSUPPWT	NA
2002	MARSUPWT	MSUPPWT	NA
2003	MARSUPWT	MSUPPWT	NA

Source: Mathematica Policy Research.

[a] Persons present in common month of wave 1 and present for all four months of wave 2.

[b] Persons with FL_665 = 1.

TABLE A.2

POTENTIAL SIPP CALIBRATION CELLS FOR HISPANIC
CHILDREN AND ADULTS

Sex and Age	Rotation Group 1	Rotation Group 2	Rotation Group 3	Rotation Group 4
Male				
Under 15				
15 to 24				
25 to 44				
45+				
Female				
Under 15				
15 to 24				
25 to 44				
45+				

Source: Mathematica Policy Research.

TABLE A.3

POTENTIAL SIPP CALIBRATION CELLS FOR CHILDREN UNDER 15

Race, Sex, and Age	Rotation Group 1	Rotation Group 2	Rotation Group 3	Rotation Group 4
Nonblack Male				
Infant				
1				
2 to 3				
4 to 5				
6 to 7				
8 to 9				
10 to 11				
12 to 13				
14				
Nonblack Female				
Infant				
1				
2 to 3				
4 to 5				
6 to 7				
8 to 9				
10 to 11				
12 to 13				
14				
Black Male				
Infant				
1				
2 to 3				
4 to 5				
6 to 7				
8 to 9				
10 to 11				
12 to 13				
14				
Black Female				
Infant				
1				
2 to 3				
4 to 5				
6 to 7				
8 to 9				
10 to 11				
12 to 13				
14				

Source: Mathematica Policy Research.

TABLE A.4

POTENTIAL SIPP CALIBRATION CELLS FOR ADULT FEMALES

Race and Age	Rotation Group 1	Rotation Group 2	Rotation Group 3	Rotation Group 4
Nonblack				
15				
16 to 17				
18 to 19				
20 to 21				
22 to 24				
25 to 29				
30 to 34				
35 to 39				
40 to 44				
45 to 49				
50 to 54				
55 to 59				
60 to 61				
62 to 64				
65 to 69				
70 to 74				
75 to 79				
80 to 84				
85+				
Black				
15				
16 to 17				
18 to 19				
20 to 21				
22 to 24				
25 to 29				
30 to 34				
35 to 39				
40 to 44				
45 to 49				
50 to 54				
55 to 59				
60 to 61				
62 to 64				
65 to 69				
70 to 74				
75+				

Source: Mathematica Policy Research.

TABLE A.5

POTENTIAL SIPP CALIBRATION CELLS FOR ADULT MALES

Race and Age	Rotation Group 1	Rotation Group 2	Rotation Group 3	Rotation Group 4
Nonblack				
15				
16 to 17				
18 to 19				
20 to 21				
22 to 24				
25 to 29				
30 to 34				
35 to 39				
40 to 44				
45 to 49				
50 to 54				
55 to 59				
60 to 61				
62 to 64				
65 to 69				
70 to 74				
75 to 79				
80 to 84				
85+				
Black				
15				
16 to 17				
18 to 19				
20 to 21				
22 to 24				
25 to 29				
30 to 34				
35 to 39				
40 to 44				
45 to 49				
50 to 54				
55 to 59				
60 to 61				
62 to 64				
65 to 69				
70+				

Source: Mathematica Policy Research.

TABLE A.6

POTENTIAL SIPP CALIBRATION CELLS FOR RELATIONSHIP CODE, BY RACE AND SEX

Race, Sex, and Relationship Code	Rotation Group 1	Rotation Group 2	Rotation Group 3	Rotation Group 4
Nonblack Female				
Householder with no spouse present but own kids				
Householder with no spouse present and no kids				
Householder with spouse present				
Householder with no relatives present				
Spouse of householder or subfamily reference person				
Other relative of householder				
Nonrelative of householder				
Black Female				
Householder with no spouse present				
Householder with spouse present				
Householder with no relatives present				
Spouse of householder or subfamily reference person				
Other relative of householder				
Nonrelative of householder				
Nonblack Male				
Householder with relatives present				
Householder with no relatives present				
Spouse of householder or subfamily reference person				
Other relative of householder				
Nonrelative of householder				
Black Male				
Householder with relatives present				
Householder with no relatives present				
Spouse of householder or subfamily reference person				
Other relative of householder				
Nonrelative of householder				

Source: Mathematica Policy Research.

TABLE A.7

ILLUSTRATION OF COLLAPSING OF AGE GROUP CONTROL TOTALS
FOR BLACK MALES: WAVE 2 CROSS-SECTIONAL WEIGHT
FOR THE 2001 SIPP PANEL

Age (TAGE)	Rotation Group 1	Rotation Group 2	Rotation Group 3	Rotation Group 4
Original Age Groups				
15	61,064	80,086	88,038	58,143
16 to 17	167,866	148,845	140,893	170,788
18 to 19	143,366	143,366	143,366	143,366
20 to 21	124,585	143,262	151,246	128,814
22 to 24	183,546	164,869	156,885	179,317
25 to 29	272,809	272,809	272,809	272,809
30 to 34	287,119	287,119	287,119	287,119
35 to 39	309,199	309,199	309,199	309,199
40 to 44	308,995	308,995	308,995	308,995
45 to 49	266,808	266,808	266,808	266,808
50 to 54	221,055	221,055	221,055	221,055
55 to 59	152,609	152,862	152,609	152,609
60 to 61	51,941	52,565	54,367	43,490
62 to 64	67,253	66,376	64,827	75,705
65 to 69	83,972	88,989	105,054	108,324
70+	180,810	175,793	159,728	156,458
Collapsed Age Groups				
15 to 19	372,296	372,296	372,296	372,296
20 to 24	308,131	308,131	308,131	308,131
25 to 29	272,809	272,809	272,809	272,809
30 to 34	287,119	287,119	287,119	287,119
35 to 39	309,199	309,199	309,199	309,199
40 to 44	308,995	308,995	308,995	308,995
45 to 49	266,808	266,808	266,808	266,808
50 to 54	221,055	221,055	221,055	221,055
55 to 64	271,803	271,803	271,803	271,803
65+	264,782	264,782	264,782	264,782

Source: Mathematica Policy Research, from the 2001 SIPP panel.

TABLE A-8

CPS POPULATION CONTROLS FOR STEP 1:
STATE POPULATIONS 16 AND OLDER

State	Civilian Noninstitutional Persons 16 and Older
Alabama	
Alaska	
Arizona	
Arkansas	
California	
Colorado	
Connecticut	
Delaware	
District of Columbia	
Florida	
Georgia	
Hawaii	
Idaho	
Illinois	
Indiana	
Iowa	
Kansas	
Kentucky	
Louisiana	
Maine	
Maryland	
Massachusetts	
Michigan	
Minnesota	
Mississippi	
Missouri	
Montana	
Nebraska	
Nevada	
New Hampshire	
New Jersey	
New Mexico	
New York	
North Carolina	
North Dakota	
Ohio	
Oklahoma	
Oregon	
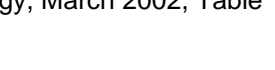
Table A-8 Continued

State	Civilian Noninstitutional Persons 16 and Older
Pennsylvania	
Rhode Island	
South Carolina	
South Dakota	
Tennessee	
Texas	
Utah	
Vermont	
Virginia	
Washington	
West Virginia	
Wisconsin	
Wyoming	

Source: Current Population Survey Technical
  Paper 63RV, Design and Methodology, March
  2002, p. 10-5.

TABLE A-9

CPS POPULATION CONTROLS FOR STEP 2:
HISPANIC BY AGE AND SEX
(Civilian Noninstitutional Persons)

Ethnicity and Age	Male	Female	Combined
Hispanic			
0 - 5			
6 - 13			
14			
15			
16 - 19			
20 - 29			
30 - 49			
50+			
Non-Hispanic			
0 - 5			
6 - 13			
14			
15			
16+			

Source: Current Population Survey Technical Paper 63RV,
   Design and Methodology, March 2002, Table 10-2 (p. 1--6).

CPS POPULATION CONTROLS FOR STEP 3:
RACE BY AGE AND SEX
(Civilian Noninstitutional Persons)

Ethnicity and Age	Male	Female	Combined
White			
0			
1			
2			
3			
4			
5			
6			
7			
8			
9			
10 - 11			
12 - 13			
14			
15			
16			
17			
18			
19			
20 - 24			
25 - 26			
27 - 29			
30 - 34			
35 - 39			
40 - 44			
45 - 49			
50 - 54			
55 - 59			
60 - 62			
63 - 64			
65 - 67			
68 - 69			
70 - 74			
75+			

Continued

Table A-10 Continued

Ethnicity and Age	Male	Female	Combined
Black			
0 - 1			
2 - 3			
4 - 5			
6 - 7			
8 - 9			
10 - 11			
12 - 13			
14			
15			
16 - 17			
18 - 19			
20 - 24			
25 - 29			
30 - 34			
35 - 39			
40 - 44			
45 - 49			
50 - 54			
55 - 59			
60 - 64			
65+			
Other Race			
0 - 5			
6 - 13			
14			
15			
16 - 44			
45+			

Source: Current Population Survey Technical Paper 63RV, Design and Methodology, March 2002, Table 10-3 (p. 10-6).

APPENDIX B

**USE OF REPLICATE WEIGHTS TO CALCULATE STANDARD ERRORS
FOR THE SIPP**

**USE OF REPLICATE WEIGHTS TO CALCULATE STANDARD ERRORS
FOR THE SIPP**

Beginning with the 1996 SIPP panel, the Census Bureau has produced replicate weights that enable SIPP users to calculate reliable standard errors for any weighted statistic that they generate from any of the SIPP weights—cross-sectional, calendar year, or full panel. The replicate weights are based on a variant of the balanced half sample method. This variant, developed by Robert Fay, is commonly known as "Fay's method." For each SIPP sample weight there are 108 replicate weights. Each replicate weight divides the sample into two halves, but this is done differently across the 108 replicates. The half samples are created in such a way that they reflect elements of the sample design. By using the replicate weights to calculate standard errors, a SIPP user is able to incorporate sample design information that is not released to the public. The Census Bureau has recommended that SIPP users calculate standard errors with the replicate weights rather than the two variables that have been placed on SIPP filers historically for standard error estimation.

The standard error for a statistic, θ, is calculated as the square root of the following:

$$(B.1) \qquad Var(\theta) = \sum_1^R c(\hat{\theta}_r - \hat{\theta}_0)^2$$

where θ_r is the value of the statistic calculated with the rth replicate weight, and θ_0 is the value of the statistic calculated with the original sample weight. As applied to the SIPP, the number of replicate weights, R, is 108, and the constant, c, is defined as 4/R (or 4/108). Intuitively, the difference between the value of the statistic, θ, when calculated with one of the replicate weights versus the original weight is computed for each of the 108 replicate weights. The variance of the statistic is then estimated as four times the average of the 108 squared differences. The value 4 is specific to the Census Bureau's application of Fay's method. With the usual half sample

method, only the records selected into a given half sample are used to estimate the statistic. Implicitly, the weights on these records are multiplied by a factor of 1 while the weights on the remaining half of the sample are multiplied by a factor of zero. Fay's method replaces the 1 and 0 factors with 1.5 and 0.5.   These factors are incorporated into the replicate weights.

Standard errors based on the SIPP replicate weights can be calculated for descriptive statistics or regression coefficients with the software package SUDAAN, which can be accessed through SAS. With each of the SUDAAN descriptive or regression procedures, the user can specify that standard errors be calculated using the jackknife method and then identify the variables that correspond to the original weight and the replicate weights. The user also provides the value of c.

An example illustrates the use of SUDAAN to derive standard errors using SIPP replicate weights. The following code, which was included in a SAS program, calls the SUDAAN procedure "Descript" and specifies the calculation of descriptive statistics and standard errors for two variables, "children" and "ehhnumpp."

```
proc descript data= temp.test design = jackknife;
    title1 'standard errors using jackknife';
    weight EHFNWGT1;
    jackwgts w1-w108 / adjjack=0.037037037037037037;
    var children ehhnumpp;
    print
            NSUM = "SAMPLE SIZE"
            WSUM = "POPULATION SIZE"
            TOTAL = "ROW TOTAL"
            SETOTAL = "STD ERR"
            SEMEAN = "STD ERR(Mean)"
            DEFFTOTAL = "DESIGN EFFECT"/
            style = NCHS;
    run;
```

The statement in the first line, "design = jackknife" invokes the jackknife option. The original weight, the replicate weights, and the value of the factor, c, are defined with the parameters "weight," "jackwgts," and "adjjack." The numeric term following this last parameter is the value of 4/108. The statements under the print command provide labels and indicate a particular output format (NCHS).

To apply this method to calculate the standard error of a difference of means for two independent subpopulations (for example, the mean incomes of whites and nonwhites), one first calculates the standard error for each mean, then derives the standard error of the difference as the square root of the sum of the squares of the standard errors of the two means.

To calculate the standard error of a difference of means for a subpopulation and the population from which that subpopulation was drawn (for example, a matched subsample and the full sample, or the wave 1 sample members with full panel weights and all wave 1 sample members), we replace the estimate of θ_r in equation B.1 with the difference between the subpopulation and full population estimates of θ using the rth replicate weights, and we replace the estimate of θ_0 with the difference between the subpopulation and full population estimates based on the original weights. If either of the original weights is calibrated, the replicate weights must be calibrated as well (see Appendix A). Intuitively, the variance of the difference is calculated as the variance of the 108 estimates of the difference, using the replicate weights, around the original sample estimate of the difference. By calculating the test statistic directly, the correlation between the subsample and full sample estimates is automatically taken into account.

To calculate the standard error of a regression coefficient, one would use the SUDAAN procedure "Regress" to estimate the coefficient and would specify the jackknife option with the

original weights, the replicate weights, and the value of the constant factor to obtain the desired standard error.

APPENDIX C

COMPARISON OF MATCHED AND ENTIRE WAVE 1/WAVE 2 SAMPLES:
2001 SIPP PANEL

TABLE C.1.a

DISTRIBUTION OF PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
THE TOTAL POPULATION

Wave 1 Characteristic	Wave 1/Wave 2 Sample				Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples			
		Age In January 2001				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Sex								
Male	48.8	51.2	49.2	41.9	0.0	0.0	0.0	0.0
Female	51.2	48.8	50.8	58.1	0.0	0.0	0.0	0.0
Race								
White	82.1	78.4	82.4	88.5	0.3 **	0.1	0.4 ***	0.1
Black	12.7	16.1	12.2	8.2	0.0	0.0	0.0	0.0
American Indian, Alaska Native	1.2	1.5	1.2	0.6	0.2 **	0.3 ***	0.1	0.0
Asian, Pacific Islander	4.0	3.9	4.2	2.6	-0.4 ***	-0.5 ***	-0.5 ***	-0.1
Ethnicity								
Hispanic	12.8	17.3	12.5	5.2	0.0	0.3 ***	-0.2 ***	0.3
Non-Hispanic	87.2	82.7	87.5	94.8	0.0	-0.3 ***	0.2 ***	-0.3
Marital Status								
Married	42.8	0.1	57.8	57.3	-0.1 **	0.0 *	-0.3 ***	0.7
Widowed	5.0	0.0	2.0	31.6	-0.2 ***	0.0 a	-0.1 *	-1.0 **
Divorced or separated	9.2	0.1	13.4	7.6	0.1 **	0.0	0.2 **	0.0
Never married	42.9	99.8	26.8	3.5	0.1 *	0.0	0.1	0.3
Years of education								
0 to 8	5.4	2.8	4.6	15.2	-0.3 ***	-0.2 **	-0.3 ***	-0.3
9 to 11	9.8	13.4	7.9	12.3	0.1	0.2 **	0.2 *	-0.4
12	24.1	1.0	31.6	35.3	-0.4 **	0.0	-0.5 **	-0.4
13 to 15	21.9	0.1	31.2	20.8	0.5 ***	0.0	0.7 ***	0.6
16 or more	17.3	0.0	24.7	16.4	0.1	0.0 a	0.0	0.5
Unknown (used for children)	21.4	82.7	0.0	0.0	0.0	0.1	0.0 a	0.0 a
Living Arrangement								
Lives alone	10.0	0.0	10.2	30.2	0.0	0.0	0.3 ***	-1.1 ***
Lives with relatives	83.9	99.2	80.6	67.9	0.1 **	0.1	0.0	1.0 ***
Lives with only non-relatives	6.1	0.8	9.1	1.8	-0.2 **	-0.1	-0.3 **	0.2
Relationship to Householder								
Householder	38.9	0.3	49.7	66.7	0.4 ***	0.0	0.8 ***	-0.6 **
Spouse	20.4	0.0	27.9	25.5	-0.4 ***	0.0 *	-0.7 ***	0.5 *
Child	30.7	89.8	11.9	0.1	0.4 ***	0.7 ***	0.4 ***	0.0
Grandchild	1.6	5.2	0.4	0.0	-0.1 *	-0.3 *	0.0	0.0 a
Parent	1.0	0.0	0.8	3.8	0.0	0.0 a	0.0	-0.1
Sibling	1.0	0.6	1.3	0.6	0.0	0.0	-0.1 *	0.2
Other relative	1.9	2.2	1.7	2.4	-0.3 ***	-0.2 *	-0.3 ***	-0.2
Nonrelative	4.6	1.9	6.4	0.9	-0.1 **	-0.1	-0.2 **	0.1
Parents Present								
Both mother and father	23.5	71.0	8.1	0.0	-0.1	-1.1 ***	0.2 **	0.0 a
Mother only	8.8	22.2	4.9	0.3	0.4 ***	1.2 ***	0.1	0.0
Father only	1.4	3.0	1.0	0.0	0.1 *	0.1	0.1	0.0
Neither	66.3	3.9	86.0	99.6	-0.3 ***	-0.3 **	-0.4 ***	0.0

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.1.b

DISTRIBUTION OF PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
RETIRED WORKERS

| | Wave 1/Wave 2 Sample | | | | Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples | | | |
| | Age In January 2001 | | | | Age In January 2001 | | | |
Wave 1 Characteristic	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Sex								
Male	46.3	48.6	48.5	43.3	-0.4	-0.2	-0.7 **	0.0
Female	53.7	51.4	51.5	56.7	0.4	0.2	0.7 **	0.0
Race								
White	90.0	89.1	88.5	91.9	0.2	1.9 *	0.0	0.0
Black	7.6	8.9	8.4	6.5	-0.1	-1.2	0.1	0.0
American Indian, Alaska Native	0.6	0.3	0.9	0.3	0.0	0.0	0.0	0.1
Asian, Pacific Islander	1.8	1.7	2.2	1.3	-0.1	-0.7	-0.1	0.0
Ethnicity								
Hispanic	4.2	5.5	4.9	3.1	0.1	0.9	-0.2	0.3
Non-Hispanic	95.8	94.5	95.1	96.9	-0.1	-0.9	0.2	-0.3
Marital Status								
Married	62.2	76.8	69.8	49.7	0.8 *	0.7	1.2 **	0.4
Widowed	26.2	7.1	17.2	41.3	-0.8 **	-0.3	-1.1 **	-0.8
Divorced or separated	8.0	11.6	9.9	5.0	-0.2	-0.1	-0.3	0.0
Never married	3.6	4.4	3.1	4.0	0.2	-0.2	0.1	0.3
Years of education								
0 to 8	12.4	7.7	10.4	16.0	-0.3	-0.8	0.4	-1.0 *
9 to 11	12.0	10.3	11.6	13.0	-0.4	-1.4	-0.5	-0.1
12	36.5	42.1	36.3	35.4	-0.5	-1.3	-0.8	0.1
13 to 15	21.9	22.5	22.7	20.8	0.9 **	2.8 **	0.6	0.9 *
16 or more	17.1	17.4	19.0	14.9	0.3	0.6	0.3	0.1
Unknown (used for children)	0.0	0.0	0.0	0.0	0.0 a	0.0 a	0.0 a	0.0 a
Living Arrangement								
Lives alone	27.2	12.7	21.4	37.5	-1.2 ***	0.6	-1.1 **	-2.0 ***
Lives with relatives	70.7	83.9	76.5	60.8	1.2 ***	-0.1	1.0 *	1.9 **
Lives with only non-relatives	2.1	3.4	2.1	1.7	0.0	-0.5	0.0	0.1
Relationship to Householder								
Householder	66.1	55.8	64.6	70.5	-0.6 *	3.5 ***	-1.2 ***	-0.9
Spouse	27.5	38.7	30.6	21.0	0.4	-2.3 *	1.4 ***	0.0
Child	0.2	1.1	0.1	0.0	0.0	0.4	0.0	0.0 a
Grandchild	0.0	0.1	0.0	0.0	0.0	0.1	0.0 a	0.0 a
Parent	2.7	1.0	1.9	4.0	0.1	-0.1	-0.1	0.5
Sibling	0.7	0.5	0.6	0.9	0.2	-0.2	0.2 *	0.2
Other relative	1.8	1.0	1.2	2.7	-0.1	-0.4	-0.4 *	0.2
Nonrelative	1.0	1.8	1.0	0.9	-0.1	-0.8	0.0	0.1
Parents Present								
Both mother and father	0.1	0.5	0.0	0.0	0.0	0.4	0.0 a	0.0 a
Mother only	0.5	2.0	0.5	0.1	-0.1	-0.2	-0.1	0.0
Father only	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0 a
Neither	99.4	97.3	99.5	99.9	0.1	-0.3	0.1	0.0

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.1.c

DISTRIBUTION OF PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
DISABLED WORKERS

Wave 1 Characteristic	Wave 1/Wave 2 Sample				Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples			
		Age In January 2001				Age In January 2001		
	Total	Under 50	50 to 64	65 +	Total	Under 50	50 to 64	65 +
All Disabled Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Sex								
Male	51.8	54.3	52.9	45.9	-0.7	-0.9	-1.2	0.1
Female	48.2	45.7	47.1	54.1	0.7	0.9	1.2	-0.1
Race								
White	78.0	76.7	78.4	78.9	-1.6 **	-0.8	-1.5	-2.7
Black	19.1	20.2	19.0	17.5	1.1	1.0	1.2	1.1
American Indian, Alaska Native	1.1	0.9	1.5	0.5	0.3 **	0.4 **	0.3	0.3
Asian, Pacific Islander	1.9	2.2	1.1	3.0	0.1	-0.5	-0.1	1.3 ***
Ethnicity								
Hispanic	9.1	9.0	8.3	10.8	1.2 **	0.7	0.9	2.2 *
Non-Hispanic	90.9	91.0	91.7	89.2	-1.2 **	-0.7	-0.9	-2.2 *
Marital Status								
Married	45.3	31.2	54.9	48.7	0.3	0.2	1.9	-0.6
Widowed	10.6	1.7	8.5	27.6	-0.5	-1.1 **	0.9	-1.5
Divorced or separated	22.6	19.0	27.5	19.0	-0.2	0.1	-0.8	1.1
Never married	21.5	48.1	9.2	4.7	0.4	0.9	-2.0 *	1.1
Years of education								
0 to 8	17.8	11.0	16.1	30.9	0.4	1.5	-1.9	3.0
9 to 11	15.7	13.5	16.1	18.0	-0.7	-1.0	-0.4	-0.6
12	37.4	41.2	38.0	30.6	-0.2	0.4	-0.2	-1.3
13 to 15	23.6	28.8	23.3	16.4	-0.1	-2.3	2.4 *	-1.7
16 or more	5.6	5.5	6.5	4.0	0.6	1.3 **	0.1	0.6
Unknown (used for children)	0.0	0.0	0.0	0.0	0.0 a	0.0 a	0.0 a	0.0 a
Living Arrangement								
Lives alone	23.5	17.7	22.7	33.5	0.0	0.2	-0.2	0.5
Lives with relatives	69.6	71.2	72.1	62.6	0.8	1.1	2.0	-1.5
Lives with only non-relatives	6.9	11.0	5.2	3.9	-0.9	-1.3	-1.7 **	0.9
Relationship to Householder								
Householder	60.8	50.2	64.5	69.6	0.4	-2.6	2.6	2.4
Spouse	18.7	12.5	23.8	18.1	0.1	1.2	1.1	-2.6
Child	10.0	24.5	3.7	0.0	0.5	2.1	-1.5 *	0.0 a
Grandchild	0.3	0.7	0.0	0.0	0.1	0.1	0.0 a	0.0 a
Parent	2.1	0.2	1.9	5.1	0.0	0.1	0.4	-0.8
Sibling	1.7	2.0	1.8	1.2	0.1	0.5	-0.7	0.7
Other relative	2.4	1.9	1.9	3.8	-0.2	0.1	-0.4	-0.4
Nonrelative	4.2	7.9	2.4	2.2	-0.9 *	-1.5	-1.6 **	0.7
Parents Present								
Both mother and father	4.2	11.5	0.7	0.0	0.7	1.7	-0.1	0.0 a
Mother only	6.9	14.6	4.5	0.0	0.0	0.1	-0.4	0.0 a
Father only	0.6	1.4	0.3	0.0	0.2	0.5	0.1	0.0 a
Neither	88.2	72.5	94.5	100.0	-1.0	-2.3	0.5	0.0 a

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.1.d

DISTRIBUTION OF PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
OTHER SOCIAL SECURITY BENEFICIARIES

Wave 1 Characteristic	Wave 1/Wave 2 Sample				Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples			
		Age In January 2001				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Sex								
Male	21.4	54.2	13.2	10.9	1.4 **	2.0	-0.5	0.4
Female	78.6	45.8	86.8	89.1	-1.4 **	-2.0	0.5	-0.4
Race								
White	87.2	78.6	84.2	91.2	-0.5	-1.6	-1.0	0.5
Black	10.1	17.0	11.6	7.1	0.2	0.5	0.8	-0.3
American Indian, Alaska Native	1.3	3.3	1.5	0.4	0.5 ***	1.4 ***	0.1	0.2
Asian, Pacific Islander	1.4	1.1	2.7	1.3	-0.2	-0.2	0.1	-0.3
Ethnicity								
Hispanic	7.8	12.0	13.7	4.7	1.7 ***	2.3	2.7 *	0.9 **
Non-Hispanic	92.2	88.0	86.3	95.3	-1.7 ***	-2.3	-2.7 *	-0.9 **
Marital Status								
Married	24.1	0.0	27.3	32.5	-0.7	0.0 a	-0.5	-0.1
Widowed	46.4	0.0	47.8	63.7	-1.2	0.0 a	-0.2	-0.2
Divorced or separated	2.9	0.0	6.2	3.2	0.2	0.0 a	1.1	0.1
Never married	26.6	100.0	18.7	0.6	1.8 **	0.0 a	-0.3	0.2
Years of education								
0 to 8	14.8	5.6	14.5	18.5	-0.2	0.0	2.0	-0.4
9 to 11	17.7	24.4	20.5	14.5	0.2	0.0	-0.7	0.1
12	28.5	1.2	38.1	36.5	-1.7 *	-0.6	-0.6	-1.4
13 to 15	14.7	0.0	18.0	19.5	0.7	0.0 a	1.1	1.5
16 or more	8.1	0.0	8.9	11.0	-0.4	0.0 a	-1.9	0.2
Unknown (used for children)	16.0	68.7	0.0	0.0	1.3 *	0.5	0.0 a	0.0 a
Living Arrangement								
Lives alone	34.2	0.0	26.3	49.3	-1.8 *	0.0 a	0.6	-1.6
Lives with relatives	64.0	99.3	67.8	49.5	1.3	0.0	-1.5	1.1
Lives with only non-relatives	1.8	0.7	6.0	1.2	0.4 **	0.0	0.8	0.5 *
Relationship to Householder								
Householder	53.6	0.1	59.5	72.5	-1.4	0.0	-0.3	-0.2
Spouse	15.0	0.0	18.5	19.8	-0.9 *	0.0 a	-1.5	-0.5
Child	22.2	87.3	11.2	0.1	1.8 **	1.2	-0.1	0.1
Grandchild	1.3	5.2	0.4	0.0	0.0	-0.7	0.3	0.0 a
Parent	2.8	0.0	3.8	3.7	0.4	0.0 a	1.6 **	0.3
Sibling	0.6	0.9	1.4	0.2	0.0	-0.4	0.3	0.1
Other relative	3.1	4.5	1.9	2.9	-0.3	-0.2	-0.4	-0.3
Nonrelative	1.5	1.9	3.4	0.8	0.3	0.1	0.2	0.4 *
Parents Present								
Both mother and father	13.1	52.0	5.8	0.0	0.9	0.8	-1.0	0.0 a
Mother only	9.0	32.9	6.4	0.5	0.7	-0.3	1.6	-0.1
Father only	1.7	6.4	1.2	0.0	0.3	1.0	-0.4	0.0 a
Neither	76.3	8.6	86.5	99.5	-1.9 **	-1.4	-0.2	0.1

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.1.e

DISTRIBUTION OF PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
SSI RECIPIENTS

Wave 1 Characteristic	Wave 1/Wave 2 Sample				Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples			
		Age In January 2001				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Sex								
Male	43.8	62.6	46.1	26.7	0.3	0.9	0.4	-0.5
Female	56.2	37.4	53.9	73.3	-0.3	-0.9	-0.4	0.5
Race								
White	62.7	56.7	65.8	57.1	-1.5	-0.7	-1.0	-3.0
Black	29.9	39.5	29.0	26.9	1.1	0.0	0.9	2.2
American Indian, Alaska Native	2.6	3.2	2.8	1.6	0.5	0.5	0.5	0.3
Asian, Pacific Islander	4.9	0.6	2.4	14.4	-0.1	0.3	-0.4	0.4
Ethnicity								
Hispanic	16.8	17.3	14.2	23.8	2.0 **	1.4	2.6 ***	0.4
Non-Hispanic	83.2	82.7	85.8	76.2	-2.0 **	-1.4	-2.6 ***	-0.4
Marital Status								
Married	21.5	0.4	23.4	28.0	-0.7	0.2	-0.9	-0.4
Widowed	13.9	0.0	6.2	43.9	-0.4	0.0 a	-0.3	-1.2
Divorced or separated	23.1	0.0	29.1	19.3	-0.4	0.0 a	-0.7	0.6
Never married	41.4	99.6	41.3	8.9	1.6	-0.2	1.8	0.9
Years of education								
0 to 8	25.7	8.5	20.2	51.1	0.1	0.9	-0.5	1.5
9 to 11	21.1	19.9	23.1	16.1	0.3	1.6	-0.3	1.5
12	28.5	1.0	36.5	21.4	-1.2	-0.5	-0.4	-3.5 **
13 to 15	12.5	0.0	16.6	7.8	0.8	0.0 a	1.1	0.6
16 or more	3.1	0.0	3.6	3.6	0.0	0.0 a	0.2	-0.2
Unknown (used for children)	9.0	70.6	0.0	0.0	0.0	-2.0	0.0 a	0.0 a
Living Arrangement								
Lives alone	26.2	0.0	24.6	45.5	1.2	0.0 a	1.4	1.7
Lives with relatives	66.2	96.4	64.8	53.2	-0.6	-0.6	-0.2	-2.3
Lives with only non-relatives	7.6	3.6	10.6	1.3	-0.6	0.6	-1.3	0.5
Relationship to Householder								
Householder	51.1	0.6	54.4	70.0	0.4	0.1	0.6	1.2
Spouse	8.6	0.0	9.9	9.6	-0.9 *	0.0 a	-1.3 *	-0.2
Child	23.2	79.4	20.2	0.3	2.0 **	5.9 **	1.4	0.2
Grandchild	1.9	11.4	0.6	0.0	-0.6 **	-3.1 *	-0.3	0.0 a
Parent	3.8	0.0	2.1	10.8	0.2	0.0 a	0.3	0.0
Sibling	2.8	0.4	3.9	1.3	0.2	0.2	0.1	0.4
Other relative	3.5	3.5	2.2	7.3	-1.0 **	-2.7 **	-0.2	-2.1
Nonrelative	5.0	4.6	6.6	0.6	-0.4	-0.4	-0.7	0.4
Parents Present								
Both mother and father	11.7	36.9	10.8	0.0	1.0	0.5	1.3	0.0 a
Mother only	13.2	43.1	11.6	0.7	1.0	2.1	0.8	0.4
Father only	1.8	5.1	1.8	0.0	0.0	-0.1	0.0	0.0 a
Neither	73.3	14.9	75.8	99.3	-2.0 **	-2.5	-2.1	-0.4

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.2.a

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
THE TOTAL POPULATION

	Wave 1/Wave 2 Sample				Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples			
		Age In January 2001				Age In January 2001		
Wave 1 Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	10.7	21.5	6.7	8.2	0.7 ***	1.6 ***	0.5 ***	0.1
Medicare	12.6	0.0	2.2	93.7	0.1 *	0.0 a	0.1	0.2
Private (including military)	75.4	70.6	76.9	78.1	0.3	0.1	0.4 *	0.6
None	14.2	13.9	16.8	1.3	-0.7 ***	-1.0 ***	-0.7 ***	-0.1
Sources of Own Income								
Social Security	14.9	2.9	4.8	93.1	0.2 **	0.2 *	0.1	0.3
SSI	2.2	1.1	2.3	4.1	0.1 ***	0.1	0.1 **	0.3
Other public assistance	0.9	0.0	1.3	0.9	0.1 ***	0.0	0.1 **	0.1
Earnings	48.7	4.6	74.3	12.1	0.6 ***	0.3 **	0.7 ***	0.3
Asset income	41.2	4.0	52.0	65.9	1.8 ***	0.6 ***	2.2 ***	2.5 ***
Other	11.1	0.1	9.1	45.0	0.5 ***	0.0	0.6 ***	0.8 *
Total Personal Income, avg. monthly								
Under $100	32.5	92.4	13.3	2.1	-0.7 ***	-0.5 ***	-0.9 ***	-0.2
$100 to 249	2.7	2.3	2.9	2.2	0.1 *	0.3 ***	0.1	-0.2
$250 to 499	4.8	2.6	4.6	9.9	0.1	0.2 *	0.1	-0.4
$500 to 749	6.4	1.6	6.4	16.5	0.1	0.2 **	0.1	-0.1
$750 to 999	5.2	0.5	5.6	13.0	-0.2 **	-0.1	0.0	-1.2 ***
$1,000 to 1,499	10.1	0.5	12.1	20.3	-0.1	-0.1	-0.3 **	0.5
$1,500 to 1,999	8.3	0.1	10.9	12.8	0.0	0.0	0.0	0.2
$2,000 to 2,999	11.8	0.1	16.7	12.4	0.3 ***	0.0 **	0.4 ***	0.7 ***
$3,000 to 3,999	7.3	0.0	10.8	4.9	0.2 **	0.0	0.2 **	0.3
$4,000 to 4999	4.1	0.0	6.1	2.5	0.1 **	0.0	0.1 *	0.2
$5,000 or more	7.0	0.0	10.6	3.4	0.1	0.0	0.1	0.1
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	86.6	97.1	95.7	17.6	-0.1	-0.2	-0.1	0.2
25 to under 50 percent	3.3	0.1	1.0	21.6	0.2 ***	0.0	0.0	1.5 ***
50 to under 75 percent	3.1	0.2	0.9	20.5	0.1	0.0	0.1 ***	0.1
75 to under 100 percent	3.8	0.2	1.1	25.2	0.0	0.0	0.0	-0.3
100 percent	3.3	2.4	1.3	15.2	-0.2 ***	0.2 *	-0.1 **	-1.6 ***

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.2.b

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
RETIRED WORKERS

| | Wave 1/Wave 2 Sample | | | | Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples | | | |
| | | Age In January 2001 | | | | Age In January 2001 | | |
Wave 1 Characteristic	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	5.8	5.8	5.7	6.0	0.1	0.0	0.4	-0.3
Medicare	91.5	19.0	99.9	100.0	0.1	-1.7	0.0	0.0 a
Private (including military)	80.7	79.6	81.2	80.4	0.3	-0.7	0.6	0.2
None	1.1	10.4	0.0	0.0	0.0	0.4	0.0	0.0 a
Sources of Own Income								
Social Security	100.0	100.0	100.0	100.0	0.0 a	0.0 a	0.0 a	0.0 a
SSI	2.2	2.7	2.2	2.1	0.2	-0.2	0.4 **	0.0
Other public assistance	0.6	0.2	0.6	0.8	0.1	0.1	0.0	0.2
Earnings	12.6	22.5	17.1	5.0	0.3	2.7 **	0.0	0.3
Asset income	68.3	62.7	68.0	70.1	2.4 ***	4.8 ***	2.5 ***	1.6 **
Other	47.8	42.5	46.9	50.1	1.1 **	1.8	0.7	1.2
Total Personal Income, avg. monthly								
Under $100	0.5	0.7	0.5	0.4	0.0	-0.2	0.0	-0.1
$100 to 249	1.9	2.2	2.0	1.6	-0.2	-0.3	-0.1	-0.3
$250 to 499	9.6	10.5	10.1	8.7	-0.1	0.8	-0.3	-0.1
$500 to 749	15.0	12.9	13.7	17.0	-0.2	-0.6	-0.1	-0.2
$750 to 999	13.2	12.7	12.0	14.6	-1.0 ***	-0.1	-0.6	-1.7 ***
$1,000 to 1,499	20.9	17.0	20.0	23.0	0.5	-0.1	0.1	1.0
$1,500 to 1,999	13.8	11.9	13.5	14.5	0.3	-0.2	0.5	0.2
$2,000 to 2,999	13.7	15.3	14.9	11.8	0.5 *	-0.3	0.6	0.7 *
$3,000 to 3,999	5.6	9.6	6.0	4.3	0.2	1.3	0.0	0.2
$4,000 to 4999	2.8	4.0	3.3	1.8	0.1	-0.5	0.2	0.2
$5,000 or more	3.2	3.3	3.9	2.3	0.0	0.3	-0.2	0.2
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	11.8	16.3	13.7	8.5	0.2	-0.8	0.0	0.8 **
25 to under 50 percent	24.7	29.1	25.4	22.8	1.6 ***	1.1	1.6 ***	1.6 **
50 to under 75 percent	22.3	18.7	22.3	23.1	0.3	2.5 **	0.5	-0.6
75 to under 100 percent	26.1	18.9	24.2	30.1	-0.3	0.1	-0.3	-0.6
100 percent	15.1	17.1	14.4	15.5	-1.7 ***	-2.9 **	-1.8 ***	-1.3 **

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.2.c

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
DISABLED WORKERS

Wave 1 Characteristic	Wave 1/Wave 2 Sample				Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples			
		Age In January 2001				Age In January 2001		
	Total	Under 50	50 to 64	65 +	Total	Under 50	50 to 64	65 +
All Disabled Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	35.9	50.6	26.9	30.7	2.4 **	1.6	1.8	3.2
Medicare	78.5	71.6	72.3	100.0	1.6 *	2.1	2.1	0.0 a
Private (including military)	43.1	31.9	45.7	54.8	-0.4	2.0	0.1	-4.0 *
None	2.8	3.4	3.8	0.0	-0.1	0.5	-0.6	0.0 a
Sources of Own Income								
Social Security	100.0	100.0	100.0	100.0	0.0 a	0.0 a	0.0 a	0.0 a
SSI	18.5	26.9	14.3	13.8	0.8	0.5	0.4	1.3
Other public assistance	3.8	5.7	3.0	2.4	0.6 *	0.1	0.4	1.5 ***
Earnings	7.8	14.6	4.3	4.2	1.2 **	2.4 *	0.4	0.1
Asset income	30.8	23.4	32.7	38.3	1.9 *	-0.7	4.1 **	2.8
Other	25.5	16.6	29.0	32.0	0.9	0.4	1.5	1.4
Total Personal Income, avg. monthly								
Under $100	0.6	0.6	0.6	0.7	-0.2	-0.4 ***	-0.2	0.3
$100 to 249	1.9	1.9	2.0	1.6	0.4	0.8 ***	0.3	0.0
$250 to 499	9.3	8.4	8.1	12.7	-1.2 *	-1.2	-1.4	-0.9
$500 to 749	32.0	40.2	26.5	30.0	-0.1	-0.6	-0.6	0.5
$750 to 999	19.2	18.0	21.2	17.3	0.7	1.6	0.9	-0.6
$1,000 to 1,499	20.5	18.0	23.0	19.6	-0.7	-0.9	0.5	-2.1
$1,500 to 1,999	6.4	5.9	6.0	8.0	0.4	0.4	0.0	0.9
$2,000 to 2,999	6.5	4.8	7.1	7.9	1.1 **	0.5	1.3	1.7 *
$3,000 to 3,999	2.3	1.2	3.7	1.4	0.2	0.4	-0.1	0.7 *
$4,000 to 4999	0.5	0.1	0.7	0.5	-0.2	-0.1	-0.3	-0.2
$5,000 or more	0.8	0.8	1.0	0.3	-0.4 **	-0.5	-0.4	-0.3
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	5.0	7.8	3.8	3.3	0.1	0.3	-0.8	0.8
25 to under 50 percent	13.6	14.3	12.9	14.1	0.9	0.9	-0.1	2.5 *
50 to under 75 percent	19.6	19.3	17.3	24.2	2.2 **	1.5	3.4 **	0.8
75 to under 100 percent	25.9	23.5	28.0	25.4	0.5	0.3	1.8	-1.1
100 percent	35.9	35.1	38.0	33.1	-3.6 ***	-3.0 *	-4.3 **	-2.9

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.2.d

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
ALL OTHER SOCIAL SECURITY BENEFICIARIES

Wave 1 Characteristic	Wave 1/Wave 2 Sample				Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples			
		Age In January 2001				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	16.5	33.6	21.0	8.9	1.4 *	1.2	2.7 *	0.3
Medicare	64.7	0.0	23.1	100.0	-1.9 **	0.0 a	0.1	0.0 a
Private (including military)	71.3	62.9	57.2	78.1	0.0	0.6	-4.1 *	1.4
None	6.4	14.5	19.2	0.0	0.1	-1.9	1.6	0.0 a
Sources of Own Income								
Social Security	100.0	100.0	100.0	100.0	0.0 a	0.0 a	0.0 a	0.0 a
SSI	4.8	4.0	9.1	4.0	0.3	-1.1	1.3	0.5
Other public assistance	0.7	0.0	1.5	0.8	0.0	0.0 a	-0.1	0.0
Earnings	15.0	7.0	31.6	13.8	0.5	-0.3	-2.0	1.6 **
Asset income	47.2	7.3	41.5	63.9	0.9	1.6 *	2.3	1.9
Other	24.1	0.2	21.3	33.9	-1.4 *	-0.2	0.0	-1.3
Total Personal Income, avg. monthly								
Under $100	3.5	13.0	1.8	0.4	0.1	-0.4	0.6	-0.1
$100 to 249	6.9	22.5	3.4	1.8	0.7	1.6	0.1	-0.2
$250 to 499	15.9	29.1	14.2	11.3	-0.3	1.8	-1.2	-1.5 *
$500 to 749	20.2	19.5	26.5	18.9	1.1	0.4	0.0	1.7 *
$750 to 999	14.6	7.5	15.3	17.2	-1.5 **	-2.1 **	0.6	-1.5 *
$1,000 to 1,499	17.0	7.4	14.4	21.3	-1.3 *	-1.4	-1.1	-0.9
$1,500 to 1,999	8.6	0.5	11.5	10.9	0.0	0.0	-0.1	0.3
$2,000 to 2,999	6.5	0.4	8.6	8.2	0.3	0.1	0.6	0.5
$3,000 to 3,999	2.5	0.0	2.6	3.4	0.5 *	0.0 a	0.4	0.8 *
$4,000 to 4999	1.6	0.0	0.9	2.4	0.3	0.0 a	0.5 *	0.4
$5,000 or more	2.7	0.0	0.9	4.2	0.1	0.0 a	-0.3	0.4
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	9.5	0.7	13.4	11.8	0.2	0.3 *	0.1	0.4
25 to under 50 percent	16.0	2.8	22.8	19.2	0.3	-0.2	0.2	1.0
50 to under 75 percent	15.2	6.0	17.3	18.2	-0.6	-0.3	-0.7	-0.3
75 to under 100 percent	23.7	7.4	22.7	30.2	0.0	0.6	0.1	0.5
100 percent	35.6	83.0	23.8	20.5	0.1	-0.4	0.3	-1.5

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.2.e

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
SSI RECIPIENTS

Wave 1 Characteristic	Wave 1/Wave 2 Sample				Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples			
		Age In January 2001				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	93.6	83.2	94.3	97.4	0.8	0.7	1.1 *	0.4
Medicare	25.9	0.0	18.7	61.1	1.2	0.0 a	1.0	2.7
Private (including military)	17.2	36.7	15.8	10.2	-1.2	-1.2	-1.0	-2.3 *
None	3.0	6.5	3.2	0.6	-0.4	-0.3	-0.4	-0.6 *
Sources of Own Income								
Social Security	31.3	10.8	24.9	61.1	0.6	-3.0	0.6	2.7
SSI	100.0	100.0	100.0	100.0	0.0 a	0.0 a	0.0 a	0.0 a
Other public assistance	8.0	0.8	10.1	6.3	0.8 *	0.4	1.3 **	-0.1
Earnings	7.2	6.0	9.6	1.1	0.4	-0.5	0.5	0.7 *
Asset income	10.9	3.7	11.5	13.3	0.6	0.0	0.8	0.4
Other	7.6	0.0	8.4	9.7	-0.9 *	0.0 a	-0.9	-1.2
Total Personal Income, avg. monthly								
Under $100	2.0	9.0	1.2	0.3	-0.4	-1.7	-0.2	-0.3
$100 to 249	4.2	18.1	2.3	1.8	0.1	3.6 **	-0.8 *	0.2
$250 to 499	15.0	28.9	11.3	18.0	-0.4	-1.2	-0.9	1.4
$500 to 749	57.0	33.7	59.5	63.1	2.2 *	3.7	3.4 **	-1.9
$750 to 999	9.0	2.9	10.8	7.3	-0.2	-1.0	0.0	-0.1
$1,000 to 1,499	8.1	5.4	9.2	6.5	-0.6	-2.6	-0.9	1.5
$1,500 to 1,999	2.3	1.5	2.9	1.2	-0.3	-1.0	-0.3	0.0
$2,000 to 2,999	1.4	0.5	1.7	1.3	-0.1	0.1	-0.2	-0.3
$3,000 to 3,999	0.8	0.0	1.1	0.3	-0.3	0.0 a	-0.3	-0.3
$4,000 to 4999	0.1	0.0	0.1	0.0	0.0	0.0 a	0.0	0.0 a
$5,000 or more	0.0	0.0	0.0	0.2	0.0	0.0 a	0.0 a	-0.2
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	71.1	89.6	77.7	41.8	-0.7	3.1	-0.6	-3.3
25 to under 50 percent	6.0	1.8	5.6	9.5	-0.5	-1.8 *	-0.4	0.0
50 to under 75 percent	12.7	6.2	9.5	25.4	1.5 **	-0.2	0.6	5.1 ***
75 to under 100 percent	10.3	2.5	7.3	23.3	-0.3	-1.1	0.4	-1.9
100 percent	0.0	0.0	0.0	0.0	0.0 a	0.0 a	0.0 a	0.0 a

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.3.a

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
THE TOTAL POPULATION

	Wave 1/Wave 2 Sample				Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples			
		Age In January 2001				Age In January 2001		
Wave 1 Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	65.2	70.4	64.4	57.8	-0.4 ***	-1.5 ***	-0.1	0.6
No married couple present								
Male householder	5.1	5.7	5.2	2.9	-0.1	0.0	-0.2 **	0.1
Female householder	14.8	22.9	12.8	7.3	0.6 ***	1.5 ***	0.4 ***	0.4
Nonfamily								
Male householder	7.0	0.7	9.5	7.6	-0.1 **	0.0	-0.2 ***	0.0
Female householder	7.7	0.2	7.8	24.0	0.0	0.0	0.2 ***	-1.1 ***
Ownership Status of Living Quarters								
Owned	71.0	67.7	70.0	83.5	0.2	-0.2	0.5 **	-0.4
Not owned	29.0	32.3	30.0	16.5	-0.2	0.2	-0.5 **	0.4
Residence in Public Housing	2.3	3.4	1.8	3.0	0.2 ***	0.5 ***	0.1 *	0.0
Household Size								
1 person	10.0	0.0	10.2	30.2	0.0	0.0	0.3 ***	-1.1 ***
2 persons	26.7	4.6	30.3	55.6	-0.1	0.2 *	-0.4 *	0.8 *
3 to 4 persons	41.6	53.7	42.4	11.1	0.5 *	0.7 *	0.4	0.5
5 or more persons	21.8	41.8	17.0	3.1	-0.4 *	-0.9 **	-0.2	-0.2
Family Size								
1 person	16.1	0.8	19.4	32.1	-0.1 **	-0.1	0.0	-1.0 ***
2 persons	24.7	6.2	26.5	54.6	0.0	0.3 **	-0.3	0.6
3 to 4 persons	39.3	53.8	38.9	10.4	0.6 **	0.9 **	0.4 *	0.6 *
5 or more persons	19.9	39.2	15.2	2.9	-0.4 **	-1.1 ***	-0.1	-0.2
Persons under 18 in Family								
None	46.0	0.9	55.4	94.9	0.0	-0.1	0.0	0.2
1 person	17.8	22.3	18.9	2.5	-0.3	-0.3	-0.3 *	-0.1
2 persons	20.5	39.1	16.3	1.6	0.2	0.3	0.2	-0.1
3 persons	10.2	23.3	6.5	0.6	0.2	0.4	0.2	-0.1
4 persons	3.6	8.9	1.9	0.2	0.0	-0.1	0.0	0.0
5 or more persons	2.0	5.4	0.9	0.1	-0.1	-0.3	-0.1	0.0

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
[a] The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.3.b

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
RETIRED WORKERS

Wave 1 Characteristic	Wave 1/Wave 2 Sample				Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples			
		Age In January 2001				Age In January 2001		
	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	62.2	75.3	69.6	50.4	0.7 *	0.9	0.9 *	0.5
No married couple present								
Male householder	2.6	2.3	2.1	3.3	0.2	-0.5	0.3	0.3
Female householder	6.1	6.4	5.0	7.2	0.3	-0.9	-0.1	1.2 ***
Nonfamily								
Male householder	8.4	7.4	7.6	9.6	-0.3	-0.1	-0.5 *	0.0
Female householder	20.4	8.4	15.6	29.0	-1.0 ***	0.4	-0.7 *	-1.9 ***
Ownership Status of Living Quarters								
Owned	85.5	87.7	87.9	82.2	-0.2	0.7	-0.2	-0.5
Not owned	14.5	12.3	12.1	17.8	0.2	-0.7	0.2	0.5
Residence in Public Housing	2.2	1.1	1.5	3.1	0.0	0.4 **	0.0	0.0
Household Size								
1 person	27.2	12.7	21.4	37.5	-1.2 ***	0.6	-1.1 **	-2.0 ***
2 persons	58.8	65.8	64.0	50.9	0.5	-0.4	0.3	1.1
3 to 4 persons	11.2	17.3	11.5	9.3	1.0 ***	1.1	0.9	1.0 **
5 or more persons	2.9	4.1	3.1	2.3	-0.2	-1.3 *	-0.1	-0.1
Family Size								
1 person	29.3	16.1	23.5	39.2	-1.2 ***	0.1	-1.0 *	-1.9 **
2 persons	57.6	64.2	62.6	50.1	0.5	0.0	0.4	0.9
3 to 4 persons	10.5	16.1	11.0	8.6	0.9 ***	0.6	0.9	1.1 **
5 or more persons	2.6	3.6	2.9	2.1	-0.2	-0.7	-0.2	-0.1
Persons under 18 in Family								
None	95.3	92.1	94.5	97.1	0.1	0.7	0.1	-0.1
1 person	2.4	4.3	2.7	1.6	0.0	-0.1	0.0	0.0
2 persons	1.4	2.1	1.7	0.9	-0.1	-0.8	-0.2	0.1
3 persons	0.6	1.1	0.6	0.4	0.0	0.0	-0.1	0.0
4 persons	0.2	0.2	0.2	0.1	0.0	0.1	0.1	0.0
5 or more persons	0.1	0.2	0.2	0.0	0.0	0.1	0.1	0.0

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
[a] The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.3.c

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
DISABLED WORKERS

Wave 1 Characteristic	Wave 1/Wave 2 Sample				Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples			
		Age In January 2001				Age In January 2001		
	Total	Under 50	50 to 64	65 +	Total	Under 50	50 to 64	65 +
All Disabled Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	50.0	43.4	55.5	49.5	0.5	1.9	1.2	-2.1
No married couple present								
Male householder	4.0	4.7	3.4	4.0	-0.5	-0.4	-0.5	-0.7
Female householder	16.8	25.3	13.9	9.6	0.7	-0.5	0.8	1.4
Nonfamily								
Male householder	12.4	15.3	11.5	9.7	0.3	-0.1	-0.6	2.0 *
Female householder	16.4	10.5	15.4	27.2	-0.8	-0.5	-0.9	-0.6
Ownership Status of Living Quarters								
Owned	65.1	57.5	69.6	68.0	-0.7	2.1	-2.9 *	-0.2
Not owned	34.9	42.5	30.4	32.0	0.7	-2.1	2.9 *	0.2
Residence in Public Housing	6.4	6.0	5.5	8.5	0.9 **	0.2	1.7 ***	0.6
Household Size								
1 person	23.5	17.7	22.7	33.5	0.0	0.2	-0.2	0.5
2 persons	42.4	32.0	48.1	47.2	-1.0	-3.4 **	0.9	0.7
3 to 4 persons	25.6	37.0	22.2	15.0	1.1	3.1 **	-0.6	-0.1
5 or more persons	8.5	13.3	7.0	4.3	-0.2	0.1	-0.1	-1.1
Family Size								
1 person	30.4	28.8	27.9	37.4	-0.8	-1.1	-2.0	1.5
2 persons	38.9	27.6	44.9	44.5	-0.2	-1.9	1.9	-0.1
3 to 4 persons	23.1	31.7	21.1	14.2	0.9	2.6 *	-0.6	0.0
5 or more persons	7.6	11.9	6.0	3.9	0.2	0.3	0.7	-1.4
Persons under 18 in Family								
None	81.1	68.9	84.8	92.5	-0.5	0.5	-1.5	0.8
1 person	9.1	13.0	8.7	4.2	-0.1	-0.3	-0.2	0.0
2 persons	5.5	9.9	3.7	2.4	0.5	0.3	1.3 **	-0.9
3 persons	2.5	5.2	1.5	0.6	0.2	-0.5	0.5	0.4
4 persons	0.9	1.7	0.5	0.3	0.2	0.6 *	0.0	-0.3
5 or more persons	0.8	1.3	0.8	0.0	-0.2	-0.5	-0.1	0.0 a

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.3.d

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
ALL OTHER SOCIAL SECURITY BENEFICIARIES

| | Wave 1/Wave 2 Sample | | | | Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples | | | |
| | | Age In January 2001 | | | | Age In January 2001 | | |
Wave 1 Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	39.1	54.8	35.6	34.1	0.3	1.1	-2.6	0.1
No married couple present								
Male householder	4.1	8.6	5.2	2.0	0.8 **	1.6 *	0.7	0.4
Female householder	20.9	35.9	27.8	13.5	0.5	-2.3	1.3	0.9
Nonfamily								
Male householder	1.5	0.6	3.5	1.4	-0.1	-0.2	-0.5	0.0
Female householder	34.1	0.1	27.4	48.8	-1.6 *	-0.1	0.7	-1.4
Ownership Status of Living Quarters								
Owned	77.3	69.4	75.6	80.8	-0.9	-1.7	-0.3	-0.3
Not owned	22.7	30.6	24.4	19.2	0.9	1.7	0.3	0.3
Residence in Public Housing	4.2	2.9	5.7	4.4	0.3	0.0	1.7 **	0.0
Household Size								
1 person	34.2	0.0	26.3	49.3	-1.8 *	0.0 a	0.6	-1.6
2 persons	31.2	10.5	31.7	38.9	-0.7	-0.5	-2.6	0.5
3 to 4 persons	23.5	54.2	31.0	9.9	1.2	-0.6	0.6	0.8
5 or more persons	11.1	35.3	11.1	1.9	1.3 *	1.1	1.4	0.4
Family Size								
1 person	36.0	0.7	32.2	50.5	-1.3	0.0	1.5	-1.1
2 persons	31.1	12.1	30.6	38.5	-0.9	-0.6	-2.5	0.2
3 to 4 persons	22.3	53.2	27.2	9.3	1.1	-0.4	-0.2	0.7
5 or more persons	10.5	34.0	9.9	1.7	1.1 *	1.0	1.2	0.2
Persons under 18 in Family								
None	69.8	0.7	70.0	96.1	-1.9 **	0.0	0.6	-0.5
1 person	10.5	29.7	16.5	1.7	-0.1	-1.3	-2.1	0.1
2 persons	9.9	34.1	7.0	1.4	0.4	-1.0	0.2	0.2
3 persons	6.4	22.4	5.2	0.5	1.2 **	2.5	0.8	0.1
4 persons	1.7	6.3	0.7	0.2	0.3	-0.1	0.4	0.2
5 or more persons	1.7	6.7	0.7	0.1	0.1	-0.1	0.1	0.0

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.3.e

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
SSI RECIPIENTS

	Wave 1/Wave 2 Sample				Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples			
		Age In January 2001				Age In January 2001		
Wave 1 Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	34.2	41.1	34.1	30.9	-0.6	0.0	-0.1	-2.1
No married couple present								
Male householder	6.1	8.7	5.9	5.0	-0.3	-0.8	0.1	-1.3
Female householder	27.5	49.5	26.5	17.7	0.4	1.5	-0.3	1.4
Nonfamily								
Male householder	11.3	0.6	14.3	8.7	0.9	-0.6	1.2	1.3
Female householder	19.9	0.0	18.0	36.6	-0.4	0.0 a	-0.6	0.2
Ownership Status of Living Quarters								
Owned	42.8	41.5	42.7	43.6	-1.5	-1.6	-0.7	-3.4
Not owned	57.2	58.5	57.3	56.4	1.5	1.6	0.7	3.4
Residence in Public Housing	13.2	9.1	11.8	19.5	0.9	-0.1	0.9	1.2
Household Size								
1 person	26.2	0.0	24.6	45.5	1.2	0.0 a	1.4	1.7
2 persons	25.8	8.6	28.1	29.1	-1.3	0.8	-2.5 **	1.3
3 to 4 persons	29.8	50.6	30.1	17.3	0.1	1.5	0.3	-1.5
5 or more persons	18.2	40.8	17.2	8.1	-0.1	-2.4	0.8	-1.6
Family Size								
1 person	33.8	3.6	35.2	46.8	0.6	0.6	0.2	2.3
2 persons	23.2	10.5	23.4	29.9	-0.3	0.1	-0.6	0.4
3 to 4 persons	27.2	50.5	26.6	15.5	0.0	1.5	-0.2	-0.9
5 or more persons	15.8	35.4	14.7	7.8	-0.2	-2.2	0.6	-1.8
Persons under 18 in Family								
None	66.3	3.6	71.7	86.2	-0.3	0.6	-1.0	2.3
1 person	13.0	25.4	12.4	7.6	-0.1	-1.3	0.3	-0.6
2 persons	10.5	33.8	8.2	3.9	0.5	5.2 **	0.1	-1.5
3 persons	5.8	22.7	4.2	1.0	0.1	-2.3	0.7	-0.5
4 persons	3.3	13.1	2.1	1.1	-0.1	-2.0	0.1	0.2
5 or more persons	1.1	1.5	1.4	0.2	-0.1	-0.1	-0.2	0.1

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.4.a

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
THE TOTAL POPULATION

Wave 1 Characteristic	Wave 1/Wave 2 Sample				Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples			
		Age In January 2001				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	3.0	4.7	2.4	2.7	0.4 ***	0.5 ***	0.3 ***	0.4 **
Housing assistance	1.7	2.8	1.3	1.3	0.2 ***	0.4 ***	0.1 ***	0.2 *
Food stamps	6.4	10.6	5.2	3.6	0.8 ***	1.3 ***	0.6 ***	0.3 **
Total Household Income, avg. monthly								
Less than $500	3.3	3.8	3.1	3.1	-0.2 ***	0.1	-0.2 ***	-0.7 ***
$500 to 999	5.9	5.3	4.5	14.5	0.0	0.0	0.1	-0.8 **
$1,000 to 1,499	6.9	6.9	5.5	14.3	-0.3 **	0.0	-0.3 ***	-0.7 *
$1,500 to 1,999	7.5	7.5	6.3	13.3	0.1	0.4 *	0.1	-0.1
$2,000 to 2,999	14.8	14.5	13.9	20.0	0.0	0.0	-0.1	0.6
$3,000 to 3,999	13.7	13.6	14.1	12.3	0.2	0.3	0.1	0.4
$4,000 to 4,999	11.6	11.7	12.4	7.6	-0.1	-0.6 **	-0.1	0.5 *
$5,000 or more	36.3	36.7	40.3	14.8	0.3	-0.2	0.4	0.8 *
Total Family Income, avg. monthly								
Less than $500	4.8	5.6	4.8	3.3	-0.3 ***	0.0	-0.3 ***	-0.7 ***
$500 to 999	6.9	5.9	5.7	15.1	0.0	0.2	0.1	-0.8 **
$1,000 to 1,499	7.6	7.2	6.5	14.5	-0.3 **	0.0	-0.3 ***	-0.6 *
$1,500 to 1,999	7.9	7.7	7.0	13.5	0.2	0.5 **	0.1	-0.1
$2,000 to 2,999	15.1	14.6	14.4	19.9	0.0	0.0	-0.2	0.5
$3,000 to 3,999	12.9	12.7	13.2	11.9	0.2	0.2	0.1	0.4
$4,000 to 4,999	10.8	11.1	11.4	7.4	0.0	-0.4	0.0	0.5 **
$5,000 or more	33.9	35.2	37.1	14.5	0.3	-0.4	0.5 **	0.8 *
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	2.2	2.5	2.4	0.5	-0.2 ***	-0.2	-0.3 ***	0.0
10 to under 50 percent	3.3	5.4	2.7	1.4	0.0	0.3	0.0	-0.6 ***
50 to under 100 percent	8.0	11.0	6.6	9.4	-0.1	-0.1	0.0	-0.3
100 to under 125 percent	4.8	6.1	3.8	7.3	0.0	0.2	0.0	-0.6 **
125 to under 150 percent	4.7	5.7	3.9	6.5	0.0	0.2	-0.1	-0.5 *
150 to under 200 percent	9.9	11.1	8.7	13.8	-0.1	0.1	-0.3 *	0.1
200 to under 300 percent	18.9	20.0	17.8	22.4	-0.3	-0.6	-0.2	-0.2
300 to under 400 percent	14.7	13.7	15.2	14.2	0.0	-0.2	0.0	0.4
400 percent or more	33.4	24.5	38.9	24.6	0.7 ***	0.2	0.8 ***	1.6 ***
Distribution of Family Income by Source, avg. monthly								
Social Security	4.6	1.5	2.3	35.4	0.1	0.0	0.0	-0.4
SSI	0.5	0.5	0.5	0.8	0.0 **	0.0 *	0.0 *	0.0
Other public assistance	0.2	0.4	0.2	0.2	0.0	0.0	0.0	0.0
Earnings	86.3	92.8	90.4	28.7	-0.3 **	0.0	-0.1	-1.2
Asset income	3.2	1.9	2.6	12.0	0.0	-0.1	-0.1	0.7 **
All other	5.1	2.8	4.0	22.9	0.2 ***	0.1	0.1 **	0.8 **

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
[a] The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.4.b

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
RETIRED WORKERS

| | Wave 1/Wave 2 Sample | | | | Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples | | | |
| | | Age In January 2001 | | | | | Age In January 2001 | | |
Wave 1 Characteristic	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	2.3	2.5	2.0	2.6	0.3 **	0.3	0.3	0.4
Housing assistance	1.0	0.6	0.9	1.2	0.1	0.1	0.0	0.2
Food stamps	2.6	3.4	2.7	2.3	0.4 **	-0.1	0.5 **	0.4
Total Household Income, avg. monthly								
Less than $500	2.4	2.1	1.6	3.4	-0.6 ***	-0.4	-0.3 *	-1.1 ***
$500 to 999	12.2	7.6	9.4	16.5	-0.9 ***	-0.7	-0.3	-1.8 ***
$1,000 to 1,499	13.8	8.6	12.9	16.1	-0.5	0.8	-0.6	-0.6
$1,500 to 1,999	13.4	10.3	12.6	15.2	0.1	-0.5	-0.6	1.0 *
$2,000 to 2,999	20.7	16.1	21.7	20.7	0.7	0.8	0.6	0.9
$3,000 to 3,999	13.5	17.6	14.9	10.9	0.5	1.7	1.0 *	-0.2
$4,000 to 4,999	8.6	14.8	10.2	5.3	0.4	-1.0	0.3	0.9 **
$5,000 or more	15.4	23.0	16.8	11.9	0.3	-0.7	0.0	0.9
Total Family Income, avg. monthly								
Less than $500	2.5	2.2	1.8	3.5	-0.7 ***	-0.3	-0.4 **	-1.1 ***
$500 to 999	12.9	9.0	10.2	17.0	-0.9 ***	-0.9	-0.2	-1.7 ***
$1,000 to 1,499	14.0	9.2	12.8	16.5	-0.5	0.5	-0.5	-0.7
$1,500 to 1,999	13.6	10.1	12.7	15.4	0.1	-0.7	-0.5	1.0
$2,000 to 2,999	20.6	16.0	21.6	20.6	0.7	0.8	0.6	0.7
$3,000 to 3,999	13.1	17.7	14.6	10.2	0.5	1.6	0.9 *	-0.3
$4,000 to 4,999	8.3	13.7	9.9	5.1	0.5	-0.3	0.2	1.0 ***
$5,000 or more	15.1	22.2	16.5	11.7	0.3	-0.8	-0.1	1.0 *
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.2	0.3	0.2	0.1	0.0	-0.1	0.0	0.0
10 to under 50 percent	1.1	1.2	0.8	1.5	-0.5 ***	-0.2	-0.4 ***	-0.7 ***
50 to under 100 percent	7.9	8.2	6.4	9.6	-0.3	-0.5	0.2	-0.9 *
100 to under 125 percent	6.6	5.1	5.5	8.3	-0.6 **	0.4	-0.5	-0.9 **
125 to under 150 percent	6.1	4.2	5.2	7.8	-0.3	0.1	0.0	-0.7
150 to under 200 percent	13.2	8.4	12.4	15.3	-0.1	-1.6 **	-0.4	0.6
200 to under 300 percent	23.3	19.6	23.2	24.4	0.0	-0.3	-0.4	0.5
300 to under 400 percent	15.6	18.8	17.1	13.1	0.7	1.3	1.0	0.2
400 percent or more	25.9	34.1	29.3	20.0	1.1 **	0.8	0.4	2.0 ***
Distribution of Family Income by Source, avg. monthly								
Social Security	37.1	30.5	35.4	41.6	-0.3	-0.1	0.0	-1.2
SSI	0.4	0.7	0.4	0.4	0.0	0.0	0.0	0.0
Other public assistance	0.2	0.1	0.2	0.2	0.0	0.0 *	0.0	0.0
Earnings	26.0	30.2	29.0	20.3	-1.3 *	-2.1	-2.1 **	0.4
Asset income	12.3	9.3	11.5	14.5	0.6 *	-0.1	0.9 **	0.2
All other	24.0	29.1	23.5	23.1	1.0 **	2.2 **	1.1 **	0.5

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
ᵃ The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.4.c

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
DISABLED WORKERS

	Wave 1/Wave 2 Sample				Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples			
		Age In January 2001				Age In January 2001		
Wave 1 Characteristic	Total	Under 50	50 to 64	65 +	Total	Under 50	50 to 64	65 +
All Disabled Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	9.7	11.6	8.2	9.7	0.6	0.0	1.2	0.5
Housing assistance	4.9	6.5	3.9	4.5	0.6	-0.1	0.9	1.0
Food stamps	15.5	18.7	13.6	14.5	1.5 *	-0.3	2.7 ***	1.5
Total Household Income, avg. monthly								
Less than $500	2.3	1.8	1.7	4.0	-0.6 **	-0.8 *	-0.9 **	0.2
$500 to 999	20.6	17.3	19.6	27.4	0.5	-1.4	1.5	1.9
$1,000 to 1,499	13.5	12.8	13.0	15.4	-1.0	-0.2	-1.4	-1.4
$1,500 to 1,999	13.9	14.0	14.2	13.0	0.8	2.6 **	0.8	-2.1
$2,000 to 2,999	16.6	17.0	15.6	17.7	0.4	1.1	-1.6	2.7 *
$3,000 to 3,999	12.9	14.2	13.4	10.0	0.0	-0.7	1.0	-1.0
$4,000 to 4,999	9.1	9.1	11.0	5.7	0.9	0.2	1.5	1.1
$5,000 or more	11.1	13.7	11.4	6.7	-1.0	-1.0	-0.9	-1.4
Total Family Income, avg. monthly								
Less than $500	2.6	2.5	1.9	4.0	-0.6 **	-0.6	-1.1 **	0.2
$500 to 999	24.4	23.7	22.6	28.9	-0.1	-1.7	0.0	2.1
$1,000 to 1,499	14.4	15.2	13.2	15.5	-0.6	-0.3	-0.8	-1.0
$1,500 to 1,999	13.2	12.7	13.6	13.2	0.7	2.1 **	1.1	-2.2
$2,000 to 2,999	15.8	14.8	15.4	17.9	0.8	2.0 *	-1.1	2.5
$3,000 to 3,999	11.5	11.9	12.1	9.5	0.0	-0.6	1.1	-0.8
$4,000 to 4,999	8.0	7.9	9.9	4.7	1.0 *	0.6	1.6 *	0.7
$5,000 or more	10.1	11.3	11.2	6.3	-1.2 *	-1.6	-0.7	-1.6
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.2	0.2	0.1	0.4	0.0	-0.2	0.1	0.2
10 to under 50 percent	1.4	1.7	1.3	1.3	-0.2	0.1	-0.5	0.0
50 to under 100 percent	21.0	24.3	19.5	18.9	0.6	-0.9	0.0	3.5 **
100 to under 125 percent	10.3	9.7	8.4	14.4	-0.3	0.4	0.3	-2.5
125 to under 150 percent	8.4	8.9	7.6	9.4	-0.2	0.2	-0.1	-1.1
150 to under 200 percent	13.5	13.7	13.4	13.6	0.4	0.8	0.3	0.0
200 to under 300 percent	19.4	16.5	22.5	17.7	-0.8	0.2	-2.2	0.7
300 to under 400 percent	12.5	13.9	11.2	13.0	0.2	-0.7	1.2	-0.3
400 percent or more	13.2	11.1	16.0	11.1	0.2	0.2	0.9	-0.4
Distribution of Family Income by Source, avg. monthly								
Social Security	38.6	35.8	37.8	45.3	0.7	1.8	-0.1	0.9
SSI	2.8	3.7	2.1	2.5	0.0	-0.2	0.0	0.4
Other public assistance	0.6	0.9	0.5	0.4	0.2 **	0.3	0.2 *	0.3 **
Earnings	41.3	45.8	42.1	31.1	-0.1	-1.3	1.2	-1.7
Asset income	2.5	2.0	2.3	3.8	0.4	0.4	0.2	0.7
All other	14.3	11.9	15.1	16.8	-1.3	-0.9	-1.7	-0.7

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
[a] The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.4.d

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
ALL OTHER SOCIAL SECURITY BENEFICIARIES

| | Wave 1/Wave 2 Sample | | | | Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples | | | |
| | | Age In January 2001 | | | | Age In January 2001 | | |
Wave 1 Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	5.1	8.7	5.1	3.8	1.3 ***	2.8 ***	1.9 **	0.3
Housing assistance	2.5	4.1	2.2	1.9	0.2	0.2	-0.1	0.2
Food stamps	6.4	11.4	8.0	4.0	1.1 **	1.0	2.1 **	0.6 *
Total Household Income, avg. monthly								
Less than $500	2.6	0.6	2.1	3.4	-0.9 **	0.0	-0.6	-1.3 **
$500 to 999	17.6	7.0	15.0	22.4	0.5	-0.9	2.8 **	0.9
$1,000 to 1,499	15.1	10.3	10.8	18.0	-1.6 **	0.3	-0.1	-2.6 **
$1,500 to 1,999	12.9	9.1	17.1	13.3	-0.3	0.7	0.1	-0.7
$2,000 to 2,999	16.0	19.6	16.0	14.6	0.5	2.0	-1.4	0.2
$3,000 to 3,999	10.7	15.7	13.3	8.1	0.8	-0.6	3.6 **	0.4
$4,000 to 4,999	7.5	10.3	8.5	6.1	0.0	0.3	-3.3 ***	0.7
$5,000 or more	17.6	27.4	17.0	14.0	1.1	-1.7	-0.9	2.4 ***
Total Family Income, avg. monthly								
Less than $500	3.3	2.4	3.0	3.7	-1.0 ***	-0.6	-0.4	-1.4 **
$500 to 999	18.2	7.4	16.7	22.7	0.7	-0.6	2.5 *	1.2
$1,000 to 1,499	15.5	10.6	12.5	18.1	-1.8 **	0.5	-0.4	-2.9 ***
$1,500 to 1,999	13.2	9.9	16.8	13.6	-0.3	0.3	-0.4	-0.4
$2,000 to 2,999	15.2	17.8	14.1	14.4	0.8	2.5	-0.4	0.3
$3,000 to 3,999	10.5	15.8	13.4	7.7	0.6	-0.7	3.6 **	0.2
$4,000 to 4,999	7.1	9.6	7.6	6.0	0.0	0.3	-3.3 ***	0.6
$5,000 or more	17.1	26.4	15.8	13.9	1.0	-1.6	-1.3	2.4 ***
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.2	0.8	0.0	0.1	-0.2	-0.8	0.0 a	-0.1
10 to under 50 percent	1.8	3.0	1.8	1.3	-0.6 *	-0.4	-0.2	-0.8 **
50 to under 100 percent	13.6	14.1	16.2	12.8	1.0	1.4	2.0	0.6
100 to under 125 percent	9.1	8.0	8.9	9.5	0.5	0.6	1.7 *	0.1
125 to under 150 percent	7.9	8.3	5.8	8.3	-0.7	1.2	-0.4	-1.6 **
150 to under 200 percent	16.6	15.4	15.4	17.3	-0.8	-1.5	0.6	-0.9
200 to under 300 percent	19.1	18.0	21.5	18.9	-0.2	1.4	-1.4	-0.5
300 to under 400 percent	10.6	13.0	11.4	9.4	-0.6	-1.5	0.6	-0.7
400 percent or more	21.2	19.5	19.1	22.3	1.7 *	-0.3	-3.0	3.8 ***
Distribution of Family Income by Source, avg. monthly								
Social Security	32.0	25.7	31.5	35.5	-1.3 **	-0.6	0.4	-2.0 **
SSI	1.0	1.3	1.8	0.6	0.0	-0.3	0.4	0.0
Other public assistance	0.2	0.2	0.7	0.1	0.0	0.0	-0.4	0.0
Earnings	44.7	62.3	46.7	34.8	1.7 *	0.5	-1.7	2.9 **
Asset income	7.9	2.8	4.7	11.5	0.3	0.5	1.5 *	0.0
All other	14.2	7.6	14.6	17.5	-0.6	-0.2	-0.1	-0.9

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE C.4.e

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
MATCHED WAVE 1/WAVE 2 SAMPLE VERSUS ENTIRE WAVE 1/WAVE 2 SAMPLE FOR
SSI RECIPIENTS

| | Wave 1/Wave 2 Sample | | | | Difference between Matched Wave 1/Wave 2 and Entire Wave 1/Wave 2 Samples | | | |
| | | Age In January 2001 | | | | | Age In January 2001 | | |
Wave 1 Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	17.9	12.6	19.4	16.6	0.4	-2.9	0.9	1.0
Housing assistance	10.0	3.9	11.6	8.8	1.2 **	1.9 *	1.1	1.4
Food stamps	37.2	25.6	38.5	39.9	2.5 **	2.7	3.2 ***	0.7
Total Household Income, avg. monthly								
Less than $500	3.5	4.3	3.0	4.5	-0.2	-2.2	0.0	0.2
$500 to 999	34.5	9.8	33.0	52.7	-0.2	-2.9 **	0.4	-0.3
$1,000 to 1,499	14.5	16.9	14.9	12.1	0.6	2.1	-0.4	2.3 *
$1,500 to 1,999	11.1	14.8	11.8	7.1	1.1 *	2.2	0.9	0.9
$2,000 to 2,999	13.9	25.0	13.4	8.9	-0.7	-1.6	-0.4	-1.4
$3,000 to 3,999	7.6	13.5	7.8	3.7	0.2	5.7 ***	-1.2 *	1.1
$4,000 to 4,999	6.1	5.4	6.5	5.3	-0.5	-0.6	0.1	-2.3 *
$5,000 or more	8.8	10.4	9.7	5.6	-0.1	-2.7	0.5	-0.5
Total Family Income, avg. monthly								
Less than $500	4.4	8.0	3.6	4.5	-0.1	-2.4	0.2	0.2
$500 to 999	39.8	12.1	40.5	53.3	-0.5	-2.7	-0.1	0.0
$1,000 to 1,499	14.5	16.4	15.0	12.1	0.8	3.3 *	-0.2	2.3 *
$1,500 to 1,999	10.1	14.7	10.3	7.1	0.5	1.9	0.1	1.0
$2,000 to 2,999	12.3	24.5	11.0	9.0	-0.2	-2.0	0.5	-1.3
$3,000 to 3,999	6.6	11.0	6.6	3.8	0.3	4.4 ***	-0.8	1.1
$4,000 to 4,999	4.7	4.9	4.7	4.8	-0.6	-0.8	0.2	-2.6 **
$5,000 or more	7.6	8.5	8.3	5.3	-0.3	-1.7	0.1	-0.7
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.1	0.6	0.0	0.0	-0.1	-0.6	0.0 a	0.0 a
10 to under 50 percent	4.9	11.9	4.5	2.0	-0.5	-2.7	0.2	-1.1
50 to under 100 percent	40.0	18.1	42.2	45.8	-0.2	-0.5	-0.8	2.4
100 to under 125 percent	11.1	15.5	9.2	14.1	1.3 **	3.3 *	1.8 ***	-1.3
125 to under 150 percent	8.6	11.1	8.6	7.1	0.6	-0.8	0.2	2.3 **
150 to under 200 percent	12.1	17.4	11.7	10.1	0.2	2.7	-0.3	-0.1
200 to under 300 percent	12.3	12.9	12.3	11.9	-0.4	1.1	-0.8	0.0
300 to under 400 percent	4.4	6.4	4.7	2.7	-0.2	-1.8	0.2	-0.4
400 percent or more	6.6	6.0	6.8	6.4	-0.7	-0.6	-0.4	-1.7
Distribution of Family Income by Source, avg. monthly								
Social Security	14.6	7.6	13.8	22.5	0.5	-1.5	1.0	1.6
SSI	27.2	27.7	28.0	24.1	1.0	0.6	0.8	1.9
Other public assistance	1.9	2.2	1.8	1.8	0.3 *	0.2	0.3	0.2
Earnings	47.7	56.9	46.6	44.4	-0.9	0.8	-1.2	-1.8
Asset income	1.4	1.2	1.5	1.5	-0.3	-0.8	-0.3	0.3
All other	7.2	4.5	8.2	5.7	-0.6	0.8	-0.5	-2.3 **

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

APPENDIX D

**COMPARISON OF DIFFERENCES BETWEEN MATCHED AND ENTIRE
WAVE 1/WAVE 2 SAMPLES: 1996 AND 2001 SIPP PANELS**

TABLE D.1.a

DISTRIBUTION OF PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
THE TOTAL POPULATION

| Wave 1 Characteristic | Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel | | | | Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel | | | |
| | | Age In March 1996 | | | | Age In January 2001 | | |
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sex								
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Race								
White	0.3 ***	0.2 **	0.4 ***	0.2 **	0.3 **	0.1	0.4 ***	0.1
Black	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
American Indian, Alaska Native	0.1 ***	0.1 **	0.0 **	0.0	0.2 **	0.3 ***	0.1	0.0
Asian, Pacific Islander	-0.4 ***	-0.3 ***	-0.4 ***	-0.2 ***	-0.4 ***	-0.5 ***	-0.5 ***	-0.1
Ethnicity								
Hispanic	0.0	0.1 **	0.0	0.0	0.0	0.3 ***	-0.2 ***	0.3
Non-Hispanic	0.0	-0.1 **	0.0	0.0	0.0	-0.3 ***	0.2 ***	-0.3
Marital Status								
Married	-0.1 ***	0.0 *	-0.1	-0.4 **	-0.1 **	0.0 *	-0.3 ***	0.7
Widowed	0.0	0.0	0.0	0.2	-0.2 ***	0.0 a	-0.1 *	-1.0 **
Divorced or separated	0.2 ***	0.0	0.2 ***	0.2	0.1 **	0.0	0.2 **	0.0
Never married	-0.1	0.0 **	-0.1 *	0.1	0.1 *	0.0	0.1	0.3
Years of education								
0 to 8	-0.2 ***	0.0	-0.3 ***	0.0	-0.3 ***	-0.2 **	-0.3 ***	-0.3
9 to 11	0.1 ***	0.1	0.1 **	0.3 *	0.1	0.2 **	0.2 *	-0.4
12	-0.3 ***	-0.1 **	-0.4 ***	-0.7 ***	-0.4 **	0.0	-0.5 **	-0.4
13 to 15	0.4 ***	0.0	0.6 ***	0.4 **	0.5 ***	0.0	0.7 ***	0.6
16 or more	0.0	0.0 a	0.0	0.1	0.1	0.0 a	0.0	0.5
Unknown (used for children)	0.0	0.0	0.0 a	0.0 a	0.0	0.1	0.0 a	0.0 a
Living Arrangement								
Lives alone	0.0	0.0	0.0	0.2	0.0	0.0	0.3 ***	-1.1 ***
Lives with relatives	0.1 ***	0.1 **	0.2 ***	-0.2	0.1 **	0.1	0.0	1.0 ***
Lives with only non-relatives	-0.1 ***	-0.1 **	-0.2 ***	0.0	-0.2 **	-0.1	-0.3 **	0.2
Relationship to Householder								
Householder	0.3 ***	0.0	0.5 ***	0.1	0.4 ***	0.0	0.8 ***	-0.6 **
Spouse	-0.2 ***	0.0	-0.3 ***	-0.2 *	-0.4 ***	0.0 *	-0.7 ***	0.5 *
Child	0.4 ***	0.6 ***	0.4 ***	0.0 **	0.4 ***	0.7 ***	0.4 ***	0.0
Grandchild	0.0 *	-0.2 *	0.0	0.0 a	-0.1 *	-0.3 *	0.0	0.0 a
Parent	0.0	0.0 a	-0.1 **	0.0	0.0	0.0 a	0.0	-0.1
Sibling	-0.1 ***	0.0	-0.1 ***	-0.1	0.0	0.0	-0.1 *	0.2
Other relative	-0.2 ***	-0.2 ***	-0.3 ***	0.2 *	-0.3 ***	-0.2 *	-0.3 ***	-0.2
Nonrelative	-0.2 ***	-0.2 ***	-0.2 ***	0.0	-0.1 **	-0.1	-0.2 **	0.1
Parents Present								
Both mother and father	0.2 ***	0.3 *	0.2 ***	0.0	-0.1	-1.1 ***	0.2 **	0.0 a
Mother only	0.1 *	0.1	0.1 **	0.0 *	0.4 ***	1.2 ***	0.1	0.0
Father only	-0.1 **	-0.2 ***	0.0	0.0	0.1 *	0.1	0.1	0.0
Neither	-0.3 ***	-0.2 **	-0.3 ***	0.0 **	-0.3 ***	-0.3 **	-0.4 ***	0.0

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
** Statistically signficant at 0.05 level.
* Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

DISTRIBUTION OF PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
RETIRED WORKERS

Wave 1 Characteristic	Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel				Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sex								
Male	0.0	-0.2	0.0	0.1	-0.4	-0.2	-0.7 **	0.0
Female	0.0	0.2	0.0	-0.1	0.4	0.2	0.7 **	0.0
Race								
White	0.1	0.7	0.0	0.2	0.2	1.9 *	0.0	0.0
Black	-0.1	-0.4	-0.1	0.0	-0.1	-1.2	0.1	0.0
American Indian, Alaska Native	0.0	0.1 **	0.0	0.0	0.0	0.0	0.0	0.1
Asian, Pacific Islander	-0.1	-0.4	0.1	-0.1	-0.1	-0.7	-0.1	0.0
Ethnicity								
Hispanic	0.0	-0.2	0.0	0.0	0.1	0.9	-0.2	0.3
Non-Hispanic	0.0	0.2	0.0	0.0	-0.1	-0.9	0.2	-0.3
Marital Status								
Married	-0.3 *	1.3 **	0.2	-1.4 ***	0.8 *	0.7	1.2 **	0.4
Widowed	0.0	-0.9 **	-0.4 *	0.7 *	-0.8 **	-0.3	-1.1 **	-0.8
Divorced or separated	0.1	-0.2	0.0	0.3 *	-0.2	-0.1	-0.3	0.0
Never married	0.2 **	-0.2	0.2	0.3 **	0.2	-0.2	0.1	0.3
Years of education								
0 to 8	-0.1	0.4	-0.1	-0.2	-0.3	-0.8	0.4	-1.0 *
9 to 11	0.3	0.2	0.3	0.3	-0.4	-1.4	-0.5	-0.1
12	-0.7 ***	-0.7	-0.8 ***	-0.6	-0.5	-1.3	-0.8	0.1
13 to 15	0.4 **	-0.1	0.4	0.5	0.9 **	2.8 **	0.6	0.9 *
16 or more	0.1	0.2	0.2	-0.1	0.3	0.6	0.3	0.1
Unknown (used for children)	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a
Living Arrangement								
Lives alone	0.1	-1.0 **	-0.1	0.6 *	-1.2 ***	0.6	-1.1 **	-2.0 ***
Lives with relatives	-0.2	0.6	0.1	-0.7	1.2 ***	-0.1	1.0 *	1.9 **
Lives with only non-relatives	0.1	0.3 *	0.1	0.0	0.0	-0.5	0.0	0.1
Relationship to Householder								
Householder	-0.1	0.1	0.0	-0.2	-0.6 *	3.5 ***	-1.2 ***	-0.9
Spouse	-0.3 *	0.0	-0.2	-0.4	0.4	-2.3 *	1.4 ***	0.0
Child	0.0	0.0	0.0 **	0.0 a	0.0	0.4	0.0	0.0 a
Grandchild	0.0 a	0.0 a	0.0 a	0.0 a	0.0	0.1	0.0 a	0.0 a
Parent	0.1	-0.1	0.1	0.3	0.1	-0.1	-0.1	0.5
Sibling	0.0	0.1	-0.1	0.0	0.2	-0.2	0.2 *	0.2
Other relative	0.1 *	-0.5	0.2 **	0.3 *	-0.1	-0.4	-0.4 *	0.2
Nonrelative	0.1	0.3 *	0.1	0.1	-0.1	-0.8	0.0	0.1
Parents Present								
Both mother and father	0.0	0.0	0.0	0.0 a	0.0	0.4	0.0 a	0.0 a
Mother only	0.0	0.1	0.0	0.0	-0.1	-0.2	-0.1	0.0
Father only	0.0 *	0.0	0.0	0.0 a	0.0	0.1	0.0	0.0 a
Neither	0.0 *	-0.1	-0.1	0.0	0.1	-0.3	0.1	0.0

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE D.1.c

DISTRIBUTION OF PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
DISABLED WORKERS

| | Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel | | | | Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel | | | |
| | | Age In March 1996 | | | | Age In January 2001 | | |
Wave 1 Characteristic	Total	Under 50	50 to 64	65 +	Total	Under 50	50 to 64	65 +
All Disabled Workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sex								
Male	-0.5	0.1	-1.5 *	-0.4	-0.7	-0.9	-1.2	0.1
Female	0.5	-0.1	1.5 *	0.4	0.7	0.9	1.2	-0.1
Race								
White	-0.4	-0.7	-0.2	-0.1	-1.6 **	-0.8	-1.5	-2.7
Black	0.1	0.4	0.1	-0.4	1.1	1.0	1.2	1.1
American Indian, Alaska Native	0.2 ***	0.1 **	0.1	0.2 **	0.3 **	0.4 **	0.3	0.3
Asian, Pacific Islander	0.1	0.1 **	0.0	0.2 *	0.1	-0.5	-0.1	1.3 ***
Ethnicity								
Hispanic	0.4 *	0.6	0.7 *	-0.2	1.2 **	0.7	0.9	2.2 *
Non-Hispanic	-0.4 *	-0.6	-0.7 *	0.2	-1.2 **	-0.7	-0.9	-2.2 *
Marital Status								
Married	0.0	-0.1	1.0	0.1	0.3	0.2	1.9	-0.6
Widowed	-0.3	0.0	-0.2	0.2	-0.5	-1.1 **	0.9	-1.5
Divorced or separated	-0.4	-0.3	-0.4	-0.6	-0.2	0.1	-0.8	1.1
Never married	0.6	0.3	-0.4	0.3	0.4	0.9	-2.0 *	1.1
Years of education								
0 to 8	-0.4	-0.8	1.0	-1.3	0.4	1.5	-1.9	3.0
9 to 11	0.0	1.2 **	0.0	-1.4	-0.7	-1.0	-0.4	-0.6
12	0.0	0.6	-1.7 **	1.1	-0.2	0.4	-0.2	-1.3
13 to 15	0.4	-0.9	0.7	1.4 ***	-0.1	-2.3	2.4 *	-1.7
16 or more	0.0	0.0	-0.1	0.1	0.6	1.3 **	0.1	0.6
Unknown (used for children)	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a
Living Arrangement								
Lives alone	-0.3	-0.6	0.0	-0.2	0.0	0.2	-0.2	0.5
Lives with relatives	0.3	0.0	0.7	-0.1	0.8	1.1	2.0	-1.5
Lives with only non-relatives	0.1	0.5	-0.7	0.3	-0.9	-1.3	-1.7 **	0.9
Relationship to Householder								
Householder	-0.9 *	-0.9	0.2	-1.4	0.4	-2.6	2.6	2.4
Spouse	-0.2	-0.3	-0.1	0.2	0.1	1.2	1.1	-2.6
Child	0.3	-0.2	0.0	0.1	0.5	2.1	-1.5 *	0.0 a
Grandchild	-0.1	-0.2	0.0 a	0.0 a	0.1	0.1	0.0 a	0.0 a
Parent	-0.1	0.0	0.0	-0.4	0.0	0.1	0.4	-0.8
Sibling	0.1	0.1	0.1	-0.2	0.1	0.5	-0.7	0.7
Other relative	0.5 **	0.6 ***	0.1	0.9 *	-0.2	0.1	-0.4	-0.4
Nonrelative	0.5	1.0 *	-0.3	0.7	-0.9 *	-1.5	-1.6 **	0.7
Parents Present								
Both mother and father	0.2	0.1	0.0	0.1	0.7	1.7	-0.1	0.0 a
Mother only	0.2	0.0	0.1	-0.1	0.0	0.1	-0.4	0.0 a
Father only	0.0	0.2	-0.2	0.0 a	0.2	0.5	0.1	0.0 a
Neither	-0.4	-0.3	0.1	0.1	-1.0	-2.3	0.5	0.0 a

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE D.1.d

DISTRIBUTION OF PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
OTHER SOCIAL SECURITY BENEFICIARIES

Wave 1 Characteristic	Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel				Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sex								
Male	0.3	-0.2	0.0	0.2	1.4 **	2.0	-0.5	0.4
Female	-0.3	0.2	0.0	-0.2	-1.4 **	-2.0	0.5	-0.4
Race								
White	0.1	0.1	1.0	0.1	-0.5	-1.6	-1.0	0.5
Black	0.0	0.2	-0.8	0.1	0.2	0.5	0.8	-0.3
American Indian, Alaska Native	0.1	0.1	-0.1	0.1 **	0.5 ***	1.4 ***	0.1	0.2
Asian, Pacific Islander	-0.3	-0.3	-0.1	-0.3	-0.2	-0.2	0.1	-0.3
Ethnicity								
Hispanic	0.6 ***	0.9	1.1 *	0.3	1.7 ***	2.3	2.7 *	0.9 **
Non-Hispanic	-0.6 ***	-0.9	-1.1 *	-0.3	-1.7 ***	-2.3	-2.7 *	-0.9 **
Marital Status								
Married	0.1	0.0 a	-0.1	0.5	-0.7	0.0 a	-0.5	-0.1
Widowed	-0.7 *	0.0 a	-0.3	-0.6	-1.2	0.0 a	-0.2	-0.2
Divorced or separated	0.0	-0.1	0.1	0.1	0.2	0.0 a	1.1	0.1
Never married	0.5	0.1	0.3	0.0	1.8 **	0.0 a	-0.3	0.2
Years of education								
0 to 8	0.6 *	0.4 *	1.2 **	0.6	-0.2	0.0	2.0	-0.4
9 to 11	0.3	-0.6	0.3	0.6 *	0.2	0.0	-0.7	0.1
12	-0.9 ***	0.1	-0.6	-1.1 **	-1.7 *	-0.6	-0.6	-1.4
13 to 15	-0.4	0.0 a	-0.9	-0.3	0.7	0.0 a	1.1	1.5
16 or more	0.1	0.0 a	0.0	0.2	-0.4	0.0 a	-1.9	0.2
Unknown (used for children)	0.4	0.2	0.0 a	0.0 a	1.3 *	0.5	0.0 a	0.0 a
Living Arrangement								
Lives alone	-0.8 **	0.0 a	-0.3	-0.9 *	-1.8 *	0.0 a	0.6	-1.6
Lives with relatives	1.0 **	0.3	0.5	1.1 **	1.3	0.0	-1.5	1.1
Lives with only non-relatives	-0.2	-0.3	-0.2	-0.1	0.4 **	0.0	0.8	0.5 *
Relationship to Householder								
Householder	-0.6	0.0	-0.8	-0.3	-1.4	0.0	-0.3	-0.2
Spouse	-0.1	0.0 a	0.0	0.1	-0.9 *	0.0 a	-1.5	-0.5
Child	0.7 **	1.0	0.3	0.0 a	1.8 **	1.2	-0.1	0.1
Grandchild	0.0	-0.3	0.2 *	0.0 a	0.0	-0.7	0.3	0.0 a
Parent	-0.1	0.0 a	0.0	-0.2	0.4	0.0 a	1.6 **	0.3
Sibling	0.0	-0.2	0.2 *	0.0	0.0	-0.4	0.3	0.1
Other relative	0.3 **	0.1	0.1	0.5 **	-0.3	-0.2	-0.4	-0.3
Nonrelative	-0.2	-0.7	0.0	-0.1	0.3	0.1	0.2	0.4 *
Parents Present								
Both mother and father	0.1	-0.3	0.0	0.0 a	0.9	0.8	-1.0	0.0 a
Mother only	0.3	0.2	0.4	0.0	0.7	-0.3	1.6	-0.1
Father only	0.1	0.2	-0.1	0.0	0.3	1.0	-0.4	0.0 a
Neither	-0.5	-0.1	-0.4	0.0	-1.9 **	-1.4	-0.2	0.1

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE D.1.e

DISTRIBUTION OF PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
SSI RECIPIENTS

	Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel				Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
Wave 1 Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sex								
Male	0.5	0.3	0.4	-0.2	0.3	0.9	0.4	-0.5
Female	-0.5	-0.3	-0.4	0.2	-0.3	-0.9	-0.4	0.5
Race								
White	0.5	0.3	-0.5	2.4 **	-1.5	-0.7	-1.0	-3.0
Black	0.6	-0.1	0.7	0.5	1.1	0.0	0.9	2.2
American Indian, Alaska Native	0.2 ***	0.1	0.3 **	0.2	0.5	0.5	0.5	0.3
Asian, Pacific Islander	-1.3 ***	-0.4	-0.5 *	-3.0 **	-0.1	0.3	-0.4	0.4
Ethnicity								
Hispanic	1.4 ***	2.7 ***	1.1 ***	1.7 **	2.0 **	1.4	2.6 ***	0.4
Non-Hispanic	-1.4 ***	-2.7 ***	-1.1 ***	-1.7 **	-2.0 **	-1.4	-2.6 ***	-0.4
Marital Status								
Married	-0.6	0.0 a	-0.3	-1.1	-0.7	0.2	-0.9	-0.4
Widowed	-0.4	0.0 a	-0.2	0.6	-0.4	0.0 a	-0.3	-1.2
Divorced or separated	0.3	0.0 a	0.0	1.4 *	-0.4	0.0 a	-0.7	0.6
Never married	0.6	0.0 a	0.4	-0.9	1.6	-0.2	1.8	0.9
Years of education								
0 to 8	0.2	-0.1	1.1 **	-0.2	0.1	0.9	-0.5	1.5
9 to 11	0.4	0.2	0.3	0.5	0.3	1.6	-0.3	1.5
12	-0.9 *	-0.3	-1.1 *	-0.8	-1.2	-0.5	-0.4	-3.5 **
13 to 15	0.1	0.0 a	-0.2	0.7 **	0.8	0.0 a	1.1	0.6
16 or more	-0.1	0.0 a	-0.1	-0.2	0.0	0.0 a	0.2	-0.2
Unknown (used for children)	0.3	0.2	0.0 a	0.0 a	0.0	-2.0	0.0 a	0.0 a
Living Arrangement								
Lives alone	-0.2	0.0 a	-0.6 *	1.5	1.2	0.0 a	1.4	1.7
Lives with relatives	-0.3	-0.3 **	-0.1	-1.8	-0.6	-0.6	-0.2	-2.3
Lives with only non-relatives	0.5 *	0.3 **	0.7	0.2	-0.6	0.6	-1.3	0.5
Relationship to Householder								
Householder	-0.7	0.0 a	-1.6 ***	2.2 *	0.4	0.1	0.6	1.2
Spouse	-0.2	0.0 a	-0.3	-0.1	-0.9 *	0.0 a	-1.3 *	-0.2
Child	1.0 **	-0.2	1.0	0.0	2.0 **	5.9 **	1.4	0.2
Grandchild	0.2 *	0.6	0.2 **	0.0 a	-0.6 **	-3.1 *	-0.3	0.0 a
Parent	-0.6	0.0 a	-0.2	-1.4	0.2	0.0 a	0.3	0.0
Sibling	-0.1	0.1	-0.1	-0.1	0.2	0.2	0.1	0.4
Other relative	-0.6 *	-0.2	-0.2	-1.3	-1.0 **	-2.7 **	-0.2	-2.1
Nonrelative	0.9 ***	-0.2	1.2 ***	0.6 *	-0.4	-0.4	-0.7	0.4
Parents Present								
Both mother and father	0.1	-0.9	0.1	0.0	1.0	0.5	1.3	0.0 a
Mother only	0.5	0.3	0.3	-0.2	1.0	2.1	0.8	0.4
Father only	-0.1	-0.6	-0.1	0.0 a	0.0	-0.1	0.0	0.0 a
Neither	-0.5	1.2 **	-0.3	0.1	-2.0 **	-2.5	-2.1	-0.4

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
THE TOTAL POPULATION

Wave 1 Characteristic	Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel				Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	0.4 ***	0.8 ***	0.2 ***	0.3 **	0.7 ***	1.6 ***	0.5 ***	0.1
Medicare	0.0	0.0 a	0.0	0.4 **	0.1 *	0.0 a	0.1	0.2
Private (including military)	0.4 ***	0.4 **	0.3 ***	0.7 ***	0.3	0.1	0.4 *	0.6
None	-0.6 ***	-1.0 ***	-0.5 ***	-0.2 ***	-0.7 ***	-1.0 ***	-0.7 ***	-0.1
Sources of Own Income								
Social Security	0.1 ***	0.2 **	0.1	0.3 **	0.2 **	0.2 *	0.1	0.3
SSI	0.1 ***	0.1 ***	0.2 ***	0.1	0.1 ***	0.1	0.1 **	0.3
Other public assistance	0.0	0.0	0.0	0.1 **	0.1 ***	0.0	0.1 **	0.1
Earnings	0.3 ***	0.1 *	0.4 ***	0.4 ***	0.6 ***	0.3 **	0.7 ***	0.3
Asset income	1.2 ***	0.2 ***	1.5 ***	1.6 ***	1.8 ***	0.6 ***	2.2 ***	2.5 ***
Other	0.3 ***	0.0	0.3 ***	1.0 ***	0.5 ***	0.0	0.6 ***	0.8 *
Total Personal Income, avg. monthly								
Under $100	-0.5 ***	-0.3 ***	-0.6 ***	-0.3 ***	-0.7 ***	-0.5 ***	-0.9 ***	-0.2
$100 to 249	0.1 *	0.1 **	0.1 **	-0.2 ***	0.1 *	0.3 ***	0.1	-0.2
$250 to 499	0.1 ***	0.2 ***	0.2 ***	-0.2	0.1	0.2 *	0.1	-0.4
$500 to 749	0.0	0.0	0.2 ***	-0.6 ***	0.1	0.2 **	0.1	-0.1
$750 to 999	-0.1	0.0	-0.1	-0.2	-0.2 **	-0.1	0.0	-1.2 ***
$1,000 to 1,499	0.1	0.0 **	0.0	0.5 ***	-0.1	-0.1	-0.3 **	0.5
$1,500 to 1,999	0.0	0.0	0.0	0.4 ***	0.0	0.0	0.0	0.2
$2,000 to 2,999	0.2 ***	0.0	0.2 ***	0.3 ***	0.3 ***	0.0 **	0.4 ***	0.7 ***
$3,000 to 3,999	0.1 **	0.0	0.1	0.2 ***	0.2 **	0.0	0.2 **	0.3
$4,000 to 4999	0.0	0.0 a	0.0	0.1 **	0.1 **	0.0	0.1 *	0.2
$5,000 or more	0.0	0.0 a	0.0	0.0	0.1	0.0	0.1	0.1
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	-0.1 **	-0.2 **	-0.1 *	0.0	-0.1	-0.2	-0.1	0.2
25 to under 50 percent	0.1 ***	0.0 ***	0.0	0.5 ***	0.2 ***	0.0	0.0	1.5 ***
50 to under 75 percent	0.1 ***	0.0	0.1 ***	0.6 ***	0.1	0.0	0.1 ***	0.1
75 to under 100 percent	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3
100 percent	-0.1 ***	0.1 **	0.0	-1.1 ***	-0.2 ***	0.2 *	-0.1 **	-1.6 ***

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
ª The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE D.2.b

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
RETIRED WORKERS

Wave 1 Characteristic	Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel				Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	0.3 **	0.2	0.2	0.5 **	0.1	0.0	0.4	-0.3
Medicare	-0.3 **	-2.6 ***	0.0	0.0 a	0.1	-1.7	0.0	0.0 a
Private (including military)	0.6 ***	0.1	0.5 *	1.0 ***	0.3	-0.7	0.6	0.2
None	0.1	0.6 *	0.0	0.0 a	0.0	0.4	0.0	0.0 a
Sources of Own Income								
Social Security	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a
SSI	0.2 ***	0.2	0.1	0.2 *	0.2	-0.2	0.4 **	0.0
Other public assistance	0.1 ***	0.1 ***	0.1 **	0.1	0.1	0.1	0.0	0.2
Earnings	0.2 **	-0.1	0.5 ***	0.0	0.3	2.7 **	0.0	0.3
Asset income	1.6 ***	0.5	1.5 ***	2.0 ***	2.4 ***	4.8 ***	2.5 ***	1.6 **
Other	0.8 ***	-0.5	0.8 **	1.1 **	1.1 **	1.8	0.7	1.2
Total Personal Income, avg. monthly								
Under $100	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	-0.1
$100 to 249	-0.1 *	0.2	-0.1	-0.2	-0.2	-0.3	-0.1	-0.3
$250 to 499	-0.1	-0.5	-0.1	-0.1	-0.1	0.8	-0.3	-0.1
$500 to 749	-0.7 ***	0.5	-0.7 ***	-1.0 **	-0.2	-0.6	-0.1	-0.2
$750 to 999	-0.2	0.5	-0.2	-0.4	-1.0 ***	-0.1	-0.6	-1.7 ***
$1,000 to 1,499	0.4 **	0.2	0.4 *	0.5	0.5	-0.1	0.1	1.0
$1,500 to 1,999	0.3 *	-0.8 *	0.4 ***	0.3	0.3	-0.2	0.5	0.2
$2,000 to 2,999	0.3 *	-0.3	0.1	0.6 ***	0.5 *	-0.3	0.6	0.7 *
$3,000 to 3,999	0.2 **	0.0	0.1	0.3 ***	0.2	1.3	0.0	0.2
$4,000 to 4999	0.1 **	0.2	0.1 ***	0.0	0.1	-0.5	0.2	0.2
$5,000 or more	0.0	0.1	0.1	-0.1	0.0	0.3	-0.2	0.2
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	0.3 **	-0.4	0.4 **	0.3	0.2	-0.8	0.0	0.8 **
25 to under 50 percent	0.4 *	-0.2	0.7 **	0.2	1.6 ***	1.1	1.6 ***	1.6 **
50 to under 75 percent	0.7 ***	0.9 *	0.4 *	1.1 ***	0.3	2.5 **	0.5	-0.6
75 to under 100 percent	-0.1	0.4	-0.2	0.0	-0.3	0.1	-0.3	-0.6
100 percent	-1.3 ***	-0.6	-1.3 ***	-1.6 ***	-1.7 ***	-2.9 **	-1.8 ***	-1.3 **

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE D.2.c

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
DISABLED WORKERS

Wave 1 Characteristic	Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel				Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 50	50 to 64	65 +	Total	Under 50	50 to 64	65 +
All Disabled Workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	1.5 ***	1.8 **	0.2	1.7 *	2.4 **	1.6	1.8	3.2
Medicare	-0.9 **	-1.0	-0.9	0.0 a	1.6 *	2.1	2.1	0.0 a
Private (including military)	-0.7	-0.9	0.1	-0.4	-0.4	2.0	0.1	-4.0 *
None	0.2	0.3	0.2	0.0 a	-0.1	0.5	-0.6	0.0 a
Sources of Own Income								
Social Security	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a
SSI	1.4 ***	1.6 **	0.7	1.1	0.8	0.5	0.4	1.3
Other public assistance	-0.1	0.0	-0.5	0.1	0.6 *	0.1	0.4	1.5 ***
Earnings	0.1	0.0	0.0	-0.2	1.2 **	2.4 *	0.4	0.1
Asset income	0.6	0.5	0.9	1.2	1.9 *	-0.7	4.1 **	2.8
Other	0.1	0.5	1.1	-1.0	0.9	0.4	1.5	1.4
Total Personal Income, avg. monthly								
Under $100	0.0	0.0	0.0 a	-0.1	-0.2	-0.4 ***	-0.2	0.3
$100 to 249	0.1	-0.4	0.3 ***	0.2	0.4	0.8 ***	0.3	0.0
$250 to 499	0.3	0.5	0.2	-0.1	-1.2 *	-1.2	-1.4	-0.9
$500 to 749	0.3	0.5	0.3	-0.6	-0.1	-0.6	-0.6	0.5
$750 to 999	-0.2	-0.1	-0.4	0.0	0.7	1.6	0.9	-0.6
$1,000 to 1,499	-0.3	-0.3	-0.4	0.2	-0.7	-0.9	0.5	-2.1
$1,500 to 1,999	0.0	-0.5	0.3	0.6 *	0.4	0.4	0.0	0.9
$2,000 to 2,999	-0.1	0.3 **	-0.4	0.1	1.1 **	0.5	1.3	1.7 *
$3,000 to 3,999	-0.1	0.0	0.0	-0.4	0.2	0.4	-0.1	0.7 *
$4,000 to 4999	0.0 *	0.0	0.0	0.0 a	-0.2	-0.1	-0.3	-0.2
$5,000 or more	0.0 **	0.0	0.1	0.0	-0.4 **	-0.5	-0.4	-0.3
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	0.0	0.1	-0.2	0.0	0.1	0.3	-0.8	0.8
25 to under 50 percent	0.2	0.0	0.1	0.9	0.9	0.9	-0.1	2.5 *
50 to under 75 percent	0.8 *	1.7 ***	0.8	-0.3	2.2 **	1.5	3.4 **	0.8
75 to under 100 percent	0.2	-0.2	1.0	-0.2	0.5	0.3	1.8	-1.1
100 percent	-1.3 **	-1.6 **	-1.7 **	-0.4	-3.6 ***	-3.0 *	-4.3 **	-2.9

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
ALL OTHER SOCIAL SECURITY BENEFICIARIES

	Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel				Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
Wave 1 Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	0.8 ***	0.4	1.7 **	0.6 **	1.4 *	1.2	2.7 *	0.3
Medicare	-0.3	0.0 a	-0.1	0.0 a	-1.9 **	0.0 a	0.1	0.0 a
Private (including military)	-0.7 **	-1.7 *	-0.5	-0.2	0.0	0.6	-4.1 *	1.4
None	0.4 **	1.2	0.3	0.0 a	0.1	-1.9	1.6	0.0 a
Sources of Own Income								
Social Security	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a
SSI	0.3	0.0	0.8 *	0.2	0.3	-1.1	1.3	0.5
Other public assistance	0.1 **	0.0 a	0.3	0.2 ***	0.0	0.0 a	-0.1	0.0
Earnings	0.4 *	0.1	1.2	0.4	0.5	-0.3	-2.0	1.6 **
Asset income	0.4	-0.2	0.9	0.9 *	0.9	1.6 *	2.3	1.9
Other	0.5 *	0.1	-0.1	1.1 **	-1.4 *	-0.2	0.0	-1.3
Total Personal Income, avg. monthly								
Under $100	0.1	0.4	0.1	-0.1	0.1	-0.4	0.6	-0.1
$100 to 249	-0.1	-0.4	0.0	-0.2	0.7	1.6	0.1	-0.2
$250 to 499	-0.3	0.9	-0.7	-0.8 *	-0.3	1.8	-1.2	-1.5 *
$500 to 749	-0.3	-1.4 *	-0.5	0.2	1.1	0.4	0.0	1.7 *
$750 to 999	-0.2	0.6 **	-0.5	-0.4	-1.5 **	-2.1 **	0.6	-1.5 *
$1,000 to 1,499	0.4 *	-0.1	1.4 **	0.6	-1.3 *	-1.4	-1.1	-0.9
$1,500 to 1,999	0.1	0.0	0.2	0.2	0.0	0.0	-0.1	0.3
$2,000 to 2,999	0.4 **	0.0 a	0.3	0.6 **	0.3	0.1	0.6	0.5
$3,000 to 3,999	0.0	0.0 a	-0.3	0.1	0.5 *	0.0 a	0.4	0.8 *
$4,000 to 4999	0.0	0.0 a	-0.2	0.0	0.3	0.0 a	0.5 *	0.4
$5,000 or more	0.0	0.0 a	0.1 **	-0.1	0.1	0.0 a	-0.3	0.4
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	0.2	0.0	-0.1	0.4	0.2	0.3 *	0.1	0.4
25 to under 50 percent	0.5 *	0.3 ***	1.8 ***	0.4	0.3	-0.2	0.2	1.0
50 to under 75 percent	0.2	0.0	0.6	0.3	-0.6	-0.3	-0.7	-0.3
75 to under 100 percent	-0.3	-0.3	-1.6	0.2	0.0	0.6	0.1	0.5
100 percent	-0.5	-0.1	-0.8	-1.2 ***	0.1	-0.4	0.3	-1.5

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE D.2.e

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
SSI RECIPIENTS

Wave 1 Characteristic	Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel				Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	0.3	1.0	0.1	0.6	0.8	0.7	1.1 *	0.4
Medicare	0.3	0.0 a	0.2	2.8 **	1.2	0.0 a	1.0	2.7
Private (including military)	-0.5	-0.9	-0.5	-0.7	-1.2	-1.2	-1.0	-2.3 *
None	-0.1	-0.7	-0.1	0.1	-0.4	-0.3	-0.4	-0.6 *
Sources of Own Income								
Social Security	0.7	-0.3	0.6	3.0 **	0.6	-3.0	0.6	2.7
SSI	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a
Other public assistance	0.3	-0.3	0.1	0.8 *	0.8 *	0.4	1.3 **	-0.1
Earnings	0.2	-0.3	0.4	0.0	0.4	-0.5	0.5	0.7 *
Asset income	-0.2	0.1	-0.1	-0.4	0.6	0.0	0.8	0.4
Other	-0.1	0.1	-0.2	0.3	-0.9 *	0.0 a	-0.9	-1.2
Total Personal Income, avg. monthly								
Under $100	0.1	-0.4	0.1	0.1	-0.4	-1.7	-0.2	-0.3
$100 to 249	-0.2	-0.6	0.2	-0.8	0.1	3.6 **	-0.8 *	0.2
$250 to 499	0.2	0.5	0.2	0.0	-0.4	-1.2	-0.9	1.4
$500 to 749	-0.1	-0.1	0.0	0.2	2.2 *	3.7	3.4 **	-1.9
$750 to 999	0.3	0.5 **	0.3	0.2	-0.2	-1.0	0.0	-0.1
$1,000 to 1,499	0.0	0.0	-0.2	0.2	-0.6	-2.6	-0.9	1.5
$1,500 to 1,999	-0.1	0.0	-0.3	0.1 *	-0.3	-1.0	-0.3	0.0
$2,000 to 2,999	-0.1	0.0 a	-0.2	-0.1	-0.1	0.1	-0.2	-0.3
$3,000 to 3,999	0.0 **	0.0 a	0.0 *	0.0	-0.3	0.0 a	-0.3	-0.3
$4,000 to 4999	0.0	0.0 a	0.0	0.0 a	0.0	0.0 a	0.0	0.0 a
$5,000 or more	0.0	0.0 a	0.0	0.0 a	0.0	0.0 a	0.0 a	-0.2
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	-0.6	0.4	-0.6	-3.0 **	-0.7	3.1	-0.6	-3.3
25 to under 50 percent	0.2	0.3	0.1	0.9 *	-0.5	-1.8 *	-0.4	0.0
50 to under 75 percent	0.6 *	-0.9	0.7 **	1.9 **	1.5 **	-0.2	0.6	5.1 ***
75 to under 100 percent	-0.2	0.2	-0.2	0.2	-0.3	-1.1	0.4	-1.9
100 percent	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
THE TOTAL POPULATION

| | Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel | | | | Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel | | | |
| | Age In March 1996 | | | | Age In January 2001 | | | |
Wave 1 Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	0.2 **	0.1	0.2 ***	-0.2	-0.4 ***	-1.5 ***	-0.1	0.6
No married couple present								
Male householder	-0.2 ***	-0.2 ***	-0.2 ***	0.0	-0.1	0.0	-0.2 **	0.1
Female householder	0.1 **	0.3	0.1 *	0.0	0.6 ***	1.5 ***	0.4 ***	0.4
Nonfamily								
Male householder	-0.1 ***	-0.1 ***	-0.3 ***	0.4 ***	-0.1 **	0.0	-0.2 ***	0.0
Female householder	0.0	0.0	0.1 **	-0.2	0.0	0.0	0.2 ***	-1.1 ***
Ownership Status of Living Quarters								
Owned	0.4 ***	0.2	0.6 ***	-0.1	0.2	-0.2	0.5 **	-0.4
Not owned	-0.4 ***	-0.2	-0.6 ***	0.1	-0.2	0.2	-0.5 **	0.4
Residence in Public Housing	0.1 ***	0.2 **	0.1 *	0.2 ***	0.2 ***	0.5 ***	0.1 *	0.0
Household Size								
1 person	0.0	0.0	0.0	0.2	0.0	0.0	0.3 ***	-1.1 ***
2 persons	0.1	0.1	0.0	0.0	-0.1	0.2 *	-0.4 *	0.8 *
3 to 4 persons	0.1	0.1	0.1	0.0	0.5 *	0.7 *	0.4	0.5
5 or more persons	-0.1	-0.2	-0.1	-0.2 *	-0.4 *	-0.9 **	-0.2	-0.2
Family Size								
1 person	-0.1 ***	-0.1 **	-0.2 ***	0.2	-0.1 **	-0.1	0.0	-1.0 ***
2 persons	0.0	0.0	0.0	0.0	0.0	0.3 **	-0.3	0.6
3 to 4 persons	0.2 **	0.3	0.2 **	0.0	0.6 **	0.9 **	0.4 *	0.6 *
5 or more persons	-0.1	-0.2	0.0	-0.2 *	-0.4 **	-1.1 ***	-0.1	-0.2
Persons under 18 in Family								
None	-0.3 ***	-0.1 **	-0.4 ***	0.0	0.0	-0.1	0.0	0.2
1 person	0.1	-0.2 *	0.2 **	0.0	-0.3	-0.3	-0.3 *	-0.1
2 persons	0.1	0.1	0.1	0.0	0.2	0.3	0.2	-0.1
3 persons	0.1	0.2	0.1	0.0	0.2	0.4	0.2	-0.1
4 persons	0.0	0.0	0.1	0.0	0.0	-0.1	0.0	0.0
5 or more persons	0.0	0.0	0.0	0.0	-0.1	-0.3	-0.1	0.0

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
[a] The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
RETIRED WORKERS

Wave 1 Characteristic	Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel				Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	-0.1	1.4 **	0.3	-0.8 *	0.7 *	0.9	0.9 *	0.5
No married couple present								
Male householder	0.0	-0.4	0.0	0.1	0.2	-0.5	0.3	0.3
Female householder	-0.1	-0.5	-0.2	0.2	0.3	-0.9	-0.1	1.2 ***
Nonfamily								
Male householder	0.4 ***	0.0	0.2	0.7 ***	-0.3	-0.1	-0.5 *	0.0
Female householder	-0.2	-0.6	-0.3 *	-0.1	-1.0 ***	0.4	-0.7 *	-1.9 ***
Ownership Status of Living Quarters								
Owned	-0.1	-0.2	-0.3	0.1	-0.2	0.7	-0.2	-0.5
Not owned	0.1	0.2	0.3	-0.1	0.2	-0.7	0.2	0.5
Residence in Public Housing	0.2 **	0.0	0.1	0.3 **	0.0	0.4 **	0.0	0.0
Household Size								
1 person	0.1	-1.0 **	-0.1	0.6 *	-1.2 ***	0.6	-1.1 **	-2.0 ***
2 persons	-0.1	0.2	0.5 *	-0.8 *	0.5	-0.4	0.3	1.1
3 to 4 persons	0.0	1.1 **	-0.4	0.2	1.0 ***	1.1	0.9	1.0 **
5 or more persons	0.0	-0.2	0.0	-0.1	-0.2	-1.3 *	-0.1	-0.1
Family Size								
1 person	0.2	-0.6	-0.1	0.7	-1.2 ***	0.1	-1.0 *	-1.9 **
2 persons	-0.1	-0.2	0.5	-0.7	0.5	0.0	0.4	0.9
3 to 4 persons	0.0	0.8 *	-0.4	0.1	0.9 ***	0.6	0.9	1.1 **
5 or more persons	0.0	0.0	0.0	-0.1	-0.2	-0.7	-0.2	-0.1
Persons under 18 in Family								
None	-0.2 **	-0.6	-0.1	-0.3 *	0.1	0.7	0.1	-0.1
1 person	0.1	0.2	0.1	0.1	0.0	-0.1	0.0	0.0
2 persons	0.1 **	0.2	0.0	0.1 *	-0.1	-0.8	-0.2	0.1
3 persons	0.0	0.1 *	0.0	0.0	0.0	0.0	-0.1	0.0
4 persons	0.0	0.1 *	0.0	0.0	0.0	0.1	0.1	0.0
5 or more persons	0.0	0.0 a	0.0	0.0	0.0	0.1	0.1	0.0

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE D.3.c

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
DISABLED WORKERS

Wave 1 Characteristic	Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel				Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 50	50 to 64	65 +	Total	Under 50	50 to 64	65 +
All Disabled Workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	0.6	-0.1	1.2	1.5	0.5	1.9	1.2	-2.1
No married couple present								
Male householder	0.0	-0.2	-0.1	0.1	-0.5	-0.4	-0.5	-0.7
Female householder	0.0	0.9	-0.3	-1.2	0.7	-0.5	0.8	1.4
Nonfamily								
Male householder	-0.6 *	-0.4	-1.2 *	-0.3	0.3	-0.1	-0.6	2.0 *
Female householder	-0.1	-0.3	0.6	-0.3	-0.8	-0.5	-0.9	-0.6
Ownership Status of Living Quarters								
Owned	-0.4	-0.9	0.3	0.5	-0.7	2.1	-2.9 *	-0.2
Not owned	0.4	0.9	-0.3	-0.5	0.7	-2.1	2.9 *	0.2
Residence in Public Housing	0.6 ***	0.6 *	0.4	0.8 **	0.9 **	0.2	1.7 ***	0.6
Household Size								
1 person	-0.3	-0.6	0.0	-0.2	0.0	0.2	-0.2	0.5
2 persons	0.0	0.9	-0.1	0.1	-1.0	-3.4 **	0.9	0.7
3 to 4 persons	0.1	-1.5 *	0.4	0.6	1.1	3.1 **	-0.6	-0.1
5 or more persons	0.3	1.2 **	-0.4	-0.5	-0.2	0.1	-0.1	-1.1
Family Size								
1 person	-0.3	0.0	-0.7	0.1	-0.8	-1.1	-2.0	1.5
2 persons	0.0	0.6	0.5	-0.3	-0.2	-1.9	1.9	-0.1
3 to 4 persons	0.3	-1.3	0.7	0.8	0.9	2.6 *	-0.6	0.0
5 or more persons	0.0	0.7	-0.4	-0.6	0.2	0.3	0.7	-1.4
Persons under 18 in Family								
None	-0.3	-1.0	0.3	1.1	-0.5	0.5	-1.5	0.8
1 person	0.3	0.6	0.2	-0.4	-0.1	-0.3	-0.2	0.0
2 persons	0.3 *	0.5	0.1	0.0	0.5	0.3	1.3 **	-0.9
3 persons	-0.5 **	-0.3	-0.5 *	-0.8	0.2	-0.5	0.5	0.4
4 persons	0.0	0.0	-0.1	0.2 *	0.2	0.6 *	0.0	-0.3
5 or more persons	0.0	0.1	0.0	-0.1	-0.2	-0.5	-0.1	0.0 a

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.

 ** Statistically signficant at 0.05 level.

  * Statistically significant at 0.10 level.

a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE D.3.d

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
ALL OTHER SOCIAL SECURITY BENEFICIARIES

Wave 1 Characteristic	Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel				Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel			
	Total	Age In March 1996			Total	Age In January 2001		
		Under 18	18 to 64	65 +		Under 18	18 to 64	65 +
All Other Beneficiaries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	0.3	-1.2	0.1	0.8 *	0.3	1.1	-2.6	0.1
No married couple present								
Male householder	0.0	0.0	0.5 *	-0.1	0.8 **	1.6 *	0.7	0.4
Female householder	0.6 *	1.2	-0.4	0.3	0.5	-2.3	1.3	0.9
Nonfamily								
Male householder	0.0	0.0	-0.2	0.2	-0.1	-0.2	-0.5	0.0
Female householder	-0.9 **	0.0	0.0	-1.2 **	-1.6 *	-0.1	0.7	-1.4
Ownership Status of Living Quarters								
Owned	-1.0 ***	-1.6 **	-1.1	-0.5	-0.9	-1.7	-0.3	-0.3
Not owned	1.0 ***	1.6 **	1.1	0.5	0.9	1.7	0.3	0.3
Residence in Public Housing	0.1	0.0	-0.7	0.3 *	0.3	0.0	1.7 **	0.0
Household Size								
1 person	-0.8 **	0.0 a	-0.3	-0.9 *	-1.8 *	0.0 a	0.6	-1.6
2 persons	0.1	0.8 **	-0.3	0.1	-0.7	-0.5	-2.6	0.5
3 to 4 persons	0.6	-0.1	0.3	0.6 *	1.2	-0.6	0.6	0.8
5 or more persons	0.1	-0.7	0.3	0.1	1.3 *	1.1	1.4	0.4
Family Size								
1 person	-1.0 **	-0.3	-0.5	-1.1 **	-1.3	0.0	1.5	-1.1
2 persons	0.2	0.4	-0.1	0.3	-0.9	-0.6	-2.5	0.2
3 to 4 persons	0.6 *	0.1	0.1	0.6 *	1.1	-0.4	-0.2	0.7
5 or more persons	0.2	-0.3	0.4	0.1	1.1 *	1.0	1.2	0.2
Persons under 18 in Family								
None	-0.7 *	-0.3	0.2	-0.4 *	-1.9 **	0.0	0.6	-0.5
1 person	0.3	0.5	-0.7	0.3 **	-0.1	-1.3	-2.1	0.1
2 persons	0.1	-0.4	0.6	0.0	0.4	-1.0	0.2	0.2
3 persons	-0.1	-1.1	-0.1	0.0	1.2 **	2.5	0.8	0.1
4 persons	0.2 **	0.6	0.1	0.0	0.3	-0.1	0.4	0.2
5 or more persons	0.1	0.6 *	-0.1	0.0	0.1	-0.1	0.1	0.0

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE D.3.e

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
SSI RECIPIENTS

Wave 1 Characteristic	Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel				Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	-0.4	-1.0	0.0	-1.1	-0.6	0.0	-0.1	-2.1
No married couple present								
Male householder	-0.3	0.4	-0.1	-1.3 *	-0.3	-0.8	0.1	-1.3
Female householder	1.1 **	1.1	0.8	0.9	0.4	1.5	-0.3	1.4
Nonfamily								
Male householder	-0.2	-0.2	-0.4	0.1	0.9	-0.6	1.2	1.3
Female householder	-0.1	-0.3	-0.1	1.2	-0.4	0.0 a	-0.6	0.2
Ownership Status of Living Quarters								
Owned	0.0	-1.2	0.9	-0.9	-1.5	-1.6	-0.7	-3.4
Not owned	0.0	1.2	-0.9	0.9	1.5	1.6	0.7	3.4
Residence in Public Housing	0.6 **	1.4 *	0.0	1.6 ***	0.9	-0.1	0.9	1.2
Household Size								
1 person	-0.2	0.0 a	-0.6 *	1.5	1.2	0.0 a	1.4	1.7
2 persons	0.1	0.0	-0.1	1.0	-1.3	0.8	-2.5 **	1.3
3 to 4 persons	0.1	1.0	0.2	-1.4	0.1	1.5	0.3	-1.5
5 or more persons	0.0	-1.0	0.5	-1.1	-0.1	-2.4	0.8	-1.6
Family Size								
1 person	0.3	0.3 **	0.1	1.8	0.6	0.6	0.2	2.3
2 persons	0.3	-0.5	0.3	1.1	-0.3	0.1	-0.6	0.4
3 to 4 persons	-0.1	1.3	-0.2	-1.4 *	0.0	1.5	-0.2	-0.9
5 or more persons	-0.5	-1.2	-0.1	-1.5	-0.2	-2.2	0.6	-1.8
Persons under 18 in Family								
None	-0.1	0.3 **	0.2	0.9	-0.3	0.6	-1.0	2.3
1 person	-0.4	-1.6 *	-0.4	-0.1	-0.1	-1.3	0.3	-0.6
2 persons	0.1	0.5	0.2	-1.0	0.5	5.2 **	0.1	-1.5
3 persons	0.2	-0.2	0.0	0.4	0.1	-2.3	0.7	-0.5
4 persons	0.1	1.2 *	-0.2	0.1	-0.1	-2.0	0.1	0.2
5 or more persons	0.1	-0.2	0.2 ***	-0.2	-0.1	-0.1	-0.2	0.1

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE D.4.a

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
THE TOTAL POPULATION

Wave 1 Characteristic	Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel				Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	0.2 ***	0.5 ***	0.1 ***	0.1 *	0.4 ***	0.5 ***	0.3 ***	0.4 **
Housing assistance	0.0	0.1	0.0	0.0	0.2 ***	0.4 ***	0.1 ***	0.2 *
Food stamps	0.3 ***	0.5 ***	0.2 **	0.2	0.8 ***	1.3 ***	0.6 ***	0.3 **
Total Household Income, avg. monthly								
Less than $500	-0.3 ***	-0.3 ***	-0.2 ***	-0.4 ***	-0.2 ***	0.1	-0.2 ***	-0.7 ***
$500 to 999	0.0	0.2 *	0.0	-0.6 ***	0.0	0.0	0.1	-0.8 **
$1,000 to 1,499	-0.1	0.0	0.0	-0.3	-0.3 **	0.0	-0.3 ***	-0.7 *
$1,500 to 1,999	-0.1	0.1	-0.2 ***	0.2	0.1	0.4 *	0.1	-0.1
$2,000 to 2,999	-0.1	-0.2	-0.1	0.2	0.0	0.0	-0.1	0.6
$3,000 to 3,999	0.1	-0.2	0.1	0.4 **	0.2	0.3	0.1	0.4
$4,000 to 4,999	0.1 *	0.1	0.1	0.3 ***	-0.1	-0.6 **	-0.1	0.5 *
$5,000 or more	0.3 **	0.2	0.3 **	0.1	0.3	-0.2	0.4	0.8 *
Total Family Income, avg. monthly								
Less than $500	-0.4 ***	-0.4 ***	-0.3 ***	-0.4 ***	-0.3 ***	0.0	-0.3 ***	-0.7 ***
$500 to 999	0.0	0.2 *	0.0	-0.5 ***	0.0	0.2	0.1	-0.8 **
$1,000 to 1,499	0.0	0.0	0.0	-0.3	-0.3 **	0.0	-0.3 ***	-0.6 *
$1,500 to 1,999	-0.1	0.1	-0.2 ***	0.2	0.2	0.5 **	0.1	-0.1
$2,000 to 2,999	0.0	-0.2	0.0	0.3	0.0	0.0	-0.2	0.5
$3,000 to 3,999	0.0	-0.2	0.0	0.3 **	0.2	0.2	0.1	0.4
$4,000 to 4,999	0.2 ***	0.2 *	0.1 **	0.3 ***	0.0	-0.4	0.0	0.5 **
$5,000 or more	0.3 ***	0.2	0.4 ***	0.1	0.3	-0.4	0.5 **	0.8 *
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	-0.3 ***	-0.3 ***	-0.3 ***	-0.1 ***	-0.2 ***	-0.2	-0.3 ***	0.0
10 to under 50 percent	-0.1	0.0	-0.1 **	-0.2 ***	0.0	0.3	0.0	-0.6 ***
50 to under 100 percent	0.0	0.0	0.0	-0.4 **	-0.1	-0.1	0.0	-0.3
100 to under 125 percent	0.0	0.1	0.0	-0.3 **	0.0	0.2	0.0	-0.6 **
125 to under 150 percent	-0.1	0.0	-0.1	-0.3 **	0.0	0.2	-0.1	-0.5 *
150 to under 200 percent	-0.2 **	-0.2	-0.2 **	-0.2	-0.1	0.1	-0.3 *	0.1
200 to under 300 percent	0.2 *	0.0	0.2 **	0.5 **	-0.3	-0.6	-0.2	-0.2
300 to under 400 percent	0.2 **	0.1	0.2 *	0.4 *	0.0	-0.2	0.0	0.4
400 percent or more	0.3 ***	0.2	0.3 ***	0.6 ***	0.7 ***	0.2	0.8 ***	1.6 ***
Distribution of Family Income by Source, avg. monthly								
Social Security	0.0 *	0.0 *	0.0 *	-0.3	0.1	0.0	0.0	-0.4
SSI	0.0 ***	0.1 ***	0.0 ***	0.0	0.0 **	0.0 *	0.0 *	0.0
Other public assistance	0.0	0.0	0.0	0.0 *	0.0	0.0	0.0	0.0
Earnings	-0.2 ***	-0.2 **	-0.2 ***	-0.5	-0.3 **	0.0	-0.1	-1.2
Asset income	0.1 **	0.0	0.0	0.3 **	0.0	-0.1	-0.1	0.7 **
All other	0.1 ***	0.0	0.1 ***	0.5 **	0.2 ***	0.1	0.1 **	0.8 **

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
[a] The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE D.4.b

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
RETIRED WORKERS

| Wave 1 Characteristic | Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel | | | | Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel | | | |
| | Age In March 1996 | | | | Age In January 2001 | | | |
	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	0.1	0.1	0.1	0.1	0.3 **	0.3	0.3	0.4
Housing assistance	0.0	-0.1	0.0	0.0	0.1	0.1	0.0	0.2
Food stamps	0.2 *	0.2	0.1	0.2	0.4 **	-0.1	0.5 **	0.4
Total Household Income, avg. monthly								
Less than $500	-0.2 **	-0.5	-0.2 **	-0.1	-0.6 ***	-0.4	-0.3 *	-1.1 ***
$500 to 999	-0.7 ***	-0.6	-0.7 ***	-0.7 **	-0.9 ***	-0.7	-0.3	-1.8 ***
$1,000 to 1,499	-0.2	0.4	0.1	-0.8 **	-0.5	0.8	-0.6	-0.6
$1,500 to 1,999	0.2	-0.2	0.0	0.5	0.1	-0.5	-0.6	1.0 *
$2,000 to 2,999	0.1	1.0	0.0	0.0	0.7	0.8	0.6	0.9
$3,000 to 3,999	0.3	-0.3	0.4	0.4	0.5	1.7	1.0 *	-0.2
$4,000 to 4,999	0.4 ***	0.5	0.3 *	0.6 ***	0.4	-1.0	0.3	0.9 **
$5,000 or more	0.0	-0.4	0.0	0.2	0.3	-0.7	0.0	0.9
Total Family Income, avg. monthly								
Less than $500	-0.2 *	-0.4	-0.2	-0.1	-0.7 ***	-0.3	-0.4 **	-1.1 ***
$500 to 999	-0.6 ***	-0.6	-0.7 ***	-0.6 *	-0.9 ***	-0.9	-0.2	-1.7 ***
$1,000 to 1,499	-0.2	0.4	0.1	-0.7 **	-0.5	0.5	-0.5	-0.7
$1,500 to 1,999	0.1	-0.2	0.0	0.4	0.1	-0.7	-0.5	1.0
$2,000 to 2,999	0.2	1.1 *	0.2	0.0	0.7	0.8	0.6	0.7
$3,000 to 3,999	0.2	-0.2	0.3	0.2	0.5	1.6	0.9 *	-0.3
$4,000 to 4,999	0.4 ***	0.4	0.3 *	0.6 ***	0.5	-0.3	0.2	1.0 ***
$5,000 or more	0.1	-0.4	0.0	0.3	0.3	-0.8	-0.1	1.0 *
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
10 to under 50 percent	-0.1	0.1	-0.1	0.0	-0.5 ***	-0.2	-0.4 ***	-0.7 ***
50 to under 100 percent	-0.4 ***	-0.7 *	-0.4 *	-0.5 *	-0.3	-0.5	0.2	-0.9 *
100 to under 125 percent	-0.2	0.1	-0.2	-0.4 *	-0.6 **	0.4	-0.5	-0.9 **
125 to under 150 percent	-0.4 **	0.0	-0.3 *	-0.5 *	-0.3	0.1	0.0	-0.7
150 to under 200 percent	-0.2	0.5	-0.2	-0.3	-0.1	-1.6 **	-0.4	0.6
200 to under 300 percent	0.4 *	0.5	0.3	0.6	0.0	-0.3	-0.4	0.5
300 to under 400 percent	0.3	-0.1	0.4	0.3	0.7	1.3	1.0	0.2
400 percent or more	0.5 **	-0.3	0.5 *	0.9 **	1.1 **	0.8	0.4	2.0 ***
Distribution of Family Income by Source, avg. monthly								
Social Security	-0.3	0.4	-0.4 *	-0.6	-0.3	-0.1	0.0	-1.2
SSI	0.0	0.1 **	0.0	0.0	0.0	0.0	0.0	0.0
Other public assistance	0.0	0.0	0.0	0.0	0.0	0.0 *	0.0	0.0
Earnings	-0.5	-1.3	-0.4	-0.3	-1.3 *	-2.1	-2.1 **	0.4
Asset income	0.4 ***	0.4	0.3 *	0.5 **	0.6 *	-0.1	0.9 **	0.2
All other	0.4 **	0.4	0.5 **	0.4	1.0 **	2.2 **	1.1 **	0.5

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
[a] The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE D.4.c

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
DISABLED WORKERS

| Wave 1 Characteristic | Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel | | | | Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel | | | |
| | Total | Age In March 1996 | | | Total | Age In January 2001 | | |
		Under 50	50 to 64	65 +		Under 50	50 to 64	65 +
All Disabled Workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	0.2	0.0	0.2	0.3	0.6	0.0	1.2	0.5
Housing assistance	0.0	0.2	0.0	-0.4	0.6	-0.1	0.9	1.0
Food stamps	0.5	0.3	1.0 *	-0.6	1.5 *	-0.3	2.7 ***	1.5
Total Household Income, avg. monthly								
Less than $500	0.1	0.1	0.1	0.3	-0.6 **	-0.8 *	-0.9 **	0.2
$500 to 999	-0.2	0.3	0.0	-1.3	0.5	-1.4	1.5	1.9
$1,000 to 1,499	-0.3	-0.8	-0.3	0.2	-1.0	-0.2	-1.4	-1.4
$1,500 to 1,999	-0.2	-0.4	-0.5	0.5	0.8	2.6 **	0.8	-2.1
$2,000 to 2,999	0.2	-0.5	1.0	0.0	0.4	1.1	-1.6	2.7 *
$3,000 to 3,999	0.0	0.5	-0.4	0.0	0.0	-0.7	1.0	-1.0
$4,000 to 4,999	0.3	0.5 ***	0.4	0.0	0.9	0.2	1.5	1.1
$5,000 or more	0.1	0.2	-0.3	0.2	-1.0	-1.0	-0.9	-1.4
Total Family Income, avg. monthly								
Less than $500	0.2	0.0	0.1	0.4	-0.6 **	-0.6	-1.1 **	0.2
$500 to 999	-0.1	0.9	-0.5	-1.1	-0.1	-1.7	0.0	2.1
$1,000 to 1,499	-0.5	-0.7	-0.4	-0.3	-0.6	-0.3	-0.8	-1.0
$1,500 to 1,999	0.1	-0.4	0.2	0.8	0.7	2.1 **	1.1	-2.2
$2,000 to 2,999	0.0	-0.6	0.6	-0.5	0.8	2.0 *	-1.1	2.5
$3,000 to 3,999	0.2	0.5	-0.2	0.3	0.0	-0.6	1.1	-0.8
$4,000 to 4,999	0.3	0.4 ***	0.5	0.0	1.0 *	0.6	1.6 *	0.7
$5,000 or more	-0.1	-0.1	-0.3	0.3	-1.2 *	-1.6	-0.7	-1.6
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.0	0.0	0.0 a	0.0 a	0.0	-0.2	0.1	0.2
10 to under 50 percent	0.2	0.3 **	0.2	-0.1	-0.2	0.1	-0.5	0.0
50 to under 100 percent	-0.2	0.0	-0.4	-0.6	0.6	-0.9	0.0	3.5 **
100 to under 125 percent	0.1	0.7 **	-0.1	-0.5	-0.3	0.4	0.3	-2.5
125 to under 150 percent	-0.4	0.3	-0.9	-0.8	-0.2	0.2	-0.1	-1.1
150 to under 200 percent	0.1	-0.8	0.5	0.9	0.4	0.8	0.3	0.0
200 to under 300 percent	0.2	-0.7	0.7	0.7	-0.8	0.2	-2.2	0.7
300 to under 400 percent	0.0	0.3	-0.2	0.0	0.2	-0.7	1.2	-0.3
400 percent or more	0.0	-0.1	0.2	0.3	0.2	0.2	0.9	-0.4
Distribution of Family Income by Source, avg. monthly								
Social Security	-0.5	-0.8	-0.2	-0.8	0.7	1.8	-0.1	0.9
SSI	0.1	0.1	0.0	0.2	0.0	-0.2	0.0	0.4
Other public assistance	0.0	-0.1	-0.1	0.1	0.2 **	0.3	0.2 *	0.3 **
Earnings	0.3	0.9	-0.3	0.2	-0.1	-1.3	1.2	-1.7
Asset income	0.2 *	0.2	0.2	0.4	0.4	0.4	0.2	0.7
All other	0.0	-0.4	0.4	0.0	-1.3	-0.9	-1.7	-0.7

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE D.4.d

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
ALL OTHER SOCIAL SECURITY BENEFICIARIES

| | Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel | | | | Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel | | | |
| | Age In March 1996 | | | | Age In January 2001 | | | |
Wave 1 Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	0.1	0.1	-0.1	0.1	1.3 ***	2.8 ***	1.9 **	0.3
Housing assistance	0.0	0.2	-0.5	0.1	0.2	0.2	-0.1	0.2
Food stamps	0.6 **	1.0	0.3	0.3 *	1.1 **	1.0	2.1 **	0.6 *
Total Household Income, avg. monthly								
Less than $500	-0.6 ***	-0.2	-0.4	-0.8 ***	-0.9 **	0.0	-0.6	-1.3 **
$500 to 999	-0.8 **	0.7	-1.4 *	-1.1 **	0.5	-0.9	2.8 **	0.9
$1,000 to 1,499	0.3	0.7	1.9 ***	-0.3	-1.6 **	0.3	-0.1	-2.6 **
$1,500 to 1,999	0.2	-0.1	0.1	0.4	-0.3	0.7	0.1	-0.7
$2,000 to 2,999	0.6	-0.4	-0.2	1.1 ***	0.5	2.0	-1.4	0.2
$3,000 to 3,999	0.7 ***	0.8	0.5	0.6 **	0.8	-0.6	3.6 **	0.4
$4,000 to 4,999	0.0	-0.1	0.3	-0.1	0.0	0.3	-3.3 ***	0.7
$5,000 or more	-0.2	-1.4 *	-0.8	0.3	1.1	-1.7	-0.9	2.4 ***
Total Family Income, avg. monthly								
Less than $500	-0.8 ***	-0.6	-0.6	-0.9 ***	-1.0 ***	-0.6	-0.4	-1.4 **
$500 to 999	-0.8 **	0.8	-1.5 *	-1.1 **	0.7	-0.6	2.5 *	1.2
$1,000 to 1,499	0.3	0.9	1.8 ***	-0.2	-1.8 **	0.5	-0.4	-2.9 ***
$1,500 to 1,999	0.1	-0.2	-0.3	0.4	-0.3	0.3	-0.4	-0.4
$2,000 to 2,999	0.7 **	-0.3	0.5	1.1 ***	0.8	2.5	-0.4	0.3
$3,000 to 3,999	0.6 ***	0.8	0.3	0.5 **	0.6	-0.7	3.6 **	0.2
$4,000 to 4,999	0.0	0.1	0.4	-0.1	0.0	0.3	-3.3 ***	0.6
$5,000 or more	-0.2	-1.4 *	-0.6	0.4	1.0	-1.6	-1.3	2.4 ***
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.0	-0.1	0.0 a	0.0	-0.2	-0.8	0.0 a	-0.1
10 to under 50 percent	-0.2	0.3	-0.1	-0.4 **	-0.6 *	-0.4	-0.2	-0.8 **
50 to under 100 percent	-0.4	0.9	-1.3 *	-0.8 *	1.0	1.4	2.0	0.6
100 to under 125 percent	-0.1	0.1	0.0	-0.2	0.5	0.6	1.7 *	0.1
125 to under 150 percent	-0.3	0.3	-0.2	-0.5	-0.7	1.2	-0.4	-1.6 **
150 to under 200 percent	-0.1	-1.2	1.3 **	0.0	-0.8	-1.5	0.6	-0.9
200 to under 300 percent	0.8 **	0.6	1.0	0.8 **	-0.2	1.4	-1.4	-0.5
300 to under 400 percent	0.3	-0.5	-0.2	0.8 ***	-0.6	-1.5	0.6	-0.7
400 percent or more	0.0	-0.5	-0.5	0.3	1.7 *	-0.3	-3.0	3.8 ***
Distribution of Family Income by Source, avg. monthly								
Social Security	0.1	1.2 *	0.4	-0.5	-1.3 **	-0.6	0.4	-2.0 **
SSI	0.1 **	0.1	0.3 ***	0.0	0.0	-0.3	0.4	0.0
Other public assistance	0.0	0.1	-0.1 *	0.0 **	0.0	0.0	-0.4	0.0
Earnings	-0.8	-1.9 **	-1.8 *	0.3	1.7 *	0.5	-1.7	2.9 **
Asset income	0.2	0.1	0.5 **	0.0	0.3	0.5	1.5 *	0.0
All other	0.4 *	0.5	0.7	0.2	-0.6	-0.2	-0.1	-0.9

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

TABLE D.4.e

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED AND FULL WAVE 1/WAVE 2 SAMPLES FOR
SSI RECIPIENTS

Wave 1 Characteristic	Difference between Matched and Full Wave 1/Wave 2 Samples in 1996 Panel				Difference between Matched and Full Wave 1/Wave 2 Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	0.6 **	1.1	0.2	0.9 **	0.4	-2.9	0.9	1.0
Housing assistance	-0.4	-1.9	-0.3	0.0	1.2 **	1.9 *	1.1	1.4
Food stamps	0.1	-0.5	0.0	0.6	2.5 **	2.7	3.2 ***	0.7
Total Household Income, avg. monthly								
Less than $500	0.2	0.0	0.0	1.2	-0.2	-2.2	0.0	0.2
$500 to 999	0.1	1.2	-0.3	0.6	-0.2	-2.9 **	0.4	-0.3
$1,000 to 1,499	-0.7 *	-1.5	-0.5	-0.8	0.6	2.1	-0.4	2.3 *
$1,500 to 1,999	0.4	1.4	0.1	0.1	1.1 *	2.2	0.9	0.9
$2,000 to 2,999	0.2	0.3	0.1	0.0	-0.7	-1.6	-0.4	-1.4
$3,000 to 3,999	0.1	-1.0	0.2	0.2	0.2	5.7 ***	-1.2 *	1.1
$4,000 to 4,999	0.1	-0.2	0.3	-0.1	-0.5	-0.6	0.1	-2.3 *
$5,000 or more	-0.4	-0.2	0.1	-1.4 *	-0.1	-2.7	0.5	-0.5
Total Family Income, avg. monthly								
Less than $500	0.5 *	0.3	0.4	1.4	-0.1	-2.4	0.2	0.2
$500 to 999	0.3	1.7	-0.1	0.6	-0.5	-2.7	-0.1	0.0
$1,000 to 1,499	-0.5	-1.7	-0.3	-0.4	0.8	3.3 *	-0.2	2.3 *
$1,500 to 1,999	0.3	1.1	0.1	0.0	0.5	1.9	0.1	1.0
$2,000 to 2,999	0.1	0.1	0.1	-0.1	-0.2	-2.0	0.5	-1.3
$3,000 to 3,999	-0.1	-1.4	0.0	0.2	0.3	4.4 ***	-0.8	1.1
$4,000 to 4,999	0.1	0.3	0.2	-0.3	-0.6	-0.8	0.2	-2.6 **
$5,000 or more	-0.6 **	-0.4	-0.3	-1.4 *	-0.3	-1.7	0.1	-0.7
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.0 **	0.1	0.0	0.1	-0.1	-0.6	0.0 a	0.0 a
10 to under 50 percent	0.1	0.2	0.1	-0.1	-0.5	-2.7	0.2	-1.1
50 to under 100 percent	0.0	-0.4	-0.3	1.1	-0.2	-0.5	-0.8	2.4
100 to under 125 percent	0.2	1.3	0.1	0.0	1.3 **	3.3 *	1.8 ***	-1.3
125 to under 150 percent	0.4	0.3	0.4	0.2	0.6	-0.8	0.2	2.3 **
150 to under 200 percent	0.3	0.3	0.1	0.6	0.2	2.7	-0.3	-0.1
200 to under 300 percent	-0.5	-1.3	-0.1	-1.0	-0.4	1.1	-0.8	0.0
300 to under 400 percent	0.1	-0.1	0.1	0.1	-0.2	-1.8	0.2	-0.4
400 percent or more	-0.6 **	-0.4	-0.4	-1.0	-0.7	-0.6	-0.4	-1.7
Distribution of Family Income by Source, avg. monthly								
Social Security	0.5	-0.6	0.2	2.9 *	0.5	-1.5	1.0	1.6
SSI	0.7 **	2.1 **	0.4	0.2	1.0	0.6	0.8	1.9
Other public assistance	0.1	-0.1	-0.1	0.4 *	0.3 *	0.2	0.3	0.2
Earnings	-1.4 *	-1.2	-0.7	-3.6	-0.9	0.8	-1.2	-1.8
Asset income	0.0	0.0	0.0	0.0	-0.3	-0.8	-0.3	0.3
All other	0.1	-0.2	0.1	0.1	-0.6	0.8	-0.5	-2.3 **

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full wave 1/wave 2 sample estimate is zero or 100 percent; the matched sample estimate cannot deviate from that value.

APPENDIX E

**COMPARISON OF DIFFERENCES BETWEEN MATCHED AND ENTIRE
FULL PANEL SAMPLES: 1996 AND 2001 SIPP PANELS**

TABLE E.1.a

DISTRIBUTION OF PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
THE TOTAL POPULATION

Wave 1 Characteristic	Difference between Matched Full Panel and Full Panel Samples in 1996 Panel				Difference between Matched Full Panel and Full Panel Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sex								
Male	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
Female	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Race								
White	0.4 ***	0.2 *	0.5 ***	0.3	0.4 ***	0.1	0.6 ***	-0.1
Black	0.0	0.1	0.0	-0.1	0.0	0.2 **	-0.1 **	0.0
American Indian, Alaska Native	0.1 ***	0.1 **	0.1 **	0.1 *	0.2 **	0.4 ***	0.1	0.0
Asian, Pacific Islander	-0.4 ***	-0.4 ***	-0.5 ***	-0.2 *	-0.6 ***	-0.7 ***	-0.6 ***	0.0
Ethnicity								
Hispanic	0.0	0.1	-0.1	0.1	0.0	0.2	-0.1 *	0.1
Non-Hispanic	0.0	-0.1	0.1	-0.1	0.0	-0.2	0.1 *	-0.1
Marital Status								
Married	-0.1 **	0.0	-0.1	-0.3	-0.2 ***	0.0	-0.4 ***	1.0 *
Widowed	0.0	0.0	0.0	0.0	-0.2 ***	0.0 a	-0.1	-1.2 ***
Divorced or separated	0.2 ***	0.0	0.3 ***	0.2	0.0	0.0	0.1	-0.1
Never married	-0.1	0.0 *	-0.2 *	0.1	0.3 ***	0.0	0.4 **	0.4
Years of education								
0 to 8	-0.3 ***	0.0	-0.3 ***	-0.4 *	-0.3 ***	-0.1	-0.4 ***	-0.2
9 to 11	0.1 *	0.1	0.1	0.2	0.1	0.3	0.1	-0.4
12	-0.3 ***	0.0	-0.3 **	-0.6 **	-0.5 ***	0.0	-0.7 **	-0.6
13 to 15	0.4 ***	0.0	0.6 ***	0.5 ***	0.6 ***	0.0	1.0 ***	0.7 *
16 or more	0.0	0.0 a	0.0	0.2	0.1	0.0 a	0.0	0.5
Unknown (used for children)	0.0	0.0	0.0 a	0.0 a	0.0	-0.2	0.0 a	0.0 a
Living Arrangement								
Lives alone	0.0	0.0 a	0.0	0.1	0.0	0.0	0.3 ***	-1.6 ***
Lives with relatives	0.1 **	0.1 *	0.2 *	-0.2	0.1	0.0	-0.1	1.4 ***
Lives with only non-relatives	-0.1 **	-0.1 *	-0.2 **	0.0	-0.1	0.0	-0.2	0.2
Relationship to Householder								
Householder	0.2 ***	0.0	0.4 ***	0.0	0.4 ***	0.0	0.9 ***	-1.2 ***
Spouse	-0.2 ***	0.0 *	-0.2 ***	-0.3 *	-0.3 ***	0.0	-0.7 ***	0.8 **
Child	0.4 ***	0.6 ***	0.3 ***	0.0 *	0.3 **	0.4	0.2	0.0
Grandchild	-0.1	-0.1	0.0	0.0 a	-0.1	-0.3	0.0	0.0 a
Parent	0.0 *	0.0 a	-0.1 ***	0.0	0.0	0.0 a	0.0	0.2
Sibling	-0.1 ***	0.0	-0.1 **	0.0	0.0	0.0	-0.1	0.2 *
Other relative	-0.1 ***	-0.2 **	-0.2 ***	0.2 *	-0.2 ***	-0.1	-0.3 ***	-0.2
Nonrelative	-0.1 ***	-0.2 ***	-0.1 **	0.1	-0.1	0.0	-0.2	0.1
Parents Present								
Both mother and father	0.2 **	0.2	0.2 **	0.0	-0.2	-1.4 ***	0.1	0.0 a
Mother only	0.1	0.1	0.1	0.0	0.3 **	1.1 ***	0.0	0.0
Father only	-0.1 *	-0.2 **	0.0	0.0	0.1 **	0.3 *	0.1	0.0
Neither	-0.2 ***	-0.2 **	-0.2 **	0.0	-0.2	0.0	-0.2	0.0

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

TABLE E.1.b

DISTRIBUTION OF PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
RETIRED WORKERS

| Wave 1 Characteristic | Difference between Matched Full Panel and Full Panel Samples in 1996 Panel | | | | Difference between Matched Full Panel and Full Panel Samples in 2001 Panel | | | |
| | Age In March 1996 | | | | Age In January 2001 | | | |
	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sex								
Male	-0.1	-0.5	-0.2	0.2	-0.4 *	-0.3	-0.8 **	0.0
Female	0.1	0.5	0.2	-0.2	0.4 *	0.3	0.8 **	0.0
Race								
White	0.2 *	1.2 *	0.1	0.2	0.3	3.5 ***	-0.6	0.5
Black	-0.3 *	-0.8	-0.1	-0.3	-0.2	-2.7 ***	0.7 **	-0.5
American Indian, Alaska Native	0.1	0.1 *	0.0	0.1	0.1	0.1	0.1	0.0
Asian, Pacific Islander	0.0	-0.5	0.0	0.0	-0.2	-0.9 *	-0.1	0.0
Ethnicity								
Hispanic	0.0	-0.3	0.2	-0.1	0.0	0.7	-0.5	0.4
Non-Hispanic	0.0	0.3	-0.2	0.1	0.0	-0.7	0.5	-0.4
Marital Status								
Married	-0.4	0.3	0.2	-1.3 **	0.9 *	0.8	1.1 *	0.7
Widowed	0.1	0.0	-0.2	0.5	-0.9 **	0.0	-1.1 **	-0.9
Divorced or separated	0.1	-0.3	-0.1	0.4 *	-0.3	-0.8	-0.3	-0.1
Never married	0.2 **	0.0	0.1	0.4 **	0.2	0.0	0.2	0.3
Years of education								
0 to 8	-0.5 **	0.1	-0.4	-0.7	-0.3	-0.9	0.7 *	-1.3 **
9 to 11	0.2	-0.4	0.1	0.4	-0.4	-1.8 *	-0.5	0.1
12	-0.5 *	-0.4	-0.5	-0.5	-0.7	-0.7	-1.3 **	0.0
13 to 15	0.6 ***	0.4	0.4	0.9 **	1.1 **	2.8 **	0.5	1.3 **
16 or more	0.2	0.3	0.4	0.0	0.3	0.5	0.6	-0.1
Unknown (used for children)	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a
Living Arrangement								
Lives alone	0.1	-0.5	-0.1	0.3	-1.4 ***	0.4	-0.8	-2.6 ***
Lives with relatives	-0.2	0.2	-0.1	-0.5	1.6 ***	0.8	1.0 *	2.4 ***
Lives with only non-relatives	0.2	0.3	0.1	0.1	-0.1	-1.2 *	-0.2	0.2
Relationship to Householder								
Householder	-0.2	0.5	-0.2	-0.3	-1.0 **	3.9 ***	-1.6 ***	-1.5 **
Spouse	-0.4 **	-0.4	-0.1	-0.7 **	0.7 *	-1.8	1.6 ***	0.3
Child	0.0 **	0.2 *	0.0	0.0 a	0.0	0.2	0.0	0.0 a
Grandchild	0.0 a	0.0 a	0.0 a	0.0 a	0.0	0.1	0.0 a	0.0 a
Parent	0.1	-0.1	0.1	0.3	0.3 *	-0.2	0.1	0.8 *
Sibling	0.0	0.1	-0.1	0.1	0.2	-0.1	0.3 **	0.1
Other relative	0.2 **	-0.6	0.1	0.5 ***	-0.1	-0.5	-0.3	0.2
Nonrelative	0.2 **	0.3 **	0.1	0.2	-0.1	-1.6 **	-0.1	0.1
Parents Present								
Both mother and father	0.0	0.0 a	0.0	0.0 a	0.0	0.2	0.0 a	0.0 a
Mother only	0.0	0.2 *	0.0	0.0	-0.1	-0.3	-0.1	0.0
Father only	0.0	0.0	0.0	0.0 a	0.0	0.1	0.0	0.0 a
Neither	0.0	-0.2 **	0.0	0.0	0.1	-0.1	0.1	0.0

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

DISTRIBUTION OF PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
DISABLED WORKERS

Wave 1 Characteristic	Difference between Matched Full Panel and Full Panel Samples in 1996 Panel				Difference between Matched Full Panel and Full Panel Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 50	50 to 64	65 +	Total	Under 50	50 to 64	65 +
All Disabled Workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sex								
Male	0.0	1.1	-1.0	-0.6	-1.0	-1.0	-2.7 *	1.5
Female	0.0	-1.1	1.0	0.6	1.0	1.0	2.7 *	-1.5
Race								
White	-1.0	-0.9	-1.4 *	-0.6	-1.3	-1.6	-0.9	-1.1
Black	0.7	0.5	1.4 **	-0.1	1.0	1.7	0.8	-0.2
American Indian, Alaska Native	0.2 ***	0.1	0.1 ***	0.3 *	0.4 *	0.5 *	0.3	0.3
Asian, Pacific Islander	0.1	0.2 *	-0.2	0.4 *	0.0	-0.6	-0.2	1.0 *
Ethnicity								
Hispanic	0.3	0.5	0.7 **	-0.6	1.6 **	2.2 *	0.8	2.2
Non-Hispanic	-0.3	-0.5	-0.7 **	0.6	-1.6 **	-2.2 *	-0.8	-2.2
Marital Status								
Married	-0.3	0.3	-0.5	0.3	1.1	1.7	2.1	0.1
Widowed	-0.5	-0.1	-0.1	-0.6	-1.1	-1.0	0.8	-3.6
Divorced or separated	0.0	-0.5	0.8	-0.4	0.0	0.8	-1.2	1.6
Never married	0.8	0.4	-0.2	0.7	0.0	-1.5	-1.7 *	1.9 **
Years of education								
0 to 8	-0.8	-1.9 *	1.6 **	-2.0	0.0	1.4	-1.8	1.5
9 to 11	0.2	1.2 *	0.6	-1.6	-1.8 **	-3.5 **	0.0	-1.9
12	0.2	0.6	-1.9 **	1.9 **	0.2	-0.4	0.4	0.1
13 to 15	0.7 **	0.5	0.3	1.6 ***	0.7	0.6	1.5	-0.9
16 or more	-0.3	-0.4	-0.5	0.1	0.9 *	1.9 ***	-0.1	1.3
Unknown (used for children)	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a
Living Arrangement								
Lives alone	-0.3	-0.9	0.3	0.1	-0.3	1.3	-0.9	-0.8
Lives with relatives	0.2	0.3	0.1	0.0	0.9	-0.4	2.5	-0.1
Lives with only non-relatives	0.2	0.7	-0.3	-0.1	-0.6	-0.9	-1.6 *	1.0
Relationship to Householder								
Householder	-0.7	-0.5	0.4	-1.7	0.9	-0.1	2.0	1.7
Spouse	-0.4	-0.3	-0.9	0.6	0.4	1.3	1.5	-2.2
Child	0.0	-0.7	-0.3	0.1	-0.4	-0.5	-1.5 *	0.0 a
Grandchild	-0.1	-0.3	0.0 a	0.0 a	0.1	0.3	0.0 a	0.0 a
Parent	0.1	0.0 a	0.3	0.3	0.0	0.2	0.6	-1.0
Sibling	0.2	0.7	0.2	-0.4	-0.3	-0.3	-1.1 *	1.0
Other relative	0.4 *	0.5 ***	0.2	0.6	-0.1	0.0	-0.3	0.0
Nonrelative	0.5	0.6	0.1	0.6	-0.6	-0.9	-1.3 *	0.6
Parents Present								
Both mother and father	0.2	0.1	0.0	0.1	0.0	-0.4	-0.2	0.0 a
Mother only	-0.4	-1.0	-0.3	-0.2	-0.3	-0.9	-0.4	0.0 a
Father only	0.1	0.5 ***	-0.2	0.0 a	0.2	0.5	0.0	0.0 a
Neither	0.0	0.5	0.5	0.1	0.1	0.8	0.6	0.0 a

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

DISTRIBUTION OF PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
OTHER SOCIAL SECURITY BENEFICIARIES

Wave 1 Characteristic	Difference between Matched Full Panel and Full Panel Samples in 1996 Panel				Difference between Matched Full Panel and Full Panel Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sex								
Male	0.8 **	0.0	1.5 **	0.2	1.1	0.3	-0.2	-0.1
Female	-0.8 **	0.0	-1.5 **	-0.2	-1.1	-0.3	0.2	0.1
Race								
White	0.0	0.3	0.8	0.0	-0.3	-0.4	-2.5	1.0
Black	0.0	-0.5	-0.3	0.0	0.0	-1.0	1.7	-0.6
American Indian, Alaska Native	0.1	0.1	-0.3	0.1 **	0.5 **	1.1 **	0.0	0.2
Asian, Pacific Islander	-0.1	0.1	-0.1	-0.1	-0.1	0.3	0.8	-0.5
Ethnicity								
Hispanic	0.5 *	0.5	0.7	0.4 *	1.3	1.5	0.9	0.8 *
Non-Hispanic	-0.5 *	-0.5	-0.7	-0.4 *	-1.3	-1.5	-0.9	-0.8 *
Marital Status								
Married	0.0	0.0 a	-1.1	0.7	-0.9	0.0 a	0.7	-0.5
Widowed	-1.1 **	0.0 a	-0.1	-0.8 *	-1.7 *	0.0 a	-0.9	0.2
Divorced or separated	0.0	-0.2	0.4	0.1	0.2	0.0 a	1.2	0.1
Never married	1.1 ***	0.2	0.9	0.0	2.4 ***	0.0 a	-1.0	0.2
Years of education								
0 to 8	0.3	0.3	1.2 **	0.4	-0.5	-0.2	1.9	-0.8
9 to 11	0.3	-1.1	-0.2	0.9 **	0.3	0.8	-2.0	0.3
12	-1.2 ***	0.2 *	-0.4	-1.5 **	-1.7 *	-0.8	-0.9	-0.9
13 to 15	-0.2	0.0 a	-0.1	-0.1	0.4	0.0 a	2.4	0.8
16 or more	0.0	0.0 a	-0.5	0.3	-0.2	0.0 a	-1.4	0.6
Unknown (used for children)	0.8 **	0.6	0.0 a	0.0 a	1.7 **	0.2	0.0 a	0.0 a
Living Arrangement								
Lives alone	-1.1 ***	0.0 a	0.0	-1.1 **	-2.5 ***	0.0 a	0.0	-2.1
Lives with relatives	1.3 ***	0.5	0.1	1.2 **	2.0 *	0.1	-1.4	1.4
Lives with only non-relatives	-0.2	-0.5	-0.2	-0.1	0.6 *	-0.1	1.4	0.7 *
Relationship to Householder								
Householder	-1.1 **	0.0	-1.5	-0.4	-2.3 **	0.1	-0.7	-0.5
Spouse	-0.1	0.0 a	-0.4	0.2	-0.8 *	0.0 a	-0.5	-0.5
Child	1.3 ***	1.2	1.3	0.0 a	2.6 ***	1.8	-0.6	0.1
Grandchild	0.1	0.2	0.2	0.0 a	-0.1	-1.1	0.0 a	0.0 a
Parent	-0.1	0.0 a	0.4	-0.3	0.5	0.0 a	1.4 *	0.6
Sibling	-0.1	-0.3	0.2	-0.1	0.0	-0.6	-0.1	0.3 *
Other relative	0.2	-0.1	-0.1	0.5 *	-0.3	0.0	-0.2	-0.5
Nonrelative	-0.2	-1.0	-0.1	0.0	0.4	-0.2	0.7	0.5
Parents Present								
Both mother and father	0.5 *	0.4	0.3	0.0 a	1.3	0.8	-1.2	0.0 a
Mother only	0.7 **	0.5	1.1	0.0	1.0	-0.3	1.4	0.0
Father only	0.0	-0.2	-0.1	0.0 a	0.1	0.7	-1.0	0.0 a
Neither	-1.2 ***	-0.7	-1.3	0.0	-2.5 **	-1.2	0.8	0.0

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

TABLE E.1.e

DISTRIBUTION OF PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
SSI RECIPIENTS

| | Difference between Matched Full Panel and Full Panel Samples in 1996 Panel | | | | Difference between Matched Full Panel and Full Panel Samples in 2001 Panel | | | |
| | Age In March 1996 | | | | Age In January 2001 | | | |
Wave 1 Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sex								
Male	0.7	1.0	1.1	-0.9	1.2	-0.9	2.1 *	-0.6
Female	-0.7	-1.0	-1.1	0.9	-1.2	0.9	-2.1 *	0.6
Race								
White	0.1	-0.8	-1.0	2.6 **	-0.7	0.6	0.8	-5.3 **
Black	0.8	0.5	1.3 *	-0.3	-0.2	-1.7	-0.8	1.9
American Indian, Alaska Native	0.2 **	0.1	0.4 **	0.1	0.3	0.7	0.3	0.1
Asian, Pacific Islander	-1.2 ***	0.1	-0.7 **	-2.4 **	0.6	0.4	-0.3	3.3 *
Ethnicity								
Hispanic	1.2 ***	1.6	1.3 ***	1.3	1.7 *	-2.7	3.5 ***	-1.2
Non-Hispanic	-1.2 ***	-1.6	-1.3 ***	-1.3	-1.7 *	2.7	-3.5 ***	1.2
Marital Status								
Married	-0.6	0.0 a	-0.4	-0.8	-0.2	0.5	-0.6	1.3
Widowed	-0.5	0.0 a	-0.1	-0.3	-0.6	0.0 a	-0.4	-1.3
Divorced or separated	0.3	0.0 a	-0.1	1.3 *	-1.3	0.0 a	-0.9	-2.0
Never married	0.8	0.0 a	0.6	-0.2	2.0 **	-0.5	1.9	2.0
Years of education								
0 to 8	0.1	-0.2	1.0	-0.3	-0.1	1.1	-0.5	0.6
9 to 11	0.3	0.2	0.4	-0.1	-0.2	0.6	-0.8	1.2
12	-0.7	-0.6	-1.1	-0.5	-1.3	0.4	-0.6	-2.8 *
13 to 15	0.3	0.0 a	0.1	0.6 *	1.4 **	0.0 a	2.1 **	0.8
16 or more	-0.2	0.0 a	-0.4 *	0.2	-0.1	0.0 a	-0.1	0.2
Unknown (used for children)	0.3	0.6	0.0 a	0.0 a	0.2	-2.1	0.0 a	0.0 a
Living Arrangement								
Lives alone	-0.2	0.0 a	-0.7	1.3	1.2	0.0 a	2.0 **	0.0
Lives with relatives	-0.2	-0.6	0.1	-1.4	-0.3	-0.8	-0.5	-0.3
Lives with only non-relatives	0.5	0.6	0.5	0.1	-0.9	0.8	-1.5	0.2
Relationship to Householder								
Householder	-0.7	0.0 a	-1.6 **	2.0 *	0.4	0.1	1.6	-1.3
Spouse	-0.2	0.0 a	-0.1	-0.5	-0.8	0.0 a	-1.3 *	0.7
Child	0.9	-1.6	1.2	0.1	1.5	1.7	1.4	0.2
Grandchild	0.3 ***	1.6 **	0.1	0.0 a	-0.4	-1.3	-0.5 *	0.0 a
Parent	-0.5	0.0 a	-0.3	-0.7	0.4	0.0 a	0.4	0.7
Sibling	-0.1	0.1	-0.1	-0.1	0.1	0.0 a	-0.2	1.4 *
Other relative	-0.5	0.2	-0.2	-1.4	-1.0 **	-0.6	-0.8	-1.8
Nonrelative	0.8 **	-0.3	1.0 *	0.7 *	-0.3	0.1	-0.4	0.1
Parents Present								
Both mother and father	0.4	-0.6	0.4	0.1	1.7 *	2.2	1.9 *	0.0 a
Mother only	0.2	-0.5	0.3	-0.3	-0.1	-2.3	0.0	0.2
Father only	-0.2	-0.8	-0.2	0.0 a	0.0	0.0	-0.1	0.0 a
Neither	-0.4	2.0 ***	-0.6	0.2	-1.6	0.1	-1.8	-0.2

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
THE TOTAL POPULATION

Wave 1 Characteristic	Difference between Matched Full Panel and Full Panel Samples in 1996 Panel				Difference between Matched Full Panel and Full Panel Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	0.3 ***	0.7 ***	0.2 **	0.3 *	0.7 ***	1.5 ***	0.4 ***	0.0
Medicare	0.0	0.0 a	0.0	0.5 ***	0.1	0.0 a	0.1	0.1
Private (including military)	0.4 ***	0.4 *	0.4 ***	0.6 ***	0.4 *	0.2	0.5 *	0.8
None	-0.6 ***	-1.0 ***	-0.5 ***	-0.3 ***	-0.7 ***	-0.8 **	-0.7 ***	-0.2
Sources of Own Income								
Social Security	0.1 ***	0.2 ***	0.1	0.5 ***	0.2 **	0.3 **	0.1	0.1
SSI	0.2 ***	0.1 **	0.2 ***	0.2	0.1 **	0.1	0.1	0.2
Other public assistance	0.0	0.0	0.0	0.1	0.1 **	0.0 *	0.1 *	0.1
Earnings	0.2 ***	0.1	0.2 **	0.3 ***	0.7 ***	0.3 **	1.0 ***	0.4
Asset income	1.1 ***	0.1 **	1.4 ***	1.6 ***	2.0 ***	0.6 ***	2.5 ***	2.6 ***
Other	0.3 ***	0.0 **	0.3 ***	0.9 ***	0.5 ***	0.0 *	0.6 ***	0.6
Total Personal Income, avg. monthly								
Under $100	-0.4 ***	-0.3 ***	-0.5 ***	-0.3 ***	-0.8 ***	-0.6 ***	-1.1 ***	-0.1
$100 to 249	0.1 **	0.2 ***	0.1	-0.2 *	0.1 **	0.4 ***	0.1	-0.2
$250 to 499	0.1 *	0.2 **	0.1	-0.1	0.0	0.1	0.0	-0.1
$500 to 749	0.0	0.0	0.1	-0.7 ***	0.0	0.2 *	0.0	-0.1
$750 to 999	-0.1	0.0	-0.1	-0.3	-0.2 *	-0.1 *	0.0	-1.1 ***
$1,000 to 1,499	0.1	0.0	0.0	0.6 ***	-0.1	0.0	-0.3 *	0.6
$1,500 to 1,999	0.0	0.0	-0.1	0.3 *	0.1	0.0	0.2	0.0
$2,000 to 2,999	0.2 ***	0.0 a	0.2 **	0.3 **	0.4 ***	0.0	0.5 ***	0.6 *
$3,000 to 3,999	0.1	0.0 a	0.0	0.2 ***	0.2 **	0.0	0.3 **	0.2
$4,000 to 4999	0.0	0.0 a	0.0	0.1 *	0.1	0.0	0.1	0.3 **
$5,000 or more	0.0	0.0 a	0.0	0.0	0.1	0.0	0.1	0.1
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	-0.1 **	-0.2 ***	-0.1	-0.1	-0.1	-0.3 *	-0.1	0.3
25 to under 50 percent	0.1 ***	0.0 **	0.0	0.6 ***	0.1 **	0.0	0.0	1.0 **
50 to under 75 percent	0.1 ***	0.0	0.0 *	0.7 ***	0.1 **	0.0	0.1 ***	0.3
75 to under 100 percent	0.0	0.0	0.0	0.0	0.0	0.1 **	0.0	-0.2
100 percent	-0.1 **	0.2 ***	0.0	-1.1 ***	-0.2 ***	0.2 *	-0.1 *	-1.5 ***

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.

 ** Statistically signficant at 0.05 level.

 * Statistically significant at 0.10 level.

a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

TABLE E.2.b

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
RETIRED WORKERS

Wave 1 Characteristic	Difference between Matched Full Panel and Full Panel Samples in 1996 Panel				Difference between Matched Full Panel and Full Panel Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	0.2 *	0.3	0.1	0.4 *	-0.1	0.3	0.2	-0.5
Medicare	-0.2	-1.9 **	0.0	0.0 a	0.1	-0.8	0.0	0.0 a
Private (including military)	0.6 **	0.5	0.4	0.8 **	0.5	0.0	0.4	0.7
None	0.0	0.3	0.0	0.0 a	-0.1	-0.6	0.0	0.0 a
Sources of Own Income								
Social Security	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a
SSI	0.2 **	0.1	0.1	0.3 **	0.1	-0.2	0.3	0.0
Other public assistance	0.1	0.2 **	0.0	0.1	0.1	0.0	0.0	0.2
Earnings	0.2 *	-0.3	0.5 ***	0.1	0.4	2.3 *	0.2	0.1
Asset income	1.7 ***	0.3	1.7 ***	2.0 ***	2.3 ***	5.2 ***	2.1 ***	1.7 **
Other	0.7 **	-0.7	0.8 **	0.8	0.7	0.8	0.9	0.5
Total Personal Income, avg. monthly								
Under $100	0.0	0.0	0.0	0.0	0.0	-0.3	0.1	-0.1
$100 to 249	-0.1	0.2	-0.1	-0.2	-0.3	-0.6	-0.1	-0.4
$250 to 499	-0.1	-0.1	-0.1	-0.1	0.1	0.8	-0.2	0.3
$500 to 749	-0.8 ***	0.7	-1.0 ***	-1.0 **	0.0	-1.2	-0.2	0.6
$750 to 999	-0.2	0.2	-0.1	-0.5	-1.0 ***	0.4	-0.1	-2.5 ***
$1,000 to 1,499	0.5 ***	-0.1	0.3	0.9 ***	0.5	-0.2	0.2	1.2 *
$1,500 to 1,999	0.2	-0.5	0.5 **	0.0	0.1	0.1	0.2	-0.1
$2,000 to 2,999	0.2	-0.8	0.2	0.5 **	0.4	-0.2	0.3	0.6
$3,000 to 3,999	0.2 **	0.3	0.0	0.5 ***	0.1	1.8 **	-0.2	0.1
$4,000 to 4999	0.1 **	0.0	0.2 ***	0.0	0.1	-0.7	0.3	0.2
$5,000 or more	0.0	0.1 *	0.1	-0.1	0.1	0.1	-0.1	0.2
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	0.3 **	-0.1	0.4 **	0.4 *	0.5	0.7	-0.1	1.0 **
25 to under 50 percent	0.3	-0.8	0.5	0.5	1.1 **	0.1	1.4 **	1.0
50 to under 75 percent	0.7 ***	0.5	0.5 *	1.0 ***	0.3	2.0	0.1	0.1
75 to under 100 percent	0.0	0.9 *	-0.1	-0.1	-0.3	0.1	-0.1	-0.8
100 percent	-1.4 ***	-0.4	-1.2 ***	-1.8 ***	-1.5 ***	-2.8 **	-1.4 ***	-1.3 *

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

TABLE E.2.c

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
DISABLED WORKERS

Wave 1 Characteristic	Difference between Matched Full Panel and Full Panel Samples in 1996 Panel				Difference between Matched Full Panel and Full Panel Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 50	50 to 64	65 +	Total	Under 50	50 to 64	65 +
All Disabled Workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	1.6 ***	1.3	0.9	1.9 *	1.0	-1.3	1.6	1.8
Medicare	-1.0 *	-1.1	-0.8	0.0 a	1.5 *	1.7	2.3	0.0 a
Private (including military)	-0.2	0.2	-0.2	0.0	-0.2	2.6	0.0	-3.7
None	0.1	0.3	-0.1	0.0 a	0.1	0.9 **	-0.6	0.0 a
Sources of Own Income								
Social Security	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a
SSI	1.7 ***	2.4 **	0.5	1.7 **	0.0	-1.7	0.9	-0.1
Other public assistance	0.2	0.1	0.2	0.0	0.3	-0.6	0.3	1.5 **
Earnings	-0.3	-1.0	-0.4	0.2	1.5 **	2.2	1.2 **	0.0
Asset income	0.4	0.6	0.3	1.2	3.1 ***	0.8	4.8 ***	4.3 **
Other	-0.1	0.7 **	0.3	-0.8	0.5	0.6	0.7	0.9
Total Personal Income, avg. monthly								
Under $100	0.0	0.0	0.0 a	-0.1	-0.2	-0.3	-0.4	0.4
$100 to 249	0.0	-0.5	0.2 **	0.3 ***	0.3	0.8 **	0.2	-0.2
$250 to 499	0.4	0.2	0.6	0.2	-1.2 *	-1.7	-1.1	-0.7
$500 to 749	-0.1	0.5	-0.4	-0.8	-0.9	-1.3	-1.1	-0.9
$750 to 999	-0.1	-0.1	0.0	-0.2	1.3 *	1.9	1.3	0.6
$1,000 to 1,499	-0.3	-0.4	-0.4	0.3	-0.1	-0.4	0.8	-1.0
$1,500 to 1,999	0.1	0.0	0.1	0.5	0.6	0.4	0.5	1.1
$2,000 to 2,999	0.0	0.2 **	-0.3	0.3	0.5	0.6	0.2	1.0
$3,000 to 3,999	-0.1	0.1	0.0	-0.4	0.2	0.3	0.1	0.4
$4,000 to 4999	0.0	0.0 a	0.0	0.0 a	-0.2	-0.2	-0.3	-0.2
$5,000 or more	0.0 **	0.0	0.1 *	0.0	-0.2	-0.1	-0.1	-0.4
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	0.0	0.0	0.0	0.0	0.1	0.2	-0.9	1.1
25 to under 50 percent	0.6	0.9	-0.2	1.4 *	-0.3	-0.1	-0.7	-0.3
50 to under 75 percent	0.6	1.2	0.4	0.1	3.1 ***	3.0 **	3.5 **	2.8
75 to under 100 percent	0.1	-0.3	1.2	-0.9	0.5	-0.8	2.8 *	-1.3
100 percent	-1.3 **	-1.8	-1.4	-0.6	-3.4 ***	-2.3	-4.7 **	-2.3

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
 * Statistically significant at 0.10 level.
a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
ALL OTHER SOCIAL SECURITY BENEFICIARIES

Wave 1 Characteristic	Difference between Matched Full Panel and Full Panel Samples in 1996 Panel				Difference between Matched Full Panel and Full Panel Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	0.6 *	-0.5	1.7 **	0.5	2.1 ***	3.3	2.9	0.2
Medicare	-0.6	0.0 a	0.8	0.0 a	-2.9 ***	0.0 a	0.0	0.0 a
Private (including military)	-1.0 ***	-0.6	-0.2	-1.0 **	-0.7	0.1	-4.8 **	1.1
None	0.4 *	1.1	-0.2	0.0 a	-0.2	-3.5 *	1.4	0.0 a
Sources of Own Income								
Social Security	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a
SSI	0.3	0.2	1.0 ***	0.1	0.3	-1.3	1.6	0.6
Other public assistance	0.1	0.0 a	-0.1	0.2 ***	0.0	0.0 a	0.0	-0.1
Earnings	0.3	0.1	1.0	0.4	0.2	-0.4	-0.8	0.9
Asset income	-0.6	-0.9	0.0	0.1	0.8	1.8 **	1.4	2.8 **
Other	0.4	0.0	0.5	1.0 *	-1.6 *	-0.2	-0.1	-1.1
Total Personal Income, avg. monthly								
Under $100	0.5 **	1.3 **	0.1	-0.1	0.8	1.4	0.6 **	0.0
$100 to 249	0.3	1.0	-0.4	-0.1	1.0	2.0	0.2	-0.2
$250 to 499	-0.1	-0.4	0.5	-0.3	-0.3	-0.1	-1.0	-1.0
$500 to 749	-0.5	-2.2 **	-0.3	0.2	0.7	-0.1	0.9	1.0
$750 to 999	-0.5	0.3	0.0	-0.8	-1.1 *	-2.3 **	1.2	-0.8
$1,000 to 1,499	0.3	0.0	0.7	0.6	-1.5 **	-1.2	-2.2	-0.8
$1,500 to 1,999	-0.2	0.0 a	-0.5	0.0	0.0	0.2	-0.1	0.4
$2,000 to 2,999	0.2	0.0 a	0.2	0.4	0.1	0.1	0.2	0.4
$3,000 to 3,999	0.0	0.0 a	-0.2	0.2	0.4	0.0 a	0.6	0.6
$4,000 to 4999	-0.1	0.0 a	-0.1	-0.1	0.2	0.0 a	0.1	0.4
$5,000 or more	0.0	0.0 a	0.1	0.0	-0.2	0.0 a	-0.4	0.0
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	-0.1	0.1	-0.4	0.1	-0.2	0.1	0.7	-0.1
25 to under 50 percent	0.5	0.4 **	1.0	0.6	-0.2	0.3	-0.2	0.2
50 to under 75 percent	-0.1	0.0	0.2	0.0	0.0	-1.2	1.7	0.5
75 to under 100 percent	-0.4	-0.7	-0.5	-0.1	0.4	1.5	-1.8	1.6
100 percent	0.2	0.2	-0.3	-0.7	0.0	-0.8	-0.3	-2.2 **

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
SSI RECIPIENTS

| | Difference between Matched Full Panel and Full Panel Samples in 1996 Panel | | | | Difference between Matched Full Panel and Full Panel Samples in 2001 Panel | | | |
| | Age In March 1996 | | | | Age In January 2001 | | | |
Wave 1 Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	0.3	0.2	0.4	0.1	0.8	-1.5	1.4 **	0.6
Medicare	0.4	0.0 a	0.3	2.4 **	0.6	0.0 a	0.7	1.0
Private (including military)	-0.5	-2.3	-0.4	-0.1	-1.0	-3.3	-0.6	-1.9
None	-0.1	0.5	-0.3	0.0	-0.5	0.6	-0.6	-0.8 *
Sources of Own Income								
Social Security	0.8	0.6	0.7	2.4 **	-0.2	-4.3	0.1	1.0
SSI	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a
Other public assistance	0.1	-0.8	0.0	0.5	0.6	0.3	0.8	0.4
Earnings	0.0	-0.8	0.0	0.1	0.1	-2.6	0.3	1.0
Asset income	0.1	0.1	0.0	0.3	0.8	-0.9	1.4	0.2
Other	0.0	0.0 a	-0.3	0.5	-1.1 *	0.0 a	-1.1	-1.3
Total Personal Income, avg. monthly								
Under $100	-0.1	-1.0	0.0	0.2	-0.1	0.7	-0.1	-0.3
$100 to 249	0.0	-0.1	0.1	-0.2	0.0	3.4	-1.0 **	0.7
$250 to 499	0.5	0.5	0.9	-0.1	-0.7	-5.1	-1.5	3.3
$500 to 749	-0.7	-0.6	-0.6	-0.5	1.7	6.7 *	3.4 **	-4.9 *
$750 to 999	0.5 **	1.0 **	0.3	0.4 *	-0.2	-1.2	0.0	0.0
$1,000 to 1,499	-0.1	0.0	-0.3	0.4 ***	-0.5	-4.8 *	-0.5	1.9 **
$1,500 to 1,999	0.0	0.0 a	-0.1	0.1	0.2	0.2	0.2	0.1
$2,000 to 2,999	-0.2	0.0 a	-0.3	-0.2	-0.2	0.0 a	-0.2	-0.3
$3,000 to 3,999	0.0	0.0 a	0.0	0.0 a	-0.3	0.0 a	-0.3	-0.3
$4,000 to 4999	0.0	0.0 a	0.0	0.0 a	0.0	0.0 a	0.1	0.0 a
$5,000 or more	0.0	0.0 a	0.0	0.0 a	0.0	0.0 a	0.0 a	-0.2
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	-0.9 *	-0.4	-0.9	-2.4 **	-0.1	4.5	-0.4	-1.6
25 to under 50 percent	0.4 **	0.5	0.2	1.3 ***	-1.1 **	-1.8	-0.8	-1.4
50 to under 75 percent	0.5	-0.5	0.6 **	1.1	1.7 ***	-2.3	1.4 **	4.6 ***
75 to under 100 percent	0.0	0.4	0.1	0.0	-0.6	-0.4	-0.2	-1.6
100 percent	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

TABLE E.3.a

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
THE TOTAL POPULATION

Wave 1 Characteristic	Difference between Matched Full Panel and Full Panel Samples in 1996 Panel				Difference between Matched Full Panel and Full Panel Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	0.2 *	0.1	0.2 **	0.0	-0.6 ***	-1.8 ***	-0.4 **	1.0 *
No married couple present								
Male householder	-0.2 ***	-0.3 ***	-0.2 ***	-0.1	0.1	0.3	-0.1	0.2
Female householder	0.1 *	0.3 *	0.1	0.0	0.6 ***	1.6 ***	0.3 **	0.2
Nonfamily								
Male householder	-0.1 ***	-0.1 **	-0.2 ***	0.3 ***	-0.1	0.0	-0.1	-0.3
Female householder	0.0	0.0	0.1 **	-0.2	0.0	0.0	0.2 **	-1.3 ***
Ownership Status of Living Quarters								
Owned	0.4 ***	0.3	0.5 ***	0.1	0.3	0.1	0.6 **	-0.3
Not owned	-0.4 ***	-0.3	-0.5 ***	-0.1	-0.3	-0.1	-0.6 **	0.3
Residence in Public Housing	0.1 **	0.3 **	0.1	0.2 ***	0.2 ***	0.4 ***	0.1	0.0
Household Size								
1 person	0.0	0.0 a	0.0	0.1	0.0	0.0	0.3 ***	-1.6 ***
2 persons	0.0	0.0	0.1	0.0	0.1	0.3 **	-0.2	1.1 **
3 to 4 persons	0.1	0.1	0.0	0.0	0.4	0.8	0.3	0.5
5 or more persons	-0.1	-0.1	-0.1	-0.1	-0.5 **	-1.1 **	-0.4	-0.1
Family Size								
1 person	-0.1 **	-0.1 *	-0.2 *	0.2	-0.1	0.0	0.1	-1.4 ***
2 persons	0.0	0.0	0.0	0.0	0.2	0.5 ***	0.0	0.9 *
3 to 4 persons	0.1	0.2	0.1	0.0	0.5 *	0.9 *	0.3	0.6 *
5 or more persons	0.0	-0.1	0.1	-0.1	-0.6 **	-1.3 ***	-0.4 *	-0.1
Persons under 18 in Family								
None	-0.2 ***	-0.1	-0.3 **	0.0	0.1	0.0	0.1	0.2
1 person	0.0	-0.3 *	0.2	-0.1	-0.1	0.2	-0.1	-0.2
2 persons	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
3 persons	0.1	0.2	0.1	0.0	0.1	0.1	0.0	0.0
4 persons	0.0	-0.1	0.1	0.0	0.0	0.1	0.0	0.1
5 or more persons	0.1	0.3 *	0.0	0.0	-0.2	-0.4	-0.1 **	0.0

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

TABLE E.3.b

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
RETIRED WORKERS

Wave 1 Characteristic	Difference between Matched Full Panel and Full Panel Samples in 1996 Panel				Difference between Matched Full Panel and Full Panel Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	-0.1	0.5	0.2	-0.6	0.9 *	1.3	0.8	0.9
No married couple present								
Male householder	0.1	0.0	0.0	0.1	0.4 *	0.1	0.4	0.5
Female householder	-0.1	-0.3	-0.3	0.2	0.3	-0.8	-0.1	1.0 **
Nonfamily								
Male householder	0.3 **	-0.1	0.2	0.6 ***	-0.5 *	-0.7	-0.8 **	0.0
Female householder	-0.1	-0.1	-0.1	-0.2	-1.2 ***	0.0	-0.3	-2.4 ***
Ownership Status of Living Quarters								
Owned	0.0	-0.2	-0.3	0.3	-0.2	0.8	-0.5	-0.1
Not owned	0.0	0.2	0.3	-0.3	0.2	-0.8	0.5	0.1
Residence in Public Housing	0.2 *	-0.2	0.1	0.3 *	0.0	0.7 ***	0.0	-0.1
Household Size								
1 person	0.1	-0.5	-0.1	0.3	-1.4 ***	0.4	-0.8	-2.6 ***
2 persons	0.0	0.5	0.4	-0.7	0.9 *	1.5	0.3	1.4
3 to 4 persons	-0.1	0.4	-0.5	0.4	0.8 **	-0.4	0.6	1.3 ***
5 or more persons	0.0	-0.4	0.1 *	-0.1	-0.2	-1.6 **	0.0	-0.1
Family Size								
1 person	0.2	-0.2	0.1	0.5	-1.6 ***	-0.8	-1.0 *	-2.4 ***
2 persons	-0.1	0.3	0.3	-0.7	1.0 *	2.6	0.6	1.0
3 to 4 persons	-0.2	-0.2	-0.5	0.3	0.7 **	-0.7	0.5	1.4 ***
5 or more persons	0.0	0.0	0.1	-0.1	-0.2	-1.1	-0.1	0.0
Persons under 18 in Family								
None	-0.2 *	-0.2	-0.2	-0.2	0.2	1.3	0.0	0.0
1 person	0.0	-0.1	0.0	0.0	-0.2	-0.5	-0.2	-0.1
2 persons	0.1 **	0.1	0.0	0.2 **	0.0	-0.7	0.0	0.2
3 persons	0.0	0.1 *	0.1 ***	0.0	-0.1	-0.3	0.0	0.0
4 persons	0.0	0.1	0.0	0.0 *	0.1 **	0.1	0.1 *	0.0
5 or more persons	0.0	0.0 a	0.0	0.0	0.0	0.1	0.0	0.0

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
DISABLED WORKERS

Wave 1 Characteristic	Difference between Matched Full Panel and Full Panel Samples in 1996 Panel				Difference between Matched Full Panel and Full Panel Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 50	50 to 64	65 +	Total	Under 50	50 to 64	65 +
All Disabled Workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	0.3	0.2	-0.2	1.6	0.6	1.1	1.7	-1.1
No married couple present								
Male householder	0.4	0.4	0.3	0.3	-0.4	-0.3	-0.4	-0.5
Female householder	-0.2	0.1	-0.1	-1.5	0.5	-1.3	1.0	1.5
Nonfamily								
Male householder	-0.2	-0.4	0.0	-0.3	-0.1	0.6	-1.6	1.3
Female householder	-0.3	-0.5	0.3	-0.5	-0.6	0.5	-0.8	-1.3
Ownership Status of Living Quarters								
Owned	-1.0 *	-1.8 *	-0.7	0.7	-0.3	1.6	-2.3	1.2
Not owned	1.0 *	1.8 *	0.7	-0.7	0.3	-1.6	2.3	-1.2
Residence in Public Housing	0.5 **	0.5	0.2	0.8 *	0.5	-0.3	1.4 **	0.1
Household Size								
1 person	-0.3	-0.9	0.3	0.1	-0.3	1.3	-0.9	-0.8
2 persons	-0.6	0.9	-1.3	-0.2	-0.1	-2.3	2.6	0.1
3 to 4 persons	0.6	-0.8	1.3	0.7	0.1	0.3	-1.6	1.1
5 or more persons	0.3	0.9	-0.2	-0.5	0.3	0.8	-0.1	-0.4
Family Size								
1 person	-0.2	-0.3	-0.1	0.0	-0.9	0.4	-2.5	0.1
2 persons	-0.5	0.7	-0.9	-0.6	0.3	-1.5	3.3 **	-0.5
3 to 4 persons	0.6	-0.9	1.2	1.0	-0.1	0.1	-1.5	1.1
5 or more persons	0.1	0.5	-0.2	-0.4	0.6	1.0	0.7	-0.8
Persons under 18 in Family								
None	-0.4	-0.8	-0.2	1.1	-1.3	-1.6	-0.9	0.0
1 person	0.3	0.6	0.4	-0.8	0.2	0.4	-0.6	0.6
2 persons	0.3	0.2	0.2	0.4 *	0.9 **	1.7 *	1.1 *	-1.0
3 persons	-0.3	-0.2	-0.4	-0.6	0.3	0.0	0.2	0.4
4 persons	0.1	0.1	0.0	0.1 *	0.3 **	0.5 *	0.2	0.0 a
5 or more persons	0.0	0.1	0.0	-0.2	-0.4	-1.0	-0.1	0.0 a

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

TABLE E.3.d

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
ALL OTHER SOCIAL SECURITY BENEFICIARIES

Wave 1 Characteristic	Difference between Matched Full Panel and Full Panel Samples in 1996 Panel				Difference between Matched Full Panel and Full Panel Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	0.4	-0.5	-0.7	1.0 **	0.9	1.0	-1.4	0.5
No married couple present								
Male householder	-0.1	-0.3	0.4	-0.3	0.6	1.1	-0.1	0.3
Female householder	0.8 **	0.7	0.2	0.5	0.7	-1.6	0.8	0.7
Nonfamily								
Male householder	0.1	0.1	-0.2	0.1	-0.2	-0.2	-0.2	-0.1
Female householder	-1.2 ***	0.0	0.4	-1.4 ***	-2.1 **	-0.2	0.8	-1.5
Ownership Status of Living Quarters								
Owned	-0.2	0.4	-0.2	-0.2	-0.7	-0.9	-1.5	0.2
Not owned	0.2	-0.4	0.2	0.2	0.7	0.9	1.5	-0.2
Residence in Public Housing	0.0	-0.8 *	-0.3	0.4 ***	-0.3	-0.7	1.2 *	-0.5
Household Size								
1 person	-1.1 ***	0.0 a	0.0	-1.1 **	-2.5 ***	0.0 a	0.0	-2.1
2 persons	-0.2	0.2	-0.6	0.2	-0.8	-1.2	-0.7	0.5
3 to 4 persons	0.8 **	0.2	0.6	0.7 *	1.9 *	-0.2	0.2	1.3 *
5 or more persons	0.4	-0.4	0.0	0.3	1.5 *	1.4	0.5	0.3
Family Size								
1 person	-1.3 ***	-0.5	-0.1	-1.2 **	-2.0 *	-0.1	1.4	-1.4
2 persons	-0.1	-0.3	-0.5	0.4	-1.3	-1.4	-2.0	0.1
3 to 4 persons	0.9 **	0.6	0.3	0.6	1.8 *	0.4	-0.2	1.1
5 or more persons	0.5	0.2	0.3	0.2	1.4 *	1.1	0.8	0.2
Persons under 18 in Family								
None	-1.1 **	-0.5	0.4	-0.5 *	-2.6 **	-0.1	1.6	-0.7
1 person	0.0	-1.0	-0.7	0.3 *	-0.3	-2.5	-3.2	0.2
2 persons	0.4	0.5	0.2	0.0	1.1	0.5	0.3	0.1
3 persons	0.4	0.4	0.3	0.1 **	1.2 *	2.2	0.4	0.0
4 persons	0.2	0.1	-0.1	0.1	0.5	0.5	0.6	0.2
5 or more persons	0.1	0.5	-0.2	-0.1	0.1	-0.6	0.3	0.0

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

TABLE E.3.e

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
SSI RECIPIENTS

Wave 1 Characteristic	Difference between Matched Full Panel and Full Panel Samples in 1996 Panel				Difference between Matched Full Panel and Full Panel Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	0.0	-0.2	0.2	-0.4	1.1	3.6	0.6	0.9
No married couple present								
Male householder	-0.6	-0.3	-0.1	-1.8 **	-0.1	-0.6	0.2	-0.5
Female householder	0.8	0.8	0.5	0.9	-1.2	-3.0	-1.3	-0.4
Nonfamily								
Male householder	0.1	-0.3	0.0	0.4	0.5	0.0 a	0.8	0.2
Female householder	-0.2	0.0 a	-0.3	0.8	-0.2	0.0 a	0.2	-1.1
Ownership Status of Living Quarters								
Owned	-0.1	-0.5	0.6	-1.2	0.2	4.7	0.2	-2.0
Not owned	0.1	0.5	-0.6	1.2	-0.2	-4.7	-0.2	2.0
Residence in Public Housing	0.4	1.3	-0.1	1.0	0.8	-0.4	0.8	1.4
Household Size								
1 person	-0.2	0.0 a	-0.7	1.3	1.2	0.0 a	2.0 **	0.0
2 persons	0.1	-0.6	0.4	0.4	-1.5	-0.9	-2.6 **	2.0
3 to 4 persons	0.1	0.7	-0.1	-0.5	-0.3	-0.6	-0.2	-0.9
5 or more persons	0.0	0.0	0.4	-1.2	0.6	1.5	0.9	-1.1
Family Size								
1 person	0.2	0.6	-0.1	1.4	0.3	0.8	0.5	0.3
2 persons	0.2	-1.4	0.6	0.5	-0.1	-0.4	-0.4	1.0
3 to 4 persons	-0.2	0.6	-0.5	-0.6	-0.4	-1.5	-0.6	0.1
5 or more persons	-0.2	0.2	0.0	-1.3	0.3	1.1	0.5	-1.4
Persons under 18 in Family								
None	0.5	0.6	0.8	0.9	-0.6	0.8	-1.0	1.8
1 person	-0.7 *	-2.4	-0.6	-0.6	-0.2	0.6	-0.4	-0.8
2 persons	0.0	1.1	-0.3	-0.4	0.3	0.8	0.5	-1.1
3 persons	0.3	0.7	0.1	0.3	0.5	-2.8	1.2 **	-0.2
4 persons	0.0	0.6	-0.2	0.0	0.2	0.9	0.0	0.2
5 or more persons	0.0	-0.6	0.1 **	-0.3	-0.2	-0.2	-0.3	0.1

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
THE TOTAL POPULATION

Wave 1 Characteristic	Difference between Matched Full Panel and Full Panel Samples in 1996 Panel				Difference between Matched Full Panel and Full Panel Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	0.2 ***	0.4 ***	0.2 ***	0.2 *	0.4 ***	0.6 **	0.3 ***	0.3 *
Housing assistance	0.0	0.0	0.0	0.0	0.2 ***	0.4 **	0.1 **	0.2 *
Food stamps	0.3 ***	0.6 ***	0.2 *	0.1	0.7 ***	1.3 ***	0.6 ***	0.3 *
Total Household Income, avg. monthly								
Less than $500	-0.2 ***	-0.3 **	-0.2 ***	-0.4 ***	-0.2	0.2	-0.2 **	-0.6 ***
$500 to 999	-0.1	0.2	-0.1	-0.7 ***	-0.1	0.1	0.0	-1.1 ***
$1,000 to 1,499	0.0	0.1	0.0	0.0	-0.4 ***	-0.2	-0.5 ***	-0.6
$1,500 to 1,999	0.0	0.3 **	-0.2 **	0.1	0.1	0.6 **	0.0	-0.2
$2,000 to 2,999	-0.1	-0.3 *	-0.1	0.3	0.0	-0.2	-0.1	0.7
$3,000 to 3,999	0.0	-0.3	0.1	0.2	0.2	0.4	0.1	0.5
$4,000 to 4,999	0.1	0.2	0.0	0.3 **	0.1	-0.4	0.2	0.3
$5,000 or more	0.2	0.1	0.3 *	0.2	0.3	-0.4	0.5	1.0 **
Total Family Income, avg. monthly								
Less than $500	-0.3 ***	-0.4 ***	-0.2 ***	-0.3 ***	-0.2 **	0.2	-0.4 ***	-0.6 ***
$500 to 999	-0.1	0.2	-0.1	-0.7 ***	0.0	0.2	0.1	-1.0 **
$1,000 to 1,499	0.0	0.1	0.0	0.0	-0.4 **	-0.2	-0.3 **	-0.6
$1,500 to 1,999	0.0	0.2	-0.1	0.0	0.2	0.6 **	0.0	-0.2
$2,000 to 2,999	0.0	-0.3	0.0	0.3	-0.1	-0.3	-0.2	0.6
$3,000 to 3,999	0.0	-0.3	0.1	0.1	0.2	0.2	0.1	0.5
$4,000 to 4,999	0.2 *	0.2	0.1	0.3 **	0.2	-0.2	0.3	0.4
$5,000 or more	0.3 **	0.2	0.3 **	0.3	0.2	-0.6	0.4	1.0 **
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	-0.2 ***	-0.2 ***	-0.2 ***	-0.1 ***	-0.2 **	-0.1	-0.3 ***	0.0
10 to under 50 percent	-0.1	0.1	-0.1 **	-0.2 **	0.0	0.3	0.0	-0.5 ***
50 to under 100 percent	0.0	0.2	0.0	-0.4 **	-0.2	0.0	-0.1	-0.4
100 to under 125 percent	0.0	0.1	0.0	-0.3 **	-0.1	0.0	-0.1	-0.6 *
125 to under 150 percent	-0.1	0.0	-0.1	-0.4 *	-0.1	0.0	-0.1	-0.4
150 to under 200 percent	-0.2 *	-0.2	-0.2 *	0.0	-0.3 *	0.0	-0.4 ***	-0.1
200 to under 300 percent	0.1	-0.2	0.2	0.5 *	-0.1	-0.1	-0.1	-0.1
300 to under 400 percent	0.2 **	0.1	0.2 **	0.4 **	0.0	-0.5	0.2	0.3
400 percent or more	0.2 **	0.2	0.2	0.5 **	0.9 ***	0.4	1.0 ***	1.9 ***
Distribution of Family Income by Source, avg. monthly								
Social Security	0.0 *	0.1 **	0.0	-0.3	0.0	-0.1	0.0	-0.7
SSI	0.0 ***	0.1 ***	0.0 ***	0.0	0.0	0.1 *	0.0	0.0
Other public assistance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Earnings	-0.3 ***	-0.2 ***	-0.2 ***	-0.4	-0.2	0.1	-0.1	-0.2
Asset income	0.1 *	0.0	0.0	0.3 **	-0.1	-0.2 ***	-0.1	0.4
All other	0.1 ***	0.0	0.1 ***	0.4 **	0.2 **	0.1	0.1 *	0.5

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
[a] The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
RETIRED WORKERS

Wave 1 Characteristic	Difference between Matched Full Panel and Full Panel Samples in 1996 Panel				Difference between Matched Full Panel and Full Panel Samples in 2001 Panel			
	Total	Age In March 1996			Total	Age In January 2001		
		Under 65	65 to 74	75 +		Under 65	65 to 74	75 +
All Retired Workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	0.1 *	0.0	0.1	0.2	0.3 *	0.1	0.3	0.4
Housing assistance	0.0	-0.1	0.1	0.0	0.1	0.0	0.1	0.2
Food stamps	0.1	0.1	0.2	0.1	0.4 **	-0.3	0.7 ***	0.3
Total Household Income, avg. monthly								
Less than $500	-0.2 *	-0.3	-0.3 **	-0.1	-0.6 ***	-0.4	-0.2	-1.0 ***
$500 to 999	-0.8 ***	-0.7	-0.6 **	-1.0 **	-1.1 ***	-1.1	-0.3	-2.1 ***
$1,000 to 1,499	0.0	1.0 **	0.4	-0.7	-0.3	1.2	-0.4	-0.6
$1,500 to 1,999	0.2	0.3	0.0	0.4	0.0	-0.4	-0.7	0.9
$2,000 to 2,999	0.1	0.8	0.1	-0.1	0.8 *	0.5	0.5	1.3 *
$3,000 to 3,999	0.2	-0.1	0.0	0.5 *	0.5	1.3	0.7	0.0
$4,000 to 4,999	0.4 ***	0.0	0.3 *	0.5 **	0.2	-0.4	-0.1	0.8 *
$5,000 or more	0.1	-1.0	0.1	0.5 *	0.4	-0.6	0.5	0.7
Total Family Income, avg. monthly								
Less than $500	-0.2	-0.3	-0.2	-0.2	-0.6 ***	-0.6	-0.4 *	-1.0 ***
$500 to 999	-0.7 ***	-0.8	-0.6 **	-0.9 **	-1.1 ***	-1.2	-0.4	-1.9 **
$1,000 to 1,499	0.1	1.1 ***	0.3	-0.5	-0.3	0.7	-0.3	-0.6
$1,500 to 1,999	0.1	0.3	-0.1	0.2	0.0	-0.4	-0.7	0.9
$2,000 to 2,999	0.2	0.8	0.3	-0.1	0.8	0.2	0.7	1.0
$3,000 to 3,999	0.1	0.0	-0.1	0.4	0.4	1.4	0.8	-0.2
$4,000 to 4,999	0.4 ***	-0.1	0.3 *	0.5 ***	0.4	0.3	-0.1	0.9 **
$5,000 or more	0.1	-1.1	0.1	0.5 **	0.5	-0.4	0.4	0.8
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1
10 to under 50 percent	0.0	0.1	-0.1	0.0	-0.4 ***	-0.5	-0.3 **	-0.6 **
50 to under 100 percent	-0.5 ***	-0.6	-0.3	-0.7 *	-0.3	-0.7	0.1	-0.7
100 to under 125 percent	-0.3 *	0.2	-0.2	-0.5 *	-0.5 *	0.5	-0.3	-1.0 *
125 to under 150 percent	-0.4 *	0.4	-0.3	-0.8 *	-0.3	0.1	0.1	-0.8
150 to under 200 percent	0.0	0.5	0.1	-0.1	-0.2	-1.2	-0.6	0.6
200 to under 300 percent	0.3	0.4	0.1	0.6	0.1	-0.3	-0.1	0.5
300 to under 400 percent	0.4 *	0.3	0.5 **	0.3	0.3	-0.4	0.7	0.1
400 percent or more	0.5 *	-1.1	0.2	1.2 ***	1.3 ***	2.7 **	0.5	2.0 ***
Distribution of Family Income by Source, avg. monthly								
Social Security	-0.4	0.8	-0.4	-1.0 ***	-0.6	-0.2	-0.1	-1.6 **
SSI	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
Other public assistance	0.0	0.0	0.0 **	0.0	0.0	0.0	0.0	0.0
Earnings	-0.3	-1.5	-0.4	0.3	-0.4	-1.0	-1.4	1.3
Asset income	0.4 ***	0.2	0.3	0.7 ***	0.5	0.1	0.7	0.2
All other	0.3	0.5	0.5 *	0.0	0.6	1.2	0.8	0.2

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.

 ** Statistically signficant at 0.05 level.

  * Statistically significant at 0.10 level.

[a] The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
DISABLED WORKERS

Wave 1 Characteristic	Difference between Matched Full Panel and Full Panel Samples in 1996 Panel				Difference between Matched Full Panel and Full Panel Samples in 2001 Panel			
		Age In March 1996				Age In January 2001		
	Total	Under 50	50 to 64	65 +	Total	Under 50	50 to 64	65 +
All Disabled Workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	0.3	0.2	0.3	0.3	0.4	0.2	0.6	0.1
Housing assistance	0.2	0.3	0.1	0.0	0.8 *	0.6	1.2 **	0.4
Food stamps	0.4	0.2	1.3 **	-1.0	1.0	-1.9	3.0 ***	1.4
Total Household Income, avg. monthly								
Less than $500	0.3	0.1	0.5	0.3	-0.6 *	-0.6	-1.0 *	0.1
$500 to 999	-0.4	0.1	-0.1	-1.4	0.8	-0.2	1.3	1.9
$1,000 to 1,499	-0.5	-0.8	-1.0	0.7	-1.5 *	-0.5	-1.5	-2.8
$1,500 to 1,999	-0.3	-0.6	-0.5	0.6	1.2	2.8 **	0.9	-0.8
$2,000 to 2,999	0.0	-0.9	0.7	-0.1	0.8	0.7	-0.4	2.8
$3,000 to 3,999	0.1	0.7 *	-0.5	-0.1	-0.7	-1.9	0.7	-1.2
$4,000 to 4,999	0.4	0.5 ***	0.9 **	-0.6	0.5	0.9	0.3	0.6
$5,000 or more	0.5 *	0.8	0.0	0.6	-0.6	-1.1	-0.2	-0.5
Total Family Income, avg. monthly								
Less than $500	0.4	0.2	0.7 *	0.4	-0.5	-0.4	-1.0 *	0.1
$500 to 999	-0.3	0.7	-0.5	-1.5	0.6	-0.5	0.5	2.3
$1,000 to 1,499	-0.8	-0.8	-1.4	0.1	-1.0	0.6	-1.8	-2.4
$1,500 to 1,999	-0.1	-0.9	0.0	1.1	1.0	2.4 **	1.1	-1.1
$2,000 to 2,999	-0.4	-0.9	0.2	-0.6	0.5	0.5	-0.7	2.4
$3,000 to 3,999	0.4	0.8 **	0.2	0.2	-0.5	-2.1 *	1.2	-0.8
$4,000 to 4,999	0.3	0.5 ***	0.8 **	-0.6	0.7	1.2	0.6	0.4
$5,000 or more	0.4	0.6	0.0	0.8 ***	-0.8	-1.7	0.0	-0.9
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.0 a	0.0 a	0.0 a	0.0 a	0.1	0.0 a	0.1	0.2
10 to under 50 percent	0.0	0.3 *	0.2	-0.6	0.0	0.2	-0.4	0.0
50 to under 100 percent	0.2	0.1	0.3	-0.2	0.6	-0.6	0.3	2.4
100 to under 125 percent	0.0	0.4	0.0	-0.6	-0.4	0.1	0.0	-2.0
125 to under 150 percent	-0.7	0.3	-1.8 **	-0.5	0.4	1.8 *	-0.7	0.0
150 to under 200 percent	0.1	-0.6	0.4	0.9	0.1	0.7	-0.1	-0.5
200 to under 300 percent	-0.1	-1.4	0.7	0.5	-0.5	-0.3	-1.3	0.8
300 to under 400 percent	0.3	0.3	-0.2	0.8	-0.2	-1.5	1.0	-0.7
400 percent or more	0.3	0.6	0.4	-0.3	0.1	-0.4	0.9	-0.1
Distribution of Family Income by Source, avg. monthly								
Social Security	-1.3 ***	-1.7 **	-0.9	-1.1	0.3	1.5	-0.8	0.6
SSI	0.1	0.0	0.1	0.3	-0.2	-0.4	-0.1	0.1
Other public assistance	0.0	0.0	0.0	0.0	0.1 *	0.1	0.1	0.2 *
Earnings	1.3 *	2.0	0.8	0.5	1.1	1.0	1.8	-0.2
Asset income	0.2	0.1	0.2	0.4	0.3	0.1	0.3	0.6
All other	-0.2	-0.4	0.0	-0.1	-1.7 *	-2.3	-1.3	-1.4

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.

 ** Statistically signficant at 0.05 level.

 * Statistically significant at 0.10 level.

a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
ALL OTHER SOCIAL SECURITY BENEFICIARIES

| Wave 1 Characteristic | Difference between Matched Full Panel and Full Panel Samples in 1996 Panel | | | | Difference between Matched Full Panel and Full Panel Samples in 2001 Panel | | | |
| | Age In March 1996 | | | | Age In January 2001 | | | |
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	0.0	-0.2	0.3	0.0	1.5 ***	2.8 **	2.1 **	0.4
Housing assistance	-0.1	0.0	-1.0	0.0	0.4	1.3 *	0.0	0.1
Food stamps	0.4	0.0	-0.2	0.4 *	1.2 **	2.0	2.2 **	0.3
Total Household Income, avg. monthly								
Less than $500	-0.4	-0.1	-0.2	-0.4	-0.7 **	-0.1	0.2	-1.1 *
$500 to 999	-0.9 **	0.5	-0.6	-1.4 **	0.1	0.0	2.3 *	0.2
$1,000 to 1,499	0.3	0.3	1.4 **	0.0	-1.7 **	-0.5	0.0	-2.4 **
$1,500 to 1,999	0.1	0.2	-0.2	0.1	-0.1	1.1	0.6	-0.7
$2,000 to 2,999	0.6	0.0	-0.1	0.9 **	0.8	1.9	-0.6	0.3
$3,000 to 3,999	0.8 ***	1.4 ***	0.5	0.5 **	1.1	-0.4	3.2 **	0.7
$4,000 to 4,999	-0.4 *	-0.9	-0.1	-0.3	0.0	0.1	-2.5 *	0.5
$5,000 or more	-0.1	-1.3	-0.9	0.5	0.6	-2.2	-3.1	2.4 **
Total Family Income, avg. monthly								
Less than $500	-0.5 *	-0.6	-0.5	-0.4	-0.8 *	-0.5	0.3	-1.2 **
$500 to 999	-0.8 **	0.7	-0.3	-1.4 **	0.4	0.4	2.3	0.6
$1,000 to 1,499	0.3	0.4	1.2	0.1	-2.1 ***	-0.8	-1.0	-2.6 **
$1,500 to 1,999	0.0	0.0	-0.5	0.2	-0.1	0.5	0.1	-0.4
$2,000 to 2,999	0.6 *	0.1	0.1	1.0 **	1.2	2.7	0.6	0.3
$3,000 to 3,999	0.7 ***	1.3 ***	0.4	0.4	1.0	0.0	3.2 **	0.4
$4,000 to 4,999	-0.3	-0.7	0.1	-0.3	-0.1	-0.1	-2.6 *	0.4
$5,000 or more	-0.1	-1.2	-0.6	0.5	0.6	-2.2	-2.9	2.4 **
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.0	0.0	0.0 a	0.0	-0.2	-0.8	0.0 a	0.0 a
10 to under 50 percent	-0.2	0.5	-0.7	-0.4 *	0.0	0.9 **	0.7	-0.6
50 to under 100 percent	-0.2	0.1	-0.5	-0.4	0.7	1.0	2.1	0.1
100 to under 125 percent	-0.2	-0.2	0.2	-0.3	0.6	1.2	1.7	0.1
125 to under 150 percent	0.0	0.4	0.4	-0.3	-0.8	0.7	-1.2	-1.3 *
150 to under 200 percent	0.2	0.4	1.2 **	-0.1	-1.1	-2.7	0.1	-0.8
200 to under 300 percent	0.5	0.0	0.4	0.8	-0.1	1.3	-0.5	-0.6
300 to under 400 percent	0.4	-0.2	0.4	0.7 *	-0.7	-1.6	0.5	-0.7
400 percent or more	-0.6	-1.2	-1.3 *	0.0	1.5	0.1	-3.5	3.9 ***
Distribution of Family Income by Source, avg. monthly								
Social Security	0.1	1.2	0.7	-0.8 **	-1.2 *	-0.2	0.4	-1.9 *
SSI	0.1 ***	0.1	0.4 ***	0.1	0.0	-0.5	0.5	0.1
Other public assistance	0.0	0.0	-0.3 **	0.0	0.0	0.1	0.0	0.0
Earnings	-0.1	-1.6	-1.3	1.2 **	1.6	1.2	-3.4	2.5
Asset income	-0.1	-0.1	0.1	-0.4	-0.2	-0.3	1.1	-0.3
All other	0.1	0.3	0.3	-0.2	-0.2	-0.3	1.3	-0.3

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IN THE 1996 AND 2001 SIPP PANELS, BY AGE:
DIFFERENCE BETWEEN THE MATCHED FULL PANEL AND ENTIRE FULL PANEL SAMPLES FOR
SSI RECIPIENTS

Wave 1 Characteristic	Difference between Matched Full Panel and Full Panel Samples in 1996 Panel				Difference between Matched Full Panel and Full Panel Samples in 2001 Panel			
	Total	Age In March 1996			Total	Age In January 2001		
		Under 18	18 to 64	65 +		Under 18	18 to 64	65 +
All SSI Recipients	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	0.6 **	0.5	0.6	0.7	0.6	-0.1	1.4	-1.2
Housing assistance	-0.3	-2.0	-0.3	0.4	1.0	0.8	1.2	0.7
Food stamps	-0.3	-1.8	-0.1	0.0	1.6	2.6	2.3	-0.5
Total Household Income, avg. monthly								
Less than $500	-0.2	-0.5	-0.3	0.7	0.2	1.1	0.0	0.4
$500 to 999	-0.1	-0.3	-0.4	0.8	-0.5	-3.4	1.0	-2.6
$1,000 to 1,499	-0.4	-0.5	-0.2	-0.9	0.1	-1.0	-0.4	2.3 *
$1,500 to 1,999	0.4	0.9	0.4	0.1	0.5	-0.4	0.8	0.2
$2,000 to 2,999	0.6	1.0	0.4	0.5	-0.6	-2.0	-0.2	-1.4
$3,000 to 3,999	-0.2	-1.1	-0.1	-0.2	0.9	7.8 ***	-0.4	1.1
$4,000 to 4,999	0.3	0.0	0.2	0.6	-0.7	-0.6	-0.5	-1.1
$5,000 or more	-0.4	0.4	-0.1	-1.6 *	0.0	-1.4	-0.2	1.1
Total Family Income, avg. monthly								
Less than $500	0.3	-0.4	0.4	0.8	0.4	1.8	0.1	0.4
$500 to 999	-0.1	0.4	-0.5	0.7	-0.8	-4.1 *	0.7	-2.5
$1,000 to 1,499	-0.3	-0.8	-0.2	-0.4	0.5	-0.2	0.0	2.3 *
$1,500 to 1,999	0.3	0.3	0.4	0.1	-0.2	0.1	-0.4	0.2
$2,000 to 2,999	0.5	0.9	0.3	0.4	-0.3	-2.1	0.2	-1.3
$3,000 to 3,999	-0.2	-1.1	-0.1	-0.2	1.0	6.5 ***	-0.2	1.3
$4,000 to 4,999	0.2	0.4	0.1	0.3	-0.5	-0.6	-0.2	-1.4
$5,000 or more	-0.7 *	0.3	-0.4	-1.7 *	-0.1	-1.4	-0.3	0.9
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.0	0.0	0.0	0.1	0.0 a	0.0 a	0.0 a	0.0 a
10 to under 50 percent	0.0	-0.5	0.2	-0.2	0.0	-1.1	0.5	-1.0
50 to under 100 percent	-0.3	-0.9	-0.7	1.1	-1.0	-1.4	-0.7	-0.9
100 to under 125 percent	0.5	2.3 ***	0.6	-0.4	0.4	-0.8	1.3 *	-1.9
125 to under 150 percent	0.2	-0.6	0.3	0.3	1.1 *	0.4	1.0	1.8
150 to under 200 percent	0.3	1.0	0.0	0.4	-0.1	3.3	-1.0	0.8
200 to under 300 percent	0.0	-1.7	0.2	0.2	0.0	2.0	-0.8	1.1
300 to under 400 percent	-0.2	0.4	-0.2	-0.4	0.2	-1.9	0.8	-0.7
400 percent or more	-0.5 *	0.0 a	-0.4	-1.1	-0.6	-0.6	-1.1	0.8
Distribution of Family Income by Source, avg. monthly								
Social Security	0.6	0.3	0.5	1.8	0.1	-1.7	0.7	-0.7
SSI	0.6	0.9	0.5	0.2	0.7	0.5	1.8	-1.9
Other public assistance	0.0	-0.4	-0.1	0.5	0.3 *	0.5	0.3 *	0.0
Earnings	-1.4	-1.2	-0.8	-2.8	0.4	2.0	-1.7	4.6
Asset income	0.0	0.1	0.0	0.1	-0.2	-2.1	0.1	0.2
All other	0.1	0.4	0.0	0.3	-1.3 *	0.8	-1.3	-2.3 **

Source: Mathematica Policy Research, from the 1996 and 2001 SIPP panels.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The full panel sample estimate is zero or 100 percent; the matched full panel sample estimate cannot deviate from that value.

APPENDIX F

**COMPARISON OF FULL PANEL AND CROSS-SECTION SAMPLES:
2001 SIPP PANEL**

DISTRIBUTION OF PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
THE TOTAL POPULATION

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | Age In January 2001 | | | | Age In January 2001 | | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Sex								
Male	48.8	51.2	49.2	41.9	0.0	-0.1	0.0	0.0
Female	51.2	48.8	50.8	58.1	0.0	0.1	0.0	0.0
Race								
White	82.0	78.3	82.3	88.5	-0.3 ***	-0.5 **	-0.3	-0.4 **
Black	12.7	16.1	12.2	8.2	0.0	0.2	-0.1	0.0
American Indian, Alaska Native	1.2	1.6	1.2	0.6	0.1	0.0	0.1	0.2 *
Asian, Pacific Islander	4.0	4.0	4.3	2.7	0.3 **	0.3 *	0.2 **	0.3
Ethnicity								
Hispanic	12.8	17.3	12.5	5.1	0.0	-0.2 **	0.0	0.3
Non-Hispanic	87.2	82.7	87.5	94.9	0.0	0.2 **	0.0	-0.3
Marital Status								
Married	42.3	0.1	57.1	56.9	0.7 ***	0.0	1.3 ***	-0.6
Widowed	5.1	0.0	2.0	31.9	0.1	0.0 a	0.1 *	0.2
Divorced or separated	9.4	0.1	13.6	7.6	-0.2 ***	0.0	-0.4 ***	0.3
Never married	43.2	99.8	27.3	3.6	-0.5 ***	0.0	-1.0 ***	0.1
Years of education								
0 to 8	5.5	2.8	4.7	15.2	0.2 **	0.2	0.1	1.1 ***
9 to 11	9.8	13.3	7.8	12.5	0.0	0.2	-0.1	0.2
12	24.4	1.0	32.1	35.4	-0.7 ***	-0.1	-0.8 ***	-1.0 ***
13 to 15	21.7	0.1	30.9	20.6	0.4 ***	0.0	0.8 ***	-0.3
16 or more	17.1	0.0	24.4	16.3	0.0	0.0 a	0.1	0.1
Unknown (used for children)	21.5	82.7	0.0	0.0	0.0	-0.2	0.0 a	0.0 a
Living Arrangement								
Lives alone	10.1	0.0	10.4	30.3	-0.1	0.0	-0.1	0.3
Lives with relatives	83.5	99.1	80.0	67.9	0.6 ***	0.3 ***	1.0 ***	-0.7
Lives with only non-relatives	6.4	0.9	9.6	1.9	-0.6 ***	-0.3 ***	-0.9 ***	0.4 **
Relationship to Householder								
Householder	38.7	0.2	49.4	66.3	0.0 ***	0.0	0.1	-0.2
Spouse	20.2	0.0	27.6	25.5	0.4 ***	0.0	0.8 ***	-0.1
Child	30.6	89.7	11.8	0.1	0.5 ***	1.1 ***	0.3	0.0
Grandchild	1.6	5.2	0.4	0.0	-0.1	-0.2	0.0	0.0 a
Parent	1.0	0.0	0.9	3.9	0.0	0.0 a	0.0	0.1
Sibling	1.1	0.5	1.4	0.8	-0.1 ***	0.0	-0.1 **	-0.1 *
Other relative	2.0	2.2	1.8	2.5	-0.2 ***	-0.4 ***	-0.2 **	0.1
Nonrelative	4.9	2.1	6.8	0.9	-0.6 ***	-0.5 ***	-0.7 ***	0.2 **
Parents Present								
Both mother and father	23.1	70.4	7.9	0.0	0.9 ***	2.3 ***	0.4 **	0.0 a
Mother only	9.0	22.6	4.9	0.4	-0.4 **	-1.7 ***	0.0	0.0
Father only	1.4	3.0	1.0	0.0	0.0	-0.1	0.0	0.0
Neither	66.5	4.1	86.1	99.6	-0.4 ***	-0.4 ***	-0.4 **	0.0

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
RETIRED WORKERS

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | Age In January 2001 | | | | Age In January 2001 | | | |
Characteristic	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Sex								
Male	46.3	47.9	48.5	43.3	-0.1	0.4	-0.1	-0.1
Female	53.7	52.1	51.5	56.7	0.1	-0.4	0.1	0.1
Race								
White	90.0	88.8	88.5	91.9	-0.3	-0.6	-0.2	-0.4
Black	7.6	8.9	8.3	6.4	0.1	0.8	-0.1	0.1
American Indian, Alaska Native	0.6	0.4	0.9	0.4	0.1 *	-0.2	0.3 **	0.0
Asian, Pacific Islander	1.8	2.0	2.3	1.3	0.1	0.0	0.0	0.2
Ethnicity								
Hispanic	4.2	6.0	4.8	3.0	0.2	-0.1	0.1	0.5 *
Non-Hispanic	95.8	94.0	95.2	97.0	-0.2	0.1	-0.1	-0.5 *
Marital Status								
Married	62.0	75.9	69.6	49.8	-0.9	-1.4	-0.7	-0.8
Widowed	26.3	7.5	17.3	41.3	0.5	0.2	0.5	0.4
Divorced or separated	8.0	11.5	9.9	5.0	0.3	1.6	0.2	0.1
Never married	3.7	5.1	3.2	3.9	0.1	-0.4	0.0	0.4
Years of education								
0 to 8	12.6	7.6	10.5	16.2	0.6 *	0.3	0.1	1.3 **
9 to 11	12.2	10.8	11.7	13.2	0.3	0.2	0.2	0.5
12	36.6	40.7	36.7	35.5	-0.8 **	-0.1	-0.6	-1.4 **
13 to 15	21.7	23.7	22.3	20.6	-0.4	-1.1	0.2	-0.9
16 or more	16.9	17.2	18.9	14.5	0.3	0.6	0.1	0.5
Unknown (used for children)	0.0	0.0	0.0	0.0	0.0 a	0.0 a	0.0 a	0.0 a
Living Arrangement								
Lives alone	27.2	13.1	21.6	37.3	0.3	0.3	0.5	-0.1
Lives with relatives	70.6	82.9	76.4	60.9	-0.7	-0.5	-1.2	-0.2
Lives with only non-relatives	2.1	4.0	1.9	1.8	0.4 **	0.2	0.6 ***	0.3
Relationship to Householder								
Householder	65.8	56.1	64.3	69.9	-0.3	-0.1	-0.1	-0.6
Spouse	27.6	37.7	30.9	21.2	-0.1	0.0	0.2	-0.3
Child	0.2	1.0	0.1	0.0	0.0	-0.1	0.0	0.0
Grandchild	0.0	0.1	0.0	0.0	0.0	0.0	0.0 a	0.0 a
Parent	2.9	1.3	2.0	4.3	0.2	-0.2	-0.3	0.7 **
Sibling	0.7	0.4	0.6	0.9	0.0	0.0	-0.1	0.0
Other relative	1.8	1.0	1.2	2.8	0.0	0.3	-0.1	0.1
Nonrelative	1.1	2.4	0.9	0.9	0.2 **	0.0	0.3 **	0.2
Parents Present								
Both mother and father	0.1	0.5	0.0	0.0	0.0	0.0	0.0 a	0.0 a
Mother only	0.5	1.9	0.6	0.1	0.0	0.3	-0.1	0.0
Father only	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0 a
Neither	99.4	97.5	99.4	99.9	0.0	-0.4	0.0	0.0

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
DISABLED WORKERS

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | Age In January 2001 | | | | Age In January 2001 | | | |
Characteristic	Total	Under 50	50 to 64	65 +	Total	Under 50	50 to 64	65 +
All Disabled Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Sex								
Male	51.6	54.2	52.5	46.5	1.3	1.2	1.0	2.2
Female	48.4	45.8	47.5	53.5	-1.3	-1.2	-1.0	-2.2
Race								
White	77.7	75.9	79.0	77.9	-0.7	-2.9	0.2	0.8
Black	19.1	20.8	18.1	18.4	0.6	3.3 *	-0.8	-0.6
American Indian, Alaska Native	1.4	1.3	1.7	1.2	-0.1	-0.1	0.3	-0.7
Asian, Pacific Islander	1.8	2.0	1.2	2.5	0.2	-0.2	0.3	0.5
Ethnicity								
Hispanic	8.8	9.4	8.1	9.1	0.6	-1.1	1.1	1.9 *
Non-Hispanic	91.2	90.6	91.9	90.9	-0.6	1.1	-1.1	-1.9 *
Marital Status								
Married	43.7	29.7	52.8	47.2	1.0	0.6	1.4	0.8
Widowed	12.2	1.9	10.3	30.1	-0.9	0.0	-1.4	-1.5
Divorced or separated	22.8	21.1	26.9	18.0	0.0	-2.4	1.5	0.8
Never married	21.3	47.3	10.0	4.7	-0.1	1.8	-1.5	-0.1
Years of education								
0 to 8	18.0	10.5	16.9	30.5	1.1	2.4 **	-0.4	1.9
9 to 11	15.9	13.8	16.1	18.6	-0.4	-1.5	0.8	-1.1
12	37.8	41.8	37.6	32.5	-0.4	1.2	-0.7	-1.9
13 to 15	22.4	28.1	22.7	13.7	-0.1	-1.7	0.7	1.0
16 or more	5.9	5.7	6.7	4.7	-0.3	-0.4	-0.4	0.2
Unknown (used for children)	0.0	0.0	0.0	0.0	0.0 a	0.0 a	0.0 a	0.0 a
Living Arrangement								
Lives alone	25.4	19.4	24.5	35.3	-1.9 **	-2.1	-1.9	-1.9
Lives with relatives	67.9	70.4	70.1	60.4	1.2	0.1	1.8	1.6
Lives with only non-relatives	6.8	10.2	5.5	4.2	0.8	2.0	0.1	0.3
Relationship to Householder								
Householder	61.5	50.4	65.7	69.5	-1.0	0.4	-2.1 *	-1.3
Spouse	17.8	12.1	22.2	18.1	1.0	0.4	1.6	0.7
Child	9.6	24.5	3.3	0.0	0.0	-0.7	0.5	0.0 a
Grandchild	0.3	1.0	0.0	0.0	0.0	0.1	0.0 a	0.0 a
Parent	2.4	0.6	2.1	5.5	0.1	-0.2	0.2	0.2
Sibling	1.7	1.9	1.6	1.4	0.0	-0.3	0.5	-0.5
Other relative	2.4	1.8	2.2	3.5	-0.1	0.0	-0.4	0.4
Nonrelative	4.3	7.7	2.8	2.1	0.1	0.3	-0.3	0.5
Parents Present								
Both mother and father	4.0	11.0	0.6	0.0	0.4	1.2	0.1	0.0 a
Mother only	6.8	14.9	4.2	0.0	-0.3	-1.3	0.3	0.0 a
Father only	0.7	1.7	0.3	0.0	0.1	0.2	0.1	0.0 a
Neither	88.6	72.4	95.0	100.0	-0.3	-0.1	-0.6	0.0 a

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE F.1.d

DISTRIBUTION OF PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
OTHER SOCIAL SECURITY BENEFICIARIES

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | Age In January 2001 | | | | Age In January 2001 | | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Sex								
Male	21.6	53.7	15.7	11.1	-0.2	-0.8	-0.7	-0.7
Female	78.4	46.3	84.3	88.9	0.2	0.8	0.7	0.7
Race								
White	86.9	78.2	83.5	91.0	-0.8	-1.6	-0.3	-0.3
Black	10.2	17.2	12.1	7.1	0.5	1.7	-0.9	0.1
American Indian, Alaska Native	1.2	3.0	1.5	0.4	0.3 *	0.4	0.8 *	0.1
Asian, Pacific Islander	1.7	1.6	2.9	1.5	0.0	-0.5	0.4	0.1
Ethnicity								
Hispanic	7.7	12.9	12.7	4.5	0.7	1.8	1.9	-0.3
Non-Hispanic	92.3	87.1	87.3	95.5	-0.7	-1.8	-1.9	0.3
Marital Status								
Married	23.9	0.0	28.5	31.6	-1.7 *	0.0 a	-2.3	-1.5
Widowed	46.8	0.0	46.9	64.2	0.1	0.0 a	1.8	1.1
Divorced or separated	3.0	0.0	5.6	3.5	0.2	0.0 a	1.3	0.1
Never married	26.3	100.0	18.9	0.7	1.3	0.0 a	-0.8	0.3
Years of education								
0 to 8	14.3	5.8	13.7	17.6	1.9 ***	1.5	1.7	2.5 ***
9 to 11	17.3	23.3	19.7	14.5	1.3 **	0.0	4.9 ***	0.5
12	28.5	1.4	38.4	36.1	-1.1	0.0	-1.0	-0.9
13 to 15	15.5	0.0	19.2	20.4	-1.4 **	0.0 a	-3.1 **	-1.1
16 or more	8.5	0.0	9.0	11.5	-1.2 ***	0.0 a	-2.5 **	-1.1
Unknown (used for children)	15.9	69.5	0.0	0.0	0.4	-1.5	0.0 a	0.0 a
Living Arrangement								
Lives alone	34.1	0.0	25.7	48.9	0.0	0.0 a	0.2	1.1
Lives with relatives	64.0	98.9	68.8	49.8	-0.1	0.7	-1.0	-1.3
Lives with only non-relatives	1.9	1.1	5.5	1.3	0.1	-0.7	0.8	0.2
Relationship to Householder								
Householder	53.7	0.2	59.7	72.0	-0.6	0.0	-1.0	0.7
Spouse	14.7	0.0	18.9	19.2	-1.1 *	0.0 a	-1.6	-1.0
Child	21.6	86.8	10.6	0.1	1.2	-1.4	2.4	0.0
Grandchild	1.1	4.4	0.3	0.0	0.6 **	2.5 ***	-0.3	0.0 a
Parent	3.2	0.0	3.6	4.3	-0.1	0.0 a	0.9	-0.3
Sibling	0.8	1.0	1.8	0.4	-0.1	-0.2	-0.3	0.0
Other relative	3.3	4.7	2.0	3.1	0.3	0.7	-0.5	0.4
Nonrelative	1.7	2.9	3.1	1.0	-0.2	-1.6 *	0.4	0.2
Parents Present								
Both mother and father	11.8	48.2	5.3	0.0	1.6 **	4.2 *	-0.1	0.0 a
Mother only	9.5	36.4	5.9	0.5	0.2	-3.2 *	3.1 **	0.1
Father only	1.8	6.9	1.4	0.0	-0.6 *	-2.7 **	-0.2	0.0 a
Neither	76.8	8.6	87.4	99.5	-1.2	1.8	-2.9	-0.1

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE F.1.e

DISTRIBUTION OF PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
SSI RECIPIENTS

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | | Age In January 2001 | | | | Age In January 2001 | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Sex								
Male	43.8	62.1	46.6	25.6	0.4	2.0	0.4	1.3
Female	56.2	37.9	53.4	74.4	-0.4	-2.0	-0.4	-1.3
Race								
White	62.6	57.4	65.5	57.4	-0.3	-0.8	-1.1	1.3
Black	29.7	39.0	29.1	26.1	-0.3	-1.4	0.3	-0.4
American Indian, Alaska Native	2.2	3.2	2.4	1.2	0.9 ***	1.7	1.0 ***	0.3
Asian, Pacific Islander	5.5	0.5	3.0	15.3	-0.3	0.6	-0.2	-1.2
Ethnicity								
Hispanic	16.1	18.4	13.9	21.0	0.0	-2.1	-0.7	3.5 *
Non-Hispanic	83.9	81.6	86.1	79.0	0.0	2.1	0.7	-3.5 *
Marital Status								
Married	21.6	0.3	23.4	28.7	0.7	0.7	0.2	-0.6
Widowed	13.9	0.0	6.1	43.1	0.5	0.0 a	0.0	1.0
Divorced or separated	22.9	0.0	28.8	19.3	-0.9	0.0 a	-1.7	-1.8
Never married	41.6	99.7	41.7	8.9	-0.3	-0.7	1.5	1.4
Years of education								
0 to 8	25.1	8.1	19.7	49.7	2.4 ***	4.9 **	0.7	4.5 **
9 to 11	21.0	18.2	23.1	16.6	-0.6	2.7	-0.7	-2.2
12	28.7	1.2	36.7	21.9	0.8	-0.2	0.7	-1.7
13 to 15	12.6	0.0	16.9	7.6	-0.3	0.0 a	-1.0	-0.1
16 or more	3.3	0.0	3.7	4.1	0.1	0.0 a	0.2	-0.5
Unknown (used for children)	9.4	72.6	0.0	0.0	-2.5 ***	-7.4 *	0.0 a	0.0 a
Living Arrangement								
Lives alone	25.6	0.0	24.3	43.5	1.0	0.0 a	0.3	0.7
Lives with relatives	66.2	96.9	64.1	54.9	-0.8	1.3	0.1	-0.8
Lives with only non-relatives	8.2	3.1	11.6	1.6	-0.1	-1.3	-0.3	0.2
Relationship to Householder								
Householder	50.3	0.5	54.0	68.2	1.7	0.7	0.3	0.3
Spouse	8.8	0.0	9.9	10.8	0.0	0.0 a	-0.1	-0.8
Child	23.1	81.5	19.5	0.3	-1.0	-0.2	0.9	0.1
Grandchild	1.7	10.4	0.5	0.0	0.2	4.0	0.1	0.0 a
Parent	3.8	0.0	2.0	11.0	-0.2	0.0 a	-0.1	-1.1
Sibling	3.0	0.3	3.8	2.4	-0.4	-0.3	-0.4	-0.8
Other relative	3.7	3.4	2.7	6.5	-0.2	-2.8 **	-0.6	2.3 *
Nonrelative	5.6	3.8	7.7	0.8	-0.1	-1.4	0.0	0.0
Parents Present								
Both mother and father	11.2	35.7	10.3	0.0	0.7	6.0	1.0	0.0 a
Mother only	13.4	46.7	11.3	0.5	-1.7 *	-9.7 **	0.3	-0.1
Father only	1.6	4.0	1.6	0.0	0.6 *	2.7 **	0.5	0.0 a
Neither	73.9	13.6	76.8	99.5	0.5	1.0	-1.9	0.1

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE F.2.a

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
THE TOTAL POPULATION

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | Age In January 2001 | | | | Age In January 2001 | | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	10.7	21.6	6.7	8.3	0.1	-0.4	0.2 *	0.4
Medicare	12.6	0.0	2.2	93.6	0.0	0.0 a	0.1 *	-0.1
Private (including military)	75.0	70.1	76.5	77.5	0.7 ***	1.5 ***	0.6 **	-0.5
None	14.5	14.2	17.2	1.3	-0.7 ***	-1.2 ***	-0.7 ***	0.1
Sources of Own Income								
Social Security	14.9	2.8	4.8	93.0	0.1 *	0.3 *	0.1 *	-0.1
SSI	2.2	1.1	2.3	4.2	0.1 **	-0.2 *	0.2 ***	0.3
Other public assistance	0.9	0.0	1.3	0.9	0.0	0.0	0.0	0.1
Earnings	48.5	4.4	74.0	12.1	0.4 ***	0.4 ***	0.5 **	0.4
Asset income	40.6	3.9	51.1	65.8	0.9 ***	0.5 ***	1.4 ***	-0.8
Other	11.0	0.1	9.1	44.3	0.1	0.0	0.0	0.9 **
Total Personal Income, avg. monthly								
Under $100	32.7	92.5	13.7	2.2	-0.4 ***	-0.4 **	-0.5 ***	-0.1
$100 to 249	2.6	2.3	2.9	2.1	0.1	0.1	0.1	0.1
$250 to 499	4.7	2.5	4.6	10.0	0.1 **	0.2 *	0.2 *	0.0
$500 to 749	6.4	1.6	6.4	16.9	0.1	0.1	0.1	-0.1
$750 to 999	5.2	0.5	5.6	13.1	0.1	0.0	0.2	0.0
$1,000 to 1,499	10.1	0.4	12.1	20.3	-0.1	-0.1	0.0	-0.5 *
$1,500 to 1,999	8.3	0.1	10.8	12.5	0.0	0.0	0.0	0.4
$2,000 to 2,999	11.8	0.1	16.6	12.3	0.1	0.0	0.1	0.3
$3,000 to 3,999	7.2	0.0	10.7	4.9	0.0	0.0	0.0	0.1
$4,000 to 4999	4.1	0.0	6.1	2.5	0.0	0.0	0.0	-0.1
$5,000 or more	6.9	0.0	10.5	3.2	0.0	0.0	0.0	0.0
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	86.7	97.2	95.7	17.5	-0.1 **	-0.3 *	-0.2 **	0.1
25 to under 50 percent	3.2	0.1	1.0	21.2	0.1	0.0	0.1	0.1
50 to under 75 percent	3.1	0.2	0.9	20.6	0.0	0.0	0.0	-0.2
75 to under 100 percent	3.8	0.2	1.1	25.4	0.0	0.0	0.1	0.1
100 percent	3.3	2.3	1.3	15.3	0.1	0.2 *	0.0	-0.1

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
RETIRED WORKERS

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | Age In January 2001 | | | | Age In January 2001 | | | |
Characteristic	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	5.8	5.7	5.8	5.9	0.3	0.6	0.0	0.4
Medicare	91.5	19.4	99.9	100.0	-0.1	-1.7	0.0 *	0.0 a
Private (including military)	80.4	80.1	81.0	79.7	-0.5	-3.7 ***	-0.4	0.2
None	1.0	9.6	0.0	0.0	0.3 ***	2.6 ***	0.0	0.0 a
Sources of Own Income								
Social Security	100.0	100.0	100.0	100.0	0.0 a	0.0 a	0.0 a	0.0 a
SSI	2.3	2.4	2.3	2.1	0.1	0.6	-0.1	0.3 *
Other public assistance	0.6	0.3	0.6	0.7	0.0	-0.2	0.0	0.1
Earnings	12.6	21.6	17.1	5.0	0.5 **	2.5 **	0.8 *	-0.2
Asset income	68.5	62.5	68.6	69.8	-0.6	-0.2	-0.7	-0.5
Other	47.2	43.7	46.1	49.3	0.8 *	-2.3 **	1.3 **	1.1
Total Personal Income, avg. monthly								
Under $100	0.4	0.6	0.5	0.3	0.1	0.3 **	0.0	0.1
$100 to 249	1.8	2.2	1.9	1.6	0.0	-0.2	0.0	0.1
$250 to 499	9.7	10.8	10.3	8.8	-0.2	-0.9	0.0	-0.2
$500 to 749	15.4	13.8	14.1	17.3	-0.2	0.4	-0.2	-0.3
$750 to 999	13.2	11.9	12.2	14.6	0.2	1.2	-0.4	0.5
$1,000 to 1,499	21.0	16.6	20.1	23.2	-0.5	1.4	-0.4	-1.0 *
$1,500 to 1,999	13.5	12.1	13.4	14.0	0.3	-0.4	0.1	0.6
$2,000 to 2,999	13.6	16.2	14.7	11.7	0.3	-1.5	0.6	0.4
$3,000 to 3,999	5.5	8.9	5.8	4.4	0.2	0.5	0.2	0.1
$4,000 to 4999	2.8	4.1	3.3	1.9	-0.2	-0.4	-0.1	-0.3 *
$5,000 or more	3.0	2.9	3.8	2.1	0.0	-0.3	0.1	0.1
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	11.6	16.0	13.4	8.4	-0.2	-1.6	0.3	-0.3
25 to under 50 percent	24.3	28.5	25.1	22.4	0.3	1.2	0.4	0.0
50 to under 75 percent	22.4	18.5	22.5	23.1	0.0	0.9	-0.5	0.3
75 to under 100 percent	26.5	19.8	24.8	30.2	0.1	0.3	0.0	0.2
100 percent	15.2	17.2	14.2	15.9	-0.2	-0.9	-0.2	-0.1

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE F.2.c

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
DISABLED WORKERS

Characteristic	Cross-sectional Sample				Difference between Full Panel and Cross-sectional Samples			
		Age In January 2001				Age In January 2001		
	Total	Under 50	50 to 64	65 +	Total	Under 50	50 to 64	65 +
All Disabled Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	35.8	50.2	28.1	29.2	0.4	-0.3	0.2	1.6
Medicare	78.1	70.8	71.6	100.0	0.8	1.4	0.7	0.0 a
Private (including military)	41.9	31.4	44.9	51.4	0.5	1.5	-0.6	1.3
None	3.2	4.2	4.3	0.0	-0.4	-0.7	-0.5	0.0 a
Sources of Own Income								
Social Security	100.0	100.0	100.0	100.0	0.0 a	0.0 a	0.0 a	0.0 a
SSI	19.2	27.9	15.1	14.5	-0.3	-0.5	0.4	-1.0
Other public assistance	3.6	4.9	3.1	2.6	-0.1	0.3	-0.6	0.1
Earnings	8.0	15.0	4.7	3.9	1.3 **	2.1	0.2	2.2 ***
Asset income	30.0	22.3	32.8	35.9	0.8	0.9	-0.2	2.4
Other	25.0	15.6	29.8	29.8	0.6	1.2	-1.4	3.2 **
Total Personal Income, avg. monthly								
Under $100	0.5	0.5	0.4	0.5	0.1	-0.2	0.2	0.2
$100 to 249	1.9	1.8	1.8	2.1	0.6 **	0.5	0.8 ***	0.3
$250 to 499	9.3	8.0	7.7	14.0	0.1	1.3	0.6	-2.3 *
$500 to 749	33.1	41.1	28.3	30.6	-1.8 *	-2.5	-1.0	-2.1
$750 to 999	19.0	18.5	20.4	17.1	0.2	-0.2	0.6	-0.1
$1,000 to 1,499	19.6	17.2	22.0	18.5	0.3	0.2	-0.3	1.5
$1,500 to 1,999	6.5	6.3	6.5	6.8	0.0	-0.1	-0.7	1.5 *
$2,000 to 2,999	6.7	4.5	7.8	8.1	0.2	0.9	-0.5	0.3
$3,000 to 3,999	2.3	1.2	3.6	1.5	0.3	0.2	0.4	0.4
$4,000 to 4999	0.5	0.2	0.8	0.4	0.1	-0.1	0.1	0.2
$5,000 or more	0.6	0.6	0.8	0.4	-0.1	-0.1	-0.2	0.0
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	5.4	7.7	4.5	3.6	0.3	0.9	-0.5	0.6
25 to under 50 percent	13.9	14.1	13.8	13.7	0.5	1.6	-0.9	1.5
50 to under 75 percent	19.3	19.4	17.6	22.0	0.0	-0.6	0.1	0.8
75 to under 100 percent	25.1	23.7	26.0	25.6	0.3	-0.3	0.6	0.4
100 percent	36.3	35.1	38.0	35.1	-1.1	-1.6	0.6	-3.3 *

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE F.2.d

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
ALL OTHER SOCIAL SECURITY BENEFICIARIES

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | | Age In January 2001 | | | | Age In January 2001 | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	16.9	35.2	20.9	9.2	0.7	-2.2	2.2	0.8
Medicare	65.1	0.0	22.2	100.0	-1.3	0.0 a	2.7 *	0.0 a
Private (including military)	70.9	61.6	57.9	77.6	-1.3	-0.1	-2.5	-0.8
None	6.2	14.5	18.8	0.0	0.6	1.0	0.2	0.0 a
Sources of Own Income								
Social Security	100.0	99.9	100.0	100.0	0.0	0.1	0.0 a	0.0 a
SSI	4.8	3.7	9.2	4.1	0.3	-0.5	0.1	0.6
Other public assistance	0.7	0.0	1.4	0.8	0.0	0.0 a	-0.4	0.2
Earnings	14.9	6.6	31.4	13.9	0.4	0.7	-0.5	0.4
Asset income	47.2	7.2	41.0	63.7	-1.6 **	0.2	-0.5	-1.3
Other	24.4	0.1	20.8	34.3	-0.6	0.1	-0.4	-0.1
Total Personal Income, avg. monthly								
Under $100	3.6	13.7	2.0	0.3	0.0	-0.3	-0.6	0.0
$100 to 249	6.9	22.7	3.7	1.8	0.2	0.1	0.0	-0.1
$250 to 499	15.7	28.7	13.7	11.3	0.3	-0.9	2.0	-0.1
$500 to 749	20.1	18.9	26.0	19.1	0.8	2.3	-0.2	0.4
$750 to 999	14.9	8.2	15.5	17.3	-0.3	-0.8	0.5	-0.1
$1,000 to 1,499	16.7	6.6	13.7	21.2	-0.1	0.1	1.0	-0.1
$1,500 to 1,999	8.3	0.7	11.3	10.3	0.3	-0.2	0.4	0.6
$2,000 to 2,999	7.0	0.5	9.5	8.9	-0.8 **	-0.2	-1.9	-0.6
$3,000 to 3,999	2.7	0.0	2.8	3.6	-0.3	0.0 a	-0.4	-0.4
$4,000 to 4999	1.4	0.0	0.9	2.0	0.0	0.0 a	-0.6	0.3
$5,000 or more	2.7	0.0	1.1	4.1	0.0	0.0 a	-0.1	0.1
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	9.8	0.9	14.7	11.9	-0.7	-0.5	-1.3	-0.5
25 to under 50 percent	15.8	2.5	21.4	19.4	0.5	0.8	1.4	0.4
50 to under 75 percent	15.6	5.2	18.1	18.9	-0.5	0.6	-1.1	-0.4
75 to under 100 percent	23.2	8.1	20.8	29.3	-0.1	-0.6	0.7	0.5
100 percent	35.6	83.4	24.9	20.5	0.8	-0.3	0.4	0.0

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
ᵃ The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE F.2.e

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
SSI RECIPIENTS

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | Age In January 2001 | | | | Age In January 2001 | | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	93.3	81.1	94.2	97.7	0.9	1.2	0.6	0.1
Medicare	26.3	0.0	18.6	62.6	0.5	0.0 a	0.6	-2.2
Private (including military)	16.9	35.7	15.4	10.3	0.6	9.8 **	0.3	-0.7
None	2.9	7.4	2.9	0.4	-0.5	-3.4 *	-0.1	0.3
Sources of Own Income								
Social Security	32.1	9.3	25.7	62.6	-0.5	1.2	-0.9	-2.2
SSI	100.0	100.0	100.0	100.0	0.0 a	0.0 a	0.0 a	0.0 a
Other public assistance	8.2	0.6	10.7	5.5	0.2	0.3	-0.6	1.4 *
Earnings	7.4	5.2	10.1	1.2	1.1 *	1.2	1.3	0.2
Asset income	10.8	3.5	11.6	12.6	0.7	2.9	0.7	-1.2
Other	7.5	0.0	8.5	9.1	0.4	0.0 a	0.0	0.9
Total Personal Income, avg. monthly								
Under $100	1.9	8.4	1.1	0.2	-0.5	-3.2	-0.1	0.1
$100 to 249	4.3	18.8	2.4	1.6	-0.9 *	-3.3	-0.3	0.1
$250 to 499	15.2	26.8	11.4	19.4	0.0	1.5	0.1	0.6
$500 to 749	56.5	36.1	58.7	61.6	1.6	4.0	0.8	0.5
$750 to 999	8.4	2.8	10.0	7.3	1.1 **	0.4	1.4 **	-0.1
$1,000 to 1,499	8.5	5.0	9.9	6.6	-0.7	2.2	-1.1	-1.1
$1,500 to 1,999	2.5	1.4	3.2	1.2	-0.5 *	-0.9	-0.7 *	-0.1
$2,000 to 2,999	1.7	0.8	2.0	1.5	0.0	-0.8	0.1	0.0
$3,000 to 3,999	0.7	0.0	1.0	0.3	0.0	0.0 a	0.0	0.1
$4,000 to 4999	0.2	0.0	0.2	0.2	-0.1	0.0 a	-0.1	-0.2
$5,000 or more	0.1	0.0	0.1	0.2	-0.1	0.0 a	-0.1	0.0
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	70.9	91.6	77.4	41.2	0.2	-1.4	0.9	0.7
25 to under 50 percent	6.4	1.3	5.7	10.9	0.3	0.5	0.6	-1.1
50 to under 75 percent	12.5	5.2	9.4	25.3	-0.3	1.2	-0.5	-1.0
75 to under 100 percent	10.2	1.9	7.4	22.6	-0.2	-0.3	-1.0	1.4
100 percent	0.0	0.0	0.0	0.0	0.0 a	0.0 a	0.0 a	0.0 a

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
THE TOTAL POPULATION

| | | Cross-sectional Sample | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | | Age In January 2001 | | | | Age In January 2001 | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	64.5	70.0	63.6	57.7	1.4 ***	2.0 ***	1.6 ***	-0.7
No married couple present								
Male householder	5.1	5.6	5.3	2.9	-0.4 **	-0.4 *	-0.5 ***	0.1
Female householder	15.1	23.4	13.1	7.3	-0.7 ***	-1.4 **	-0.5 ***	-0.1
Nonfamily								
Male householder	7.2	0.8	9.9	7.7	-0.3 ***	-0.2 **	-0.5 ***	0.4
Female householder	7.8	0.2	7.9	24.0	0.0	0.0	0.0	0.3
Ownership Status of Living Quarters								
Owned	70.1	66.8	69.0	83.0	1.6 ***	2.2 ***	1.6 ***	0.6
Not owned	29.9	33.2	31.0	17.0	-1.6 ***	-2.2 ***	-1.6 ***	-0.6
Residence in Public Housing	2.4	3.4	1.8	2.9	0.0	-0.1	0.0	0.0
Household Size								
1 person	10.1	0.0	10.4	30.3	-0.1	0.0	-0.1	0.3
2 persons	26.8	4.6	30.5	55.3	-0.5	-0.3	-0.6	-0.3
3 to 4 persons	41.5	53.6	42.3	11.3	0.2	-0.1	0.4	-0.2
5 or more persons	21.6	41.7	16.8	3.1	0.3	0.3	0.4	0.1
Family Size								
1 person	16.5	0.9	20.0	32.1	-0.6 ***	-0.3 ***	-1.0 ***	0.7
2 persons	24.7	6.4	26.6	54.3	-0.7	-0.8	-0.7	-0.7
3 to 4 persons	39.0	53.5	38.5	10.7	0.8	0.2	1.1	-0.1
5 or more persons	19.8	39.1	14.9	2.9	0.6	0.8	0.6	0.1
Persons under 18 in Family								
None	46.5	1.0	56.2	94.9	-1.0	-0.2 ***	-1.5	0.0
1 person	17.6	22.3	18.5	2.6	-0.1	-0.8	0.2	0.0
2 persons	20.1	38.6	15.9	1.6	0.9	1.1 **	1.0	0.1
3 persons	10.3	23.7	6.5	0.6	0.1	0.0	0.2	0.0
4 persons	3.5	8.9	1.9	0.2	0.1	0.1	0.1	0.0
5 or more persons	2.0	5.4	0.9	0.1	0.0	-0.1	0.0	0.0

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
[a] The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
RETIRED WORKERS

| | | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | |
| | | Age In January 2001 | | | | Age In January 2001 | | |
Characteristic	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	62.2	74.7	69.4	50.6	-1.0	-1.3	-1.0	-0.8
No married couple present								
Male householder	2.6	2.5	2.2	3.2	0.1	-0.6	0.2	0.2
Female householder	6.0	6.0	5.0	7.2	0.1	1.1 *	-0.3	0.4
Nonfamily								
Male householder	8.6	8.1	7.7	9.6	0.4	0.2	0.8	-0.1
Female householder	20.3	8.5	15.6	28.8	0.4	0.5	0.3	0.3
Ownership Status of Living Quarters								
Owned	85.1	87.2	87.6	81.7	0.6	0.0	-0.1	1.5 *
Not owned	14.9	12.8	12.4	18.3	-0.6	0.0	0.1	-1.5 *
Residence in Public Housing	2.2	1.2	1.6	3.0	-0.1	0.4	-0.2	-0.1
Household Size								
1 person	27.2	13.1	21.6	37.3	0.3	0.3	0.5	-0.1
2 persons	58.8	65.0	63.8	51.4	-0.5	-0.9	0.0	-0.9
3 to 4 persons	11.3	17.5	11.8	9.2	0.1	1.1	-0.6	0.7
5 or more persons	2.7	4.4	2.8	2.1	0.1	-0.4	0.0	0.3
Family Size								
1 person	29.4	17.1	23.6	39.1	0.7	0.5	1.2	0.2
2 persons	57.5	63.0	62.5	50.4	-0.9	-1.2	-0.6	-1.2
3 to 4 persons	10.6	16.2	11.3	8.5	0.2	0.8	-0.5	0.8
5 or more persons	2.5	3.7	2.7	2.0	0.1	-0.1	-0.1	0.3
Persons under 18 in Family								
None	95.5	92.3	94.7	97.1	-0.2	-1.0	0.1	-0.3
1 person	2.4	4.3	2.7	1.5	0.1	0.5	0.1	0.1
2 persons	1.3	2.2	1.7	0.8	0.1	0.1	0.1	0.2 *
3 persons	0.5	0.9	0.6	0.4	-0.1	0.3	-0.2	0.0
4 persons	0.1	0.1	0.2	0.1	0.0	0.1	0.0	0.0
5 or more persons	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
[a] The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE F.3.c

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
DISABLED WORKERS

| Characteristic | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | Total | Age In January 2001 | | | Total | Age In January 2001 | | |
		Under 50	50 to 64	65 +		Under 50	50 to 64	65 +
All Disabled Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	48.2	41.2	53.7	48.2	1.4	2.1	1.0	1.3
No married couple present								
Male householder	4.0	4.9	3.5	3.7	0.2	0.8	-0.4	0.7
Female householder	16.8	26.1	13.8	8.9	-0.3	-2.0	0.9	0.0
Nonfamily								
Male householder	13.2	15.8	11.8	11.8	0.2	0.1	0.8	-0.6
Female householder	17.5	11.4	16.7	27.4	-1.8 **	-1.9	-2.0 *	-1.4
Ownership Status of Living Quarters								
Owned	64.3	55.8	69.9	66.4	0.6	0.8	-0.6	2.3
Not owned	35.7	44.2	30.1	33.6	-0.6	-0.8	0.6	-2.3
Residence in Public Housing	6.5	6.0	5.3	9.3	0.0	0.2	0.1	-0.5
Household Size								
1 person	25.4	19.4	24.5	35.3	-1.9 **	-2.1	-1.9	-1.9
2 persons	41.6	31.6	47.1	45.8	1.3	-1.1	2.5	2.5
3 to 4 persons	24.8	36.9	21.2	14.2	0.1	0.1	0.7	-0.9
5 or more persons	8.3	12.2	7.2	4.6	0.5	3.1 **	-1.3	0.2
Family Size								
1 person	32.1	29.6	29.9	39.6	-1.2	-0.1	-1.8	-1.6
2 persons	38.1	27.7	43.9	42.5	0.9	-2.0	2.2	2.6
3 to 4 persons	22.6	31.7	20.4	13.5	0.0	0.1	0.5	-0.9
5 or more persons	7.2	11.0	5.8	4.4	0.3	2.0	-0.9	-0.1
Persons under 18 in Family								
None	82.1	71.1	85.0	92.5	-0.5	-2.6	1.1	-0.5
1 person	9.0	12.9	8.6	4.3	-0.2	0.1	-0.7	0.2
2 persons	5.1	8.7	3.7	2.5	0.5	1.1	0.2	0.3
3 persons	2.3	4.6	1.4	0.4	0.2	0.9	-0.3	0.2
4 persons	0.9	1.6	0.7	0.2	-0.2	-0.2	-0.3	-0.2
5 or more persons	0.7	1.1	0.7	0.0	0.2	0.8 *	-0.1	0.0 a

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
ALL OTHER SOCIAL SECURITY BENEFICIARIES

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | Age In January 2001 | | | | Age In January 2001 | | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	38.1	50.3	36.5	34.0	0.3	5.2 **	-2.0	-1.4
No married couple present								
Male householder	4.2	9.3	4.7	2.1	-0.6	-2.7 **	0.0	-0.1
Female householder	21.7	39.0	27.9	13.8	0.4	-1.9	1.9	0.2
Nonfamily								
Male householder	1.9	1.3	4.7	1.5	-0.4	-0.8	-1.7 *	0.1
Female householder	33.9	0.1	25.8	48.4	0.4	0.1	1.8	1.3
Ownership Status of Living Quarters								
Owned	76.9	67.9	76.8	80.3	0.5	1.1	0.5	0.6
Not owned	23.1	32.1	23.2	19.7	-0.5	-1.1	-0.5	-0.6
Residence in Public Housing	4.1	3.4	5.2	4.1	-0.3	-0.6	-0.7	0.0
Household Size								
1 person	34.1	0.0	25.7	48.9	0.0	0.0 a	0.2	1.1
2 persons	31.5	11.6	31.6	38.8	-1.3	-0.5	0.6	-1.5
3 to 4 persons	23.0	53.7	29.9	9.9	1.2	-0.6	1.8	0.6
5 or more persons	11.4	34.7	12.9	2.4	0.1	1.1	-2.6 *	-0.3
Family Size								
1 person	36.0	1.1	31.2	50.2	0.1	-0.7	1.0	1.3
2 persons	31.4	13.5	30.6	38.2	-1.5	-0.7	-0.1	-1.5
3 to 4 persons	22.0	52.9	26.5	9.4	0.7	-1.4	1.1	0.4
5 or more persons	10.6	32.5	11.7	2.2	0.7	2.9	-2.1	-0.2
Persons under 18 in Family								
None	69.7	1.1	67.8	95.7	-1.3	-0.7	0.9	0.0
1 person	10.7	30.6	16.7	1.9	0.6	-0.4	1.6	0.0
2 persons	9.9	33.4	8.1	1.6	0.1	-0.3	-1.0	-0.2
3 persons	6.2	21.9	5.9	0.5	0.4	0.8	-1.3	0.2
4 persons	1.7	6.4	0.7	0.2	0.3	0.6	0.1	0.1
5 or more persons	1.7	6.6	0.9	0.2	0.0	0.0	-0.4	-0.1

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE F.3.e

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
SSI RECIPIENTS

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | Age In January 2001 | | | | Age In January 2001 | | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	34.2	38.3	33.7	33.4	0.9	9.2 *	0.2	-0.5
No married couple present								
Male householder	6.3	8.2	6.4	5.2	-0.3	-0.9	0.0	-0.6
Female householder	27.6	53.0	26.4	16.7	-1.5	-7.9	-0.1	0.4
Nonfamily								
Male householder	11.4	0.4	14.8	8.1	1.0	-0.4	0.9	0.8
Female householder	19.5	0.0	17.6	35.8	-0.3	0.0 a	-1.1	-0.3
Ownership Status of Living Quarters								
Owned	41.8	40.5	41.6	43.3	2.0 *	3.5	1.0	4.1 **
Not owned	58.2	59.5	58.4	56.7	-2.0 *	-3.5	-1.0	-4.1 **
Residence in Public Housing	12.6	9.2	11.4	17.9	-0.9	-1.1	-1.0	-0.7
Household Size								
1 person	25.6	0.0	24.3	43.5	1.0	0.0 a	0.3	0.7
2 persons	26.4	8.4	28.6	30.5	1.1	5.2 **	0.3	-0.6
3 to 4 persons	30.1	50.6	30.2	18.5	-0.2	-4.6	0.8	1.0
5 or more persons	17.8	41.0	16.8	7.5	-1.9 *	-0.6	-1.5	-1.0
Family Size								
1 person	33.8	3.1	35.9	45.1	0.8	-1.3	-0.1	0.8
2 persons	23.5	9.8	23.6	30.8	1.6	5.3 **	0.9	0.2
3 to 4 persons	27.2	51.2	26.1	16.9	-0.5	-5.4	1.0	0.1
5 or more persons	15.5	36.0	14.4	7.1	-1.9 *	1.4	-1.9 *	-1.1
Persons under 18 in Family								
None	66.7	3.1	72.1	87.4	2.8 **	-1.3	1.7	0.5
1 person	12.6	23.7	12.2	7.4	1.4 **	8.9 **	1.1	0.3
2 persons	10.0	33.5	7.7	3.3	-1.8 **	-4.0	-1.0	-0.4
3 persons	6.4	24.4	4.7	0.9	-1.6 *	-1.8	-1.3 *	-0.1
4 persons	3.1	11.9	2.1	0.8	-0.6	-1.3	-0.2	-0.4
5 or more persons	1.3	3.3	1.2	0.1	-0.3	-0.6	-0.3	0.0

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
THE TOTAL POPULATION

| | | Cross-sectional Sample | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | | Age In January 2001 | | | | Age In January 2001 | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	3.0	4.7	2.3	2.8	0.2	0.2	0.1	0.2
Housing assistance	1.8	2.8	1.4	1.4	0.0	0.2	0.0	-0.1
Food stamps	6.4	10.6	5.1	3.5	0.2	0.0	0.2 *	0.4 *
Total Household Income, avg. monthly								
Less than $500	3.5	3.9	3.4	3.1	-0.3 ***	-0.4 *	-0.3 ***	0.0
$500 to 999	5.9	5.3	4.5	14.6	0.1	-0.2	0.1	0.2
$1,000 to 1,499	7.1	7.1	5.6	14.5	-0.1	-0.4	0.1	-0.2
$1,500 to 1,999	7.5	7.4	6.4	13.3	0.1	0.1	0.1	-0.1
$2,000 to 2,999	14.9	14.7	14.0	20.4	0.1	0.2	0.1	-0.3
$3,000 to 3,999	13.5	13.5	13.9	11.8	0.1	-0.3	0.1	0.8 **
$4,000 to 4,999	11.5	11.7	12.2	7.6	0.0	-0.1	0.1	0.1
$5,000 or more	36.0	36.4	40.0	14.8	0.0	1.0	-0.3	-0.5
Total Family Income, avg. monthly								
Less than $500	5.1	5.8	5.2	3.3	-0.5 ***	-0.9 ***	-0.5 ***	-0.1
$500 to 999	6.9	5.9	5.8	15.2	0.0	-0.2	0.1	0.4
$1,000 to 1,499	7.8	7.4	6.7	14.5	-0.1	-0.2	-0.1	-0.1
$1,500 to 1,999	8.0	7.6	7.1	13.5	-0.1	0.0	-0.1	-0.1
$2,000 to 2,999	15.1	14.7	14.3	20.3	0.2	0.2	0.3	-0.3
$3,000 to 3,999	12.8	12.7	13.1	11.4	0.1	-0.1	0.0	0.7 **
$4,000 to 4,999	10.7	11.1	11.2	7.3	0.1	0.0	0.1	0.0
$5,000 or more	33.6	34.9	36.7	14.5	0.3	1.3 **	0.1	-0.5
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	2.4	2.5	2.7	0.6	-0.3 ***	-0.4 **	-0.4 ***	0.0
10 to under 50 percent	3.3	5.4	2.8	1.4	-0.2 *	-0.4 **	-0.1	-0.1
50 to under 100 percent	8.1	11.2	6.6	9.3	0.2	-0.1	0.3 **	0.4
100 to under 125 percent	4.8	6.0	3.9	7.3	0.1	0.1	0.1	0.3
125 to under 150 percent	4.8	5.7	4.0	6.8	0.0	0.0	0.0	-0.2
150 to under 200 percent	10.0	11.4	8.8	13.7	-0.1	-0.3	-0.1	-0.2
200 to under 300 percent	18.8	19.8	17.6	22.8	0.2	0.3	0.2	-0.6 *
300 to under 400 percent	14.4	13.6	14.9	13.8	0.1	0.0	0.1	0.6 *
400 percent or more	33.2	24.4	38.6	24.3	0.0	0.8 **	-0.3	-0.1
Distribution of Family Income by Source, avg. monthly								
Social Security	4.6	1.4	2.3	35.4	0.1 *	0.1 *	0.1 **	0.4
SSI	0.5	0.5	0.5	0.8	0.0	0.0	0.0 **	0.0
Other public assistance	0.2	0.4	0.2	0.2	0.0	0.0	0.0	0.0
Earnings	86.4	92.8	90.4	29.7	-0.1	0.0	-0.1	-1.3 *
Asset income	3.1	1.9	2.6	11.5	0.0	0.0	0.0	0.4
All other	5.1	2.9	4.0	22.4	0.0	0.0	0.0	0.5

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
[a] The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE F.4.b

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
RETIRED WORKERS

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | | Age In January 2001 | | | | Age In January 2001 | | |
Characteristic	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	2.3	2.2	2.1	2.6	0.3 **	1.0 **	0.2	0.3
Housing assistance	1.1	0.6	1.1	1.3	-0.1 *	0.1	-0.2	-0.2
Food stamps	2.6	3.2	2.7	2.2	0.3 *	1.1 **	0.1	0.3
Total Household Income, avg. monthly								
Less than $500	2.3	1.9	1.6	3.2	0.0	0.0	0.0	0.0
$500 to 999	12.2	7.5	9.4	16.7	0.3	1.2 *	0.1	0.2
$1,000 to 1,499	13.9	8.0	12.9	16.6	0.0	1.1	0.5	-0.9 *
$1,500 to 1,999	13.6	10.1	12.9	15.2	-0.5	0.3	-0.6	-0.5
$2,000 to 2,999	21.4	18.6	22.6	20.6	-0.6	-2.3 *	-0.6	-0.2
$3,000 to 3,999	12.9	16.7	14.4	10.1	1.1 ***	1.7 *	0.9 *	1.3 ***
$4,000 to 4,999	8.4	13.7	9.6	5.6	0.3	0.9	0.6	0.0
$5,000 or more	15.4	23.6	16.7	11.9	-0.7 *	-2.8 **	-0.8	0.0
Total Family Income, avg. monthly								
Less than $500	2.5	2.1	1.8	3.4	0.0	-0.1	0.0	-0.1
$500 to 999	12.9	8.6	10.1	17.2	0.5	1.7 **	0.4	0.4
$1,000 to 1,499	14.1	8.5	12.9	16.8	0.0	1.5 *	0.3	-0.8
$1,500 to 1,999	13.7	9.9	13.0	15.5	-0.5	0.3	-0.6	-0.5
$2,000 to 2,999	21.3	19.1	22.5	20.5	-0.6	-3.3 ***	-0.6	0.1
$3,000 to 3,999	12.5	16.5	14.1	9.6	1.0 ***	1.9 **	0.8 *	1.0 **
$4,000 to 4,999	8.0	12.6	9.3	5.3	0.2	0.8	0.4	-0.1
$5,000 or more	15.1	22.6	16.3	11.7	-0.7 *	-2.8 **	-0.8	0.0
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.2	0.2	0.2	0.1	0.0	0.1	0.0	0.0
10 to under 50 percent	1.1	1.3	0.8	1.4	0.0	-0.2	0.0	0.0
50 to under 100 percent	7.7	7.8	6.2	9.5	0.3	1.3 *	0.2	0.3
100 to under 125 percent	6.6	4.4	5.3	8.6	0.4	1.0 *	0.3	0.2
125 to under 150 percent	6.4	4.2	5.7	7.9	0.0	0.9	-0.1	-0.1
150 to under 200 percent	13.4	8.5	12.6	15.6	-0.4	-0.1	-0.2	-0.8
200 to under 300 percent	23.8	21.1	23.7	24.5	-0.9 **	-1.0	-1.1 **	-0.5
300 to under 400 percent	15.2	18.9	16.8	12.4	0.8 **	0.0	1.0 **	0.7
400 percent or more	25.6	33.6	28.7	20.1	-0.2	-1.9	-0.1	0.1
Distribution of Family Income by Source, avg. monthly								
Social Security	37.3	30.6	35.8	41.6	0.3	1.1	0.0	0.5
SSI	0.5	0.7	0.5	0.4	0.0	0.2 **	-0.1	0.1
Other public assistance	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0
Earnings	26.7	31.1	29.6	21.2	-1.2	-1.3	-1.1	-1.3
Asset income	11.8	8.7	11.0	14.0	0.5 *	0.2	0.7 **	0.4
All other	23.6	28.8	23.1	22.7	0.3	-0.2	0.4	0.4

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
[a] The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
DISABLED WORKERS

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | Age In January 2001 | | | | | Age In January 2001 | | |
Characteristic	Total	Under 50	50 to 64	65 +	Total	Under 50	50 to 64	65 +
All Disabled Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	9.2	11.3	7.5	9.4	0.5	0.7	0.1	0.8
Housing assistance	5.0	6.8	4.1	4.1	-0.5	-0.1	-0.3	-1.3
Food stamps	15.8	20.1	13.8	13.5	0.0	0.1	-0.7	1.1
Total Household Income, avg. monthly								
Less than $500	2.5	2.0	1.8	4.2	-0.3	-0.5	-0.2	-0.2
$500 to 999	21.5	17.8	20.4	28.7	-1.5	-1.4	-1.1	-2.2
$1,000 to 1,499	13.6	13.0	12.6	16.4	0.7	0.1	1.3	0.3
$1,500 to 1,999	14.0	15.0	14.3	11.8	0.7	1.0	0.8	0.1
$2,000 to 2,999	16.9	17.6	16.3	17.1	-0.4	-0.4	-0.9	0.3
$3,000 to 3,999	12.4	13.0	13.2	10.1	0.4	1.1	0.9	-1.2
$4,000 to 4,999	8.6	8.7	10.3	5.7	-0.1	-0.8	0.0	0.8
$5,000 or more	10.5	12.8	11.1	6.0	0.4	0.8	-0.8	2.1 **
Total Family Income, avg. monthly								
Less than $500	2.9	2.5	2.0	4.9	-0.5	-0.3	-0.3	-0.9
$500 to 999	25.2	23.9	23.4	30.1	-1.2	0.0	-1.4	-2.3
$1,000 to 1,499	14.4	15.6	12.9	15.6	1.1	0.1	1.9 *	1.2
$1,500 to 1,999	13.5	13.7	14.0	12.2	0.2	0.2	0.2	0.2
$2,000 to 2,999	16.0	15.1	16.1	17.1	0.3	0.4	0.1	0.7
$3,000 to 3,999	11.1	11.2	11.8	9.6	-0.1	-0.1	0.5	-1.0
$4,000 to 4,999	7.6	7.5	9.2	4.8	-0.3	-0.9	-0.3	0.4
$5,000 or more	9.4	10.6	10.7	5.7	0.4	0.7	-0.7	1.8 **
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.2	0.2	0.1	0.3	0.0	-0.2	0.0	0.1
10 to under 50 percent	1.8	2.4	1.3	1.7	-0.3	-0.3	-0.4	-0.2
50 to under 100 percent	20.9	22.9	20.0	19.7	-0.3	1.0	-1.1	-0.7
100 to under 125 percent	10.4	10.1	8.3	14.7	0.1	0.7	0.7	-1.9
125 to under 150 percent	8.7	9.2	7.6	9.9	0.0	-0.2	0.8	-1.2
150 to under 200 percent	14.1	14.9	13.9	13.3	-0.2	-1.9	0.5	0.8
200 to under 300 percent	19.4	16.8	22.6	17.2	-0.6	-1.0	-1.1	0.8
300 to under 400 percent	11.8	12.4	10.5	13.1	1.7 ***	3.3 ***	1.3	0.2
400 percent or more	12.8	11.2	15.6	10.1	-0.3	-1.6	-0.6	2.1 **
Distribution of Family Income by Source, avg. monthly								
Social Security	39.1	36.4	38.1	46.0	0.5	1.0	1.4	-2.5 *
SSI	3.1	4.0	2.6	2.5	0.0	0.0	0.0	0.1
Other public assistance	0.7	0.8	0.5	0.9	-0.2 *	-0.1	-0.2	-0.5
Earnings	40.3	45.0	40.8	31.0	0.4	-1.2	1.1	2.3
Asset income	2.6	2.0	2.5	4.0	-0.4 *	-0.8 **	-0.1	-0.3
All other	14.3	11.8	15.7	15.6	-0.3	1.2	-2.2 *	1.0

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.

 ** Statistically signficant at 0.05 level.

  * Statistically significant at 0.10 level.

ᵃ The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE F.4.d

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
ALL OTHER SOCIAL SECURITY BENEFICIARIES

| | | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | |
| | | Age In January 2001 | | | | Age In January 2001 | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	5.3	8.8	5.4	4.0	0.3	1.1	-0.2	0.0
Housing assistance	2.6	4.3	3.0	1.9	0.1	0.1	-0.7	0.4
Food stamps	6.8	12.6	8.1	4.2	-0.1	-1.9	0.3	0.3
Total Household Income, avg. monthly								
Less than $500	2.7	1.2	2.1	3.5	-0.4 *	-0.9 *	-0.6	-0.2
$500 to 999	18.0	7.5	15.2	22.6	-0.2	-0.8	-0.2	0.4
$1,000 to 1,499	14.9	10.4	11.6	17.3	0.2	-0.9	1.1	0.6
$1,500 to 1,999	12.7	10.4	15.9	12.7	0.7	-0.7	3.9 ***	0.5
$2,000 to 2,999	16.7	20.2	16.8	15.4	0.3	2.8	-0.8	-0.5
$3,000 to 3,999	10.0	15.0	12.0	7.6	0.3	0.6	-0.5	0.2
$4,000 to 4,999	7.7	10.5	8.8	6.4	0.0	0.4	-1.6	0.1
$5,000 or more	17.3	24.9	17.5	14.5	-0.9	-0.5	-1.3	-1.3
Total Family Income, avg. monthly								
Less than $500	3.4	3.3	2.7	3.7	-0.5	-1.6 **	-0.2	-0.1
$500 to 999	18.9	8.3	17.3	23.1	-0.2	-0.9	-0.5	0.4
$1,000 to 1,499	14.9	10.2	12.7	17.3	0.3	-0.9	1.5	0.7
$1,500 to 1,999	12.9	10.9	15.8	12.9	0.7	-0.7	3.0 *	0.6
$2,000 to 2,999	16.1	18.9	15.0	15.3	0.0	2.3	-1.1	-0.7
$3,000 to 3,999	9.7	14.8	12.0	7.2	0.2	0.6	-0.5	0.0
$4,000 to 4,999	7.3	9.9	8.1	6.2	0.0	0.3	-1.3	0.1
$5,000 or more	16.7	23.5	16.2	14.3	-0.5	0.9	-1.0	-1.2
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.3	0.9	0.0	0.1	-0.1	-0.1	0.0 a	-0.1
10 to under 50 percent	2.2	4.6	2.1	1.4	-1.0 ***	-2.7 **	-1.1 *	-0.4
50 to under 100 percent	13.6	13.4	16.6	13.0	0.7	1.0	-0.1	0.8
100 to under 125 percent	9.0	7.7	9.4	9.4	0.5	0.4	1.9 *	0.2
125 to under 150 percent	8.2	8.5	5.2	8.9	0.3	0.8	1.7	-0.2
150 to under 200 percent	15.8	16.5	14.8	15.8	0.7	0.2	0.2	1.0
200 to under 300 percent	19.7	19.2	21.6	19.4	-0.4	-0.3	-1.0	-0.3
300 to under 400 percent	10.2	11.6	11.3	9.4	-0.2	-0.5	-0.3	-0.1
400 percent or more	20.9	17.7	19.0	22.6	-0.5	1.2	-1.1	-0.9
Distribution of Family Income by Source, avg. monthly								
Social Security	31.9	27.0	31.2	34.4	0.7	-0.1	1.7	1.2
SSI	1.0	1.4	1.9	0.6	0.0	-0.1	-0.3	0.0
Other public assistance	0.2	0.2	0.7	0.1	-0.1	0.0	-0.6	0.0
Earnings	45.0	61.2	47.5	36.6	0.1	-0.5	1.0	-1.1
Asset income	7.7	2.6	4.4	11.1	-0.4	-0.5	-0.5	0.1
All other	14.1	7.6	14.3	17.2	-0.2	1.2 *	-1.4	-0.2

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.

a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE F.4.e

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IDENTIFIED IN THE 2001 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
SSI RECIPIENTS

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | | Age In January 2001 | | | | Age In January 2001 | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	17.7	13.0	18.6	17.9	0.5	-1.8	1.4	-1.7
Housing assistance	10.4	4.9	11.6	10.2	-0.1	-3.1 *	0.9	-2.0
Food stamps	36.9	27.4	38.7	37.2	1.8	-1.4	1.2	3.6 *
Total Household Income, avg. monthly								
Less than $500	3.5	3.4	3.0	5.0	-0.7	-0.9	-0.6	-0.7
$500 to 999	33.8	10.6	32.5	50.3	3.2 ***	0.2	2.5 **	3.9 *
$1,000 to 1,499	15.6	17.2	15.9	14.0	-2.7 ***	-7.8 **	-1.2	-4.3 ***
$1,500 to 1,999	11.1	14.8	11.7	7.4	0.8	-1.9	1.5	0.6
$2,000 to 2,999	13.1	24.5	12.7	7.7	0.7	6.2	0.2	1.0
$3,000 to 3,999	8.3	14.9	8.3	4.5	-0.8	3.3	-1.4 *	-0.2
$4,000 to 4,999	6.0	5.4	6.2	5.7	-0.2	-1.0	0.1	-0.8
$5,000 or more	8.7	9.3	9.7	5.5	-0.4	1.9	-1.1	0.5
Total Family Income, avg. monthly								
Less than $500	4.3	6.0	3.7	5.2	-0.9 **	-1.8	-0.8	-0.9
$500 to 999	39.5	13.2	40.6	51.2	3.2 ***	-1.7	2.7 **	4.1 *
$1,000 to 1,499	15.2	16.8	15.4	13.7	-2.0 **	-5.3 *	-0.7	-4.0 ***
$1,500 to 1,999	10.1	14.7	10.1	7.4	0.2	-3.0	0.7	0.6
$2,000 to 2,999	11.5	23.8	10.5	7.7	0.5	6.6 *	-0.1	1.1
$3,000 to 3,999	7.1	12.6	7.0	4.4	-0.9	2.5	-1.4 *	-0.4
$4,000 to 4,999	4.8	5.0	4.5	5.3	-0.3	-0.6	-0.1	-0.9
$5,000 or more	7.4	7.9	8.1	5.2	0.2	3.3	-0.3	0.4
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.1	0.5	0.0	0.0	-0.1	-0.5	0.0 a	0.0 a
10 to under 50 percent	5.1	11.3	5.0	2.0	-0.9 *	-3.2	-0.7	0.1
50 to under 100 percent	39.7	18.8	42.0	44.8	2.1 *	-5.9 **	2.3 *	2.4
100 to under 125 percent	11.2	14.7	9.5	13.7	-0.5	-1.0	-0.6	0.2
125 to under 150 percent	8.7	11.9	7.9	9.2	-0.8	1.6	0.1	-4.2 ***
150 to under 200 percent	11.9	18.2	11.7	9.0	-0.3	-0.7	-0.5	1.2
200 to under 300 percent	12.1	13.1	12.2	11.4	0.8	6.7 **	0.1	0.5
300 to under 400 percent	4.4	5.8	4.6	3.1	-0.3	0.8	-0.5	0.0
400 percent or more	6.8	5.8	7.0	6.7	0.0	2.0	-0.2	-0.2
Distribution of Family Income by Source, avg. monthly								
Social Security	14.4	6.6	13.7	22.8	0.0	0.2	-0.1	-0.5
SSI	27.8	28.7	28.5	24.9	-1.0	-3.1	-0.3	-1.9
Other public assistance	1.9	2.0	2.0	1.4	0.0	-0.2	-0.1	0.4
Earnings	47.2	56.6	46.1	43.4	0.5	2.0	-0.2	2.4
Asset income	1.4	1.0	1.6	1.3	0.4	1.4	0.2	0.4
All other	7.3	5.1	8.1	6.2	0.2	-0.4	0.5	-0.7

Source: Mathematica Policy Research, from the 2001 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

APPENDIX G

**COMPARISON OF FULL PANEL AND CROSS-SECTION SAMPLES:
1996 SIPP PANEL**

DISTRIBUTION OF PERSONAL CHARACTERISTICS IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
THE TOTAL POPULATION

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | | Age In March 1996 | | | | Age In March 1996 | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Sex								
Male	48.9	51.2	49.2	41.9	0.0	0.0	0.0	0.0
Female	51.1	48.8	50.8	58.1	0.0	0.0	0.0	0.0
Race								
White	82.5	78.6	83.0	89.1	-0.2 **	-0.8 ***	0.0	-0.5 **
Black	12.8	16.2	12.2	8.2	0.0	0.4 **	-0.2 **	0.1
American Indian, Alaska Native	1.1	1.5	1.1	0.6	-0.1	0.0	-0.1	0.1
Asian, Pacific Islander	3.5	3.7	3.7	2.0	0.3 ***	0.4 ***	0.3 **	0.4 ***
Ethnicity								
Hispanic	10.7	14.4	10.4	4.5	0.0	-0.1 *	0.0	0.2
Non-Hispanic	89.3	85.6	89.6	95.5	0.0	0.1 *	0.0	-0.2
Marital Status								
Married	42.3	0.1	58.6	54.4	0.6 ***	0.0	1.4 ***	-1.2 ***
Widowed	5.3	0.0	2.0	33.9	0.1 *	0.0	0.0	0.9 **
Divorced or separated	9.1	0.1	13.4	7.4	-0.4 ***	0.0	-0.7 ***	0.1
Never married	43.3	99.8	25.9	4.4	-0.3 ***	0.0	-0.7 ***	0.3
Years of education								
0 to 8	6.1	2.4	5.0	20.4	0.4 ***	0.1	0.4 ***	1.5 ***
9 to 11	10.3	13.0	8.5	13.7	-0.1	0.4 **	-0.3 ***	0.1
12	24.8	1.4	33.5	33.6	-0.8 ***	-0.1	-0.9 ***	-1.1 ***
13 to 15	21.1	0.1	30.8	19.1	0.4 ***	0.0	0.8 ***	-0.1
16 or more	15.2	0.0	22.3	13.2	0.0	0.0 a	0.1	-0.3
Unknown (used for children)	22.4	83.2	0.0	0.0	0.0	-0.4 **	0.0 a	0.0 a
Living Arrangement								
Lives alone	9.5	0.0	9.4	31.6	0.0	0.0 *	-0.1 *	0.4
Lives with relatives	84.7	98.9	82.0	65.9	0.5 ***	0.2 *	0.8 ***	-0.6 *
Lives with only non-relatives	5.8	1.1	8.5	2.4	-0.4 ***	-0.1	-0.7 ***	0.2
Relationship to Householder								
Householder	37.7	0.2	48.4	67.0	0.0	-0.1 **	0.1 **	0.1
Spouse	20.3	0.0	28.5	24.0	0.4 ***	0.0	0.9 ***	-0.4 **
Child	32.0	89.9	12.6	0.1	0.5 ***	1.2 ***	0.2	0.0
Grandchild	1.6	5.2	0.4	0.0	0.0	-0.1	0.0	0.0 a
Parent	0.9	0.0	0.7	3.8	0.0	0.0 a	0.0	0.2
Sibling	1.0	0.4	1.3	0.9	-0.1 ***	0.0	-0.2 ***	0.0
Other relative	2.0	1.9	1.8	3.0	-0.5 ***	-0.6 ***	-0.5 ***	-0.1
Nonrelative	4.6	2.3	6.3	1.4	-0.4 ***	-0.4 ***	-0.5 ***	0.2
Parents Present								
Both mother and father	24.3	70.6	8.7	0.0	0.9 ***	2.5 ***	0.2	0.0
Mother only	9.2	22.6	4.9	0.4	-0.2 *	-1.0 ***	0.1	0.0
Father only	1.3	2.7	0.9	0.0	-0.2 ***	-0.7 ***	-0.1	0.0
Neither	65.3	4.1	85.5	99.5	-0.5 ***	-0.8 ***	-0.2	0.0

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE G.1.b

DISTRIBUTION OF PERSONAL CHARACTERISTICS IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
RETIRED WORKERS

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | | Age In March 1996 | | | | Age In March 1996 | | |
Characteristic	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Sex								
Male	47.2	49.4	49.7	43.5	0.0	0.4	0.0	-0.2
Female	52.8	50.6	50.3	56.5	0.0	-0.4	0.0	0.2
Race								
White	90.7	88.9	90.3	91.8	-0.1	1.1	-0.6	0.2
Black	7.5	9.2	7.7	6.7	-0.1	-0.9	0.4	-0.4
American Indian, Alaska Native	0.5	0.5	0.5	0.6	0.1	0.0	0.0	0.2
Asian, Pacific Islander	1.3	1.4	1.5	1.0	0.1	-0.2	0.2	0.0
Ethnicity								
Hispanic	3.9	5.0	4.8	2.3	0.1	-0.2	-0.1	0.3 **
Non-Hispanic	96.1	95.0	95.2	97.7	-0.1	0.2	0.1	-0.3 **
Marital Status								
Married	60.5	78.0	66.9	47.1	-1.1 **	-1.5	-1.4 **	-0.5
Widowed	27.6	7.1	19.7	43.8	0.8 **	1.1 **	1.2 ***	0.1
Divorced or separated	7.8	11.0	9.3	5.1	0.0	0.4	-0.1	0.1
Never married	4.0	3.9	4.1	4.0	0.3 *	0.0	0.3	0.3
Years of education								
0 to 8	17.8	12.1	13.9	24.5	1.2 ***	2.3 ***	0.8 **	1.3 **
9 to 11	13.4	12.3	13.5	13.6	0.4	1.6 **	0.6	-0.4
12	35.1	39.8	37.0	31.3	-1.1 ***	-1.8 *	-1.4 ***	-0.5
13 to 15	20.2	22.3	21.3	18.1	-0.1	-0.6	0.2	-0.2
16 or more	13.6	13.5	14.4	12.6	-0.4	-1.5 **	-0.2	-0.2
Unknown (used for children)	0.0	0.0	0.0	0.0	0.0 a	0.0 a	0.0 a	0.0 a
Living Arrangement								
Lives alone	28.3	12.7	23.3	39.1	0.5	1.7 **	1.1 **	-0.6
Lives with relatives	69.5	84.8	74.1	59.3	-0.8 **	-2.2 **	-1.2 **	0.1
Lives with only non-relatives	2.2	2.5	2.7	1.6	0.3 *	0.6	0.1	0.5 ***
Relationship to Householder								
Householder	67.1	56.6	66.5	70.7	-0.2	0.4	0.6	-1.5 ***
Spouse	26.0	37.8	28.6	19.3	-0.2	0.3	-0.7 **	0.4
Child	0.1	0.9	0.1	0.0	0.0	-0.2	0.0	0.0 a
Grandchild	0.0	0.0	0.0	0.0	0.0 a	0.0 a	0.0 a	0.0 a
Parent	2.8	1.7	1.4	4.9	0.1	-1.1 **	0.0	0.5 *
Sibling	0.7	0.5	0.6	0.8	0.1	-0.2	0.1	0.1
Other relative	2.1	1.3	1.4	3.4	0.1	0.3	-0.1	0.1
Nonrelative	1.2	1.2	1.4	0.9	0.2 **	0.4	0.1	0.4 **
Parents Present								
Both mother and father	0.0	0.2	0.0	0.0	0.0 *	-0.2 *	0.0	0.0 a
Mother only	0.5	1.1	0.6	0.1	0.0	-0.2	0.0	0.0
Father only	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0 a
Neither	99.5	98.5	99.3	99.9	0.0	0.4	0.0	0.0

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE G.1.c

DISTRIBUTION OF PERSONAL CHARACTERISTICS IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
DISABLED WORKERS

| Characteristic | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | Total | Age In March 1996 | | | Total | Age In March 1996 | | |
		Under 50	50 to 64	65 +		Under 50	50 to 64	65 +
All Disabled Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Sex								
Male	56.4	61.9	54.1	52.9	0.4	-0.1	-0.1	1.1
Female	43.6	38.1	45.9	47.1	-0.4	0.1	0.1	-1.1
Race								
White	75.5	74.3	80.0	70.1	0.3	0.3	-0.3	1.6
Black	21.8	22.9	17.9	26.2	-0.5	-1.0	0.6	-1.6
American Indian, Alaska Native	1.6	1.7	1.3	2.1	0.0	0.4	-0.3	-0.1
Asian, Pacific Islander	1.1	1.1	0.8	1.6	0.2	0.3	0.1	0.2
Ethnicity								
Hispanic	6.8	6.7	6.0	8.1	-0.1	-0.3	-0.8	1.2 *
Non-Hispanic	93.2	93.3	94.0	91.9	0.1	0.3	0.8	-1.2 *
Marital Status								
Married	43.2	29.5	53.2	45.1	0.8	0.7	0.9	3.0 **
Widowed	14.1	2.2	12.9	30.9	-0.6	-0.3	0.7	-1.6
Divorced or separated	20.4	21.4	23.1	15.0	-2.8 ***	-3.9 ***	-2.9 **	-1.2
Never married	22.3	46.9	10.7	9.0	2.6 ***	3.5 **	1.3 *	-0.2
Years of education								
0 to 8	25.5	14.7	23.2	42.4	1.5 *	3.0 ***	0.6	1.9
9 to 11	18.9	18.0	21.0	16.7	0.4	0.4	1.8 *	-1.8
12	32.2	38.7	31.0	25.8	-1.0	-0.1	-1.9	-1.7
13 to 15	18.1	21.9	19.1	11.8	-0.8	-2.8 *	-0.8	1.4
16 or more	5.4	6.6	5.8	3.2	0.0	-0.5	0.4	0.2
Unknown (used for children)	0.0	0.0	0.0	0.0	0.0 a	0.0 a	0.0 a	0.0 a
Living Arrangement								
Lives alone	23.4	19.2	22.5	30.0	-1.2 *	-0.9	0.5	-3.7 ***
Lives with relatives	68.6	69.4	71.2	63.6	2.1 **	2.8	0.8	3.1 **
Lives with only non-relatives	8.0	11.4	6.3	6.4	-0.9	-1.9	-1.2	0.6
Relationship to Householder								
Householder	59.5	49.5	64.8	64.0	-2.2 **	-3.7 *	0.1	-2.1
Spouse	17.4	12.1	21.6	17.5	1.2 **	0.9	0.9	3.0 ***
Child	8.9	22.9	2.9	0.4	1.7 ***	3.2 **	0.1	0.0
Grandchild	0.2	0.7	0.0	0.0	0.1	0.3	0.0 a	0.0 a
Parent	2.4	0.2	2.1	5.4	-0.4	-0.2	-0.1	-0.7
Sibling	2.3	3.7	1.6	1.6	-0.1	0.2	-0.2	-0.5
Other relative	3.9	2.7	3.4	6.2	0.1	0.4	0.1	-0.3
Nonrelative	5.4	8.2	3.5	4.8	-0.5	-1.1	-0.9	0.6
Parents Present								
Both mother and father	5.0	13.0	1.3	0.3	0.6	0.6	0.1	0.2
Mother only	5.3	11.1	3.5	0.5	1.1 **	2.8 ***	-0.4	0.0
Father only	0.9	2.6	0.2	0.0	0.2	0.3	0.1	0.0 a
Neither	88.9	73.2	95.0	99.2	-1.8 ***	-3.8 ***	0.3	-0.2

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE G.1.d

DISTRIBUTION OF PERSONAL CHARACTERISTICS IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
OTHER SOCIAL SECURITY BENEFICIARIES

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | Age In March 1996 | | | | | Age In March 1996 | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Sex								
Male	19.8	53.3	16.2	8.2	-0.3	-2.1	0.2	-0.8 *
Female	80.2	46.7	83.8	91.8	0.3	2.1	-0.2	0.8 *
Race								
White	85.9	73.1	83.2	91.3	-1.7 **	-4.3 **	0.4	-0.7 *
Black	11.4	21.7	14.1	6.9	1.5 **	4.9 ***	0.5	0.1
American Indian, Alaska Native	1.1	2.9	0.6	0.5	0.4 ***	0.5	0.2	0.3 **
Asian, Pacific Islander	1.6	2.3	2.1	1.3	-0.2	-1.1	-1.2	0.3
Ethnicity								
Hispanic	6.4	11.8	8.9	3.7	0.0	-0.9	-0.5	0.2
Non-Hispanic	93.6	88.2	91.1	96.3	0.0	0.9	0.5	-0.2
Marital Status								
Married	24.1	0.0	31.5	31.2	-1.6 ***	0.0 a	-0.6	-1.9 **
Widowed	46.7	0.0	42.0	65.1	-0.3	0.0 a	-1.1	1.4 *
Divorced or separated	3.1	0.2	7.3	3.2	0.4 **	0.0	1.4 *	0.3
Never married	26.1	99.8	19.3	0.6	1.5 **	0.0	0.4	0.2
Years of education								
0 to 8	17.4	5.2	15.2	22.4	1.3 **	-0.1	1.2	2.3 ***
9 to 11	18.7	23.8	21.3	16.2	-0.2	-1.0	1.4	-0.5
12	27.2	1.6	38.9	33.8	-1.9 ***	-0.1	-1.1	-2.3 ***
13 to 15	14.6	0.0	19.7	18.7	-0.1	0.0 a	-0.6	0.4
16 or more	6.3	0.0	4.9	8.9	-0.3	0.0 a	-0.9	0.1
Unknown (used for children)	15.9	69.3	0.0	0.0	1.1 *	1.3	0.0 a	0.0 a
Living Arrangement								
Lives alone	34.4	0.0	23.0	49.9	-0.7	0.0 a	-2.3 *	0.7
Lives with relatives	63.5	98.6	71.0	48.6	0.5	-0.7	3.5 **	-1.1
Lives with only non-relatives	2.1	1.4	6.0	1.4	0.2	0.7	-1.2	0.3
Relationship to Householder								
Householder	51.9	0.1	56.2	69.9	0.0	0.0	-0.3	1.6 **
Spouse	15.7	0.0	20.5	20.3	-1.0 **	0.0 a	0.3	-1.3 **
Child	22.2	88.1	13.1	0.0	1.6 **	1.2	1.2	0.0 a
Grandchild	1.3	5.2	0.7	0.0	-0.1	-0.6	0.1	0.0 a
Parent	3.5	0.0	2.4	5.0	-0.1	0.0 a	0.4	-0.2
Sibling	0.6	0.6	0.9	0.6	-0.2	-0.3	-0.2	-0.2
Other relative	3.0	3.2	1.2	3.3	-0.3	-0.8	-0.2	-0.2
Nonrelative	1.9	2.7	4.9	0.9	0.1	0.5	-1.3	0.2
Parents Present								
Both mother and father	10.2	41.8	4.2	0.0	0.8	1.5	-0.3	0.0 a
Mother only	12.5	46.8	10.0	0.5	0.8	-0.4	1.4	0.1 *
Father only	1.1	4.3	0.5	0.0	-0.3	-1.5 *	0.4 *	0.0
Neither	76.2	7.1	85.3	99.5	-1.4 *	0.5	-1.5	-0.1

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF PERSONAL CHARACTERISTICS IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
SSI RECIPIENTS

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | Age In March 1996 | | | | | Age In March 1996 | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Sex								
Male	46.0	63.0	50.6	28.2	-1.4	-2.4	-1.8	1.1
Female	54.0	37.0	49.4	71.8	1.4	2.4	1.8	-1.1
Race								
White	61.4	54.7	64.7	58.2	-0.3	2.7	-0.9	-0.6
Black	30.9	40.6	30.6	26.7	-0.4	-2.4	0.6	-1.0
American Indian, Alaska Native	2.2	2.2	2.3	2.2	0.4	0.7	0.1	0.8 **
Asian, Pacific Islander	5.4	2.5	2.4	13.0	0.3	-1.0	0.1	0.8
Ethnicity								
Hispanic	13.3	14.2	10.5	18.6	0.4	-3.6	0.7	1.5
Non-Hispanic	86.7	85.8	89.5	81.4	-0.4	3.6	-0.7	-1.5
Marital Status								
Married	20.0	0.0	21.9	25.8	1.5 *	0.0 a	1.1	1.7
Widowed	16.5	0.0	7.6	42.6	-0.2	0.0 a	-0.5	-1.4
Divorced or separated	19.9	0.3	24.3	20.6	-0.3	-0.3	-0.7	-0.7
Never married	43.7	99.7	46.2	10.9	-1.0	0.3	0.0	0.3
Years of education								
0 to 8	32.3	6.7	26.3	57.3	2.6 ***	-0.8	2.6 **	1.9
9 to 11	19.6	17.8	21.5	16.8	-1.1	-1.7	-1.1	-0.9
12	26.0	1.4	36.9	15.9	-0.5	1.0	-1.0	-1.1
13 to 15	9.1	0.0	12.3	7.0	0.1	0.0 a	0.0	0.2
16 or more	2.5	0.0	2.9	3.1	-0.2	0.0 a	-0.4	0.0
Unknown (used for children)	10.4	74.0	0.0	0.0	-0.9	1.5	0.0 a	0.0 a
Living Arrangement								
Lives alone	23.6	0.0	21.1	40.4	-0.7	0.0 a	-1.2	-1.8
Lives with relatives	67.1	97.9	65.9	54.3	1.4	-1.6 **	3.0 **	1.4
Lives with only non-relatives	9.2	2.1	12.9	5.3	-0.7	1.6 **	-1.8 **	0.4
Relationship to Householder								
Householder	45.7	0.0	47.9	63.7	-0.1	0.0 a	-2.0 *	0.7
Spouse	8.2	0.0	9.9	8.9	0.9 **	0.0 a	0.7	1.2 **
Child	24.2	81.6	22.1	0.2	0.6	0.5	2.7 **	0.1
Grandchild	1.6	9.3	0.6	0.0	0.0	0.6	0.1	0.0 a
Parent	4.1	0.0	1.8	11.0	0.2	0.0 a	0.2	0.0
Sibling	2.9	0.6	3.3	3.1	0.2	0.0	0.1	0.2
Other relative	5.9	4.0	4.6	9.3	-1.5 ***	-2.4 *	-0.8	-2.6 ***
Nonrelative	7.4	4.5	9.9	3.8	-0.3	1.3	-1.0	0.4
Parents Present								
Both mother and father	12.1	34.6	12.5	0.2	-0.6	-4.4	0.6	0.1
Mother only	13.7	52.1	10.7	0.7	0.3	1.8	1.4	-0.1
Father only	1.0	2.5	1.1	0.0	0.4 **	1.0	0.5 **	0.0 a
Neither	73.2	10.8	75.7	99.0	-0.1	1.6	-2.5 **	0.0

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
THE TOTAL POPULATION

| Characteristic | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | | Age In March 1996 | | | | Age In March 1996 | | |
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	10.7	19.3	7.2	9.2	-0.1	-1.0 ***	0.1	1.0 ***
Medicare	12.4	0.0	2.0	93.0	0.0	0.0 a	0.1 **	-0.2
Private (including military)	73.2	68.6	74.6	76.9	1.2 ***	2.3 ***	1.1 ***	-0.4
None	15.3	14.6	18.4	1.0	-1.1 ***	-1.2 ***	-1.2 ***	0.0
Sources of Own Income								
Social Security	14.9	3.1	4.9	92.4	0.2 **	0.3 **	0.2 ***	-0.3
SSI	2.3	1.2	2.1	5.4	0.2 ***	0.0	0.2 ***	0.8 ***
Other public assistance	1.9	0.1	2.8	1.3	0.0	0.0	-0.1	0.1
Earnings	47.0	4.2	72.9	11.4	0.4 ***	0.1	0.7 ***	0.2
Asset income	41.4	3.9	52.6	68.4	1.1 ***	0.4 ***	1.8 ***	-0.6 *
Other	11.0	0.1	9.4	43.7	0.1	0.0	0.0	0.6 *
Total Personal Income, avg. monthly								
Under $100	33.7	92.7	13.9	1.9	-0.3 ***	-0.2	-0.5 ***	-0.1
$100 to 249	3.4	2.5	4.0	2.4	0.0	0.2	-0.1	-0.1
$250 to 499	7.2	3.1	7.6	14.7	0.1	0.1	0.0	0.5 **
$500 to 749	7.0	1.1	7.3	18.3	0.1	-0.1	0.2	0.3
$750 to 999	6.0	0.4	6.6	15.2	0.0	0.0	0.1	-0.5
$1,000 to 1,499	10.3	0.2	13.0	19.3	-0.2	0.0	-0.3 *	0.2
$1,500 to 1,999	8.1	0.0	11.0	11.4	0.1 *	0.0	0.3 **	-0.1
$2,000 to 2,999	11.1	0.0	16.2	9.5	0.1	0.0 *	0.2	0.0
$3,000 to 3,999	5.9	0.0	8.9	3.9	0.2 **	0.0	0.3 **	-0.1
$4,000 to 4999	3.1	0.0	4.8	1.5	0.1	0.0 a	0.1	0.0
$5,000 or more	4.2	0.0	6.6	1.8	-0.2 ***	0.0 a	-0.3 ***	-0.3 ***
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	86.4	96.9	95.5	16.2	-0.2 ***	-0.2 *	-0.2 ***	0.1
25 to under 50 percent	3.3	0.1	1.2	21.7	0.0	0.0	0.0	-0.2
50 to under 75 percent	3.2	0.1	1.0	21.5	0.1 **	0.0	0.1 *	0.5 *
75 to under 100 percent	4.0	0.3	1.1	26.9	0.0	0.1	0.0	-0.2
100 percent	3.1	2.6	1.2	13.7	0.1	0.2	0.1 *	-0.2

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
RETIRED WORKERS

Characteristic	Cross-sectional Sample				Difference between Full Panel and Cross-sectional Samples			
		Age In March 1996				Age In March 1996		
	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	6.3	4.1	6.3	6.9	0.4 **	0.9 *	0.7 ***	-0.1
Medicare	91.0	16.7	100.0	100.0	0.0	-1.8 *	0.0	0.0 a
Private (including military)	79.8	81.8	80.4	78.6	0.1	-0.6	0.1	0.2
None	1.1	10.4	0.0	0.0	0.0	-0.2	0.0	0.0 a
Sources of Own Income								
Social Security	100.0	100.0	100.0	100.0	0.0 a	0.0 a	0.0 a	0.0 a
SSI	2.8	1.4	3.0	3.0	0.4 ***	0.7 *	0.4 **	0.2
Other public assistance	0.9	0.7	0.9	0.9	0.2 ***	0.3 *	0.1	0.2 **
Earnings	10.9	17.4	14.7	3.9	0.6 ***	2.3 **	0.7 *	0.2
Asset income	70.8	65.0	71.5	71.5	-0.1	0.2	-0.3	0.0
Other	47.9	46.8	49.6	45.9	0.6	-0.2	0.6	0.9
Total Personal Income, avg. monthly								
Under $100	0.3	0.2	0.4	0.2	0.0	0.1	0.0	-0.1
$100 to 249	1.9	2.5	2.0	1.8	0.0	-0.2	0.1	-0.1
$250 to 499	13.6	14.8	13.8	13.0	0.3	-0.9	0.1	0.9 **
$500 to 749	18.0	19.3	16.4	19.7	0.2	0.7	0.4	-0.2
$750 to 999	15.7	9.9	14.3	19.2	-0.4	-0.1	-0.4	-0.6
$1,000 to 1,499	20.3	15.8	20.2	21.8	0.2	0.0	0.4	0.1
$1,500 to 1,999	12.5	13.8	13.6	10.8	0.0	0.7	-0.5	0.5
$2,000 to 2,999	10.7	15.1	11.8	8.0	-0.1	0.1	0.2	-0.4
$3,000 to 3,999	4.1	4.8	4.6	3.3	-0.1	-0.3	-0.1	0.1
$4,000 to 4999	1.6	2.7	1.6	1.2	0.0	0.1	0.0	0.0
$5,000 or more	1.3	1.1	1.5	1.1	-0.2 *	-0.2	-0.2	-0.1
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	9.7	14.3	10.7	7.2	-0.1	-0.4	-0.1	-0.1
25 to under 50 percent	24.9	31.5	27.9	19.0	0.1	2.8 **	-0.2	-0.3
50 to under 75 percent	23.2	17.7	23.9	23.9	0.4	-0.9	0.3	0.9 *
75 to under 100 percent	28.1	20.6	25.0	34.3	-0.1	-1.3	-0.1	0.2
100 percent	14.0	15.9	12.4	15.6	-0.3	-0.2	0.0	-0.6

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
DISABLED WORKERS

| Characteristic | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | | Age In March 1996 | | | | Age In March 1996 | | |
	Total	Under 50	50 to 64	65 +	Total	Under 50	50 to 64	65 +
All Disabled Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	35.8	49.0	27.8	31.2	0.9	0.8	0.2	0.3
Medicare	76.6	64.0	71.8	100.0	-0.2	-0.6	0.8	0.0 a
Private (including military)	39.9	26.8	47.0	45.6	-0.7	1.2	-1.6	-0.1
None	5.1	7.8	6.1	0.0	0.2	-1.1	1.4 **	0.0 a
Sources of Own Income								
Social Security	100.0	100.0	100.0	100.0	0.0 a	0.0 a	0.0 a	0.0 a
SSI	21.2	29.9	14.1	21.0	0.5	-0.4	0.3	0.8
Other public assistance	5.1	6.8	3.5	5.4	0.0	0.8	-1.0	0.2
Earnings	8.3	15.9	4.8	4.0	0.9	0.6	0.5	0.6
Asset income	33.9	22.8	39.8	39.1	-0.1	1.5	-1.1	0.6
Other	26.6	15.1	34.2	29.7	-1.5 **	-1.1	-1.9	0.0
Total Personal Income, avg. monthly								
Under $100	0.6	1.0	0.2	0.5	0.2 *	0.6 **	-0.2	0.2
$100 to 249	2.3	3.3	1.3	2.4	0.0	0.3	0.0	-0.6
$250 to 499	21.4	23.5	19.4	21.6	1.7 **	2.5	0.5	2.2 *
$500 to 749	31.0	34.7	26.6	32.9	0.3	-0.7	2.3 *	-1.8
$750 to 999	15.2	14.6	16.0	14.6	-0.4	-0.6	-0.6	0.3
$1,000 to 1,499	15.5	12.2	18.5	15.1	-0.3	-0.7	-0.1	0.6
$1,500 to 1,999	7.2	5.5	9.1	6.5	-1.0 **	-1.6 **	-0.7	-0.3
$2,000 to 2,999	4.7	3.7	6.1	4.0	-0.4	0.2	-0.9	-0.4
$3,000 to 3,999	1.6	0.8	2.1	2.0	-0.1	0.4 *	-0.3	-0.2
$4,000 to 4999	0.2	0.3	0.3	0.0	-0.1	-0.3	-0.1	0.0 a
$5,000 or more	0.4	0.3	0.4	0.4	0.0	-0.1	0.2	0.0
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	4.9	5.7	3.9	5.3	-0.2	-0.4	0.0	-0.5
25 to under 50 percent	16.2	15.9	16.9	15.5	-0.8	-2.2 *	-0.5	0.9
50 to under 75 percent	21.4	20.1	20.8	24.1	0.2	0.7	0.5	-0.8
75 to under 100 percent	27.0	24.6	27.6	29.2	0.5	1.3	-0.4	1.0
100 percent	30.6	33.8	30.8	26.1	0.3	0.5	0.4	-0.6

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.

 ** Statistically signficant at 0.05 level.

  * Statistically significant at 0.10 level.

a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE G.2.d

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
ALL OTHER SOCIAL SECURITY BENEFICIARIES

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | Age In March 1996 | | | | | Age In March 1996 | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	15.4	27.9	20.3	9.5	1.6 ***	0.8	1.1	1.5 ***
Medicare	64.6	0.0	18.2	100.0	-1.8 **	0.0 a	0.4	0.0 a
Private (including military)	68.4	51.7	56.9	77.3	-0.9	0.4	-1.3	-0.6
None	8.5	22.9	21.2	0.0	0.1	-2.2	1.0	0.0 a
Sources of Own Income								
Social Security	100.0	100.0	100.0	100.0	0.0 a	0.0 a	0.0 a	0.0 a
SSI	5.3	3.6	8.1	5.2	0.9 ***	0.6	0.5	1.1 ***
Other public assistance	1.5	0.0	4.6	1.4	0.1	0.0 a	1.0	-0.2
Earnings	11.9	5.0	29.9	10.0	0.0	0.2	-1.4	0.1
Asset income	49.5	6.7	42.3	67.2	-0.7	1.1	-0.5	0.1
Other	22.8	0.4	21.5	31.3	-0.4	0.0	0.7	0.0
Total Personal Income, avg. monthly								
Under $100	4.5	17.7	1.7	0.3	1.0 **	2.9 *	0.2	0.1
$100 to 249	8.7	24.3	7.4	3.2	-0.2	-1.4	0.8	-0.5 *
$250 to 499	21.6	31.1	22.5	17.9	-0.1	-0.6	-0.9	0.0
$500 to 749	20.9	19.3	20.1	21.8	0.3	-1.1	-0.8	1.2 *
$750 to 999	13.7	5.8	11.7	17.1	-0.4	-0.2	2.5 **	-1.0
$1,000 to 1,499	14.3	1.7	18.2	18.0	-0.3	0.5	0.1	-0.5
$1,500 to 1,999	6.9	0.2	7.8	9.2	-0.3	-0.2	-2.0 **	0.2
$2,000 to 2,999	5.3	0.0	5.8	7.2	0.2	0.0 a	0.5	0.3
$3,000 to 3,999	2.1	0.0	2.3	2.8	0.1	0.0 a	0.2	0.1
$4,000 to 4999	0.7	0.0	1.3	0.9	0.1	0.0 a	-0.3	0.2
$5,000 or more	1.1	0.0	1.1	1.6	-0.2	0.0 a	-0.3	-0.2
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	7.8	0.8	11.4	9.5	-0.5	0.0	-1.3	-0.3
25 to under 50 percent	16.4	1.9	22.1	20.4	0.3	0.8	0.9	0.3
50 to under 75 percent	16.6	4.2	20.5	20.2	0.4	-0.6	1.2	0.9
75 to under 100 percent	24.8	9.5	20.9	31.4	-0.9	0.9	-1.4	-1.0
100 percent	34.4	83.6	25.1	18.6	0.7	-1.1	0.5	0.1

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF ADDITIONAL PERSONAL CHARACTERISTICS IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
SSI RECIPIENTS

| Characteristic | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | | Age In March 1996 | | | | Age In March 1996 | | |
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Health Insurance								
Medicaid	93.4	86.3	93.9	96.0	0.5	2.3	0.0	0.4
Medicare	30.5	0.0	19.6	67.7	0.6	0.0 a	0.3	-1.3
Private (including military)	13.7	23.8	13.5	8.9	0.4	-1.4	1.4 *	-0.1
None	2.8	6.5	3.1	0.4	-0.2	0.1	-0.3	-0.1
Sources of Own Income								
Social Security	36.5	9.8	27.7	67.5	0.7	3.1 *	-0.1	-1.1
SSI	100.0	100.0	100.0	100.0	0.0 a	0.0 a	0.0 a	0.0 a
Other public assistance	10.5	0.8	14.7	6.8	0.6	0.1	0.9	0.0
Earnings	7.2	2.3	11.1	1.7	0.8	0.3	1.2	0.2
Asset income	11.0	1.0	12.2	13.6	-0.1	0.9	0.1	-1.5 *
Other	6.2	0.2	7.7	6.0	-0.1	-0.2	-0.3	0.0
Total Personal Income, avg. monthly								
Under $100	2.1	7.8	1.5	0.4	-0.3	-3.2	0.3	0.1
$100 to 249	5.3	13.9	4.0	3.7	0.0	1.2	-0.1	0.1
$250 to 499	50.7	65.1	46.5	52.2	1.7 **	1.5	1.6	2.5 *
$500 to 749	27.8	9.1	28.6	35.3	-1.1	-1.2	-1.1	-2.2
$750 to 999	6.3	3.5	7.8	4.5	0.1	1.6	0.2	-0.8
$1,000 to 1,499	4.4	0.4	6.4	2.5	0.2	0.3	0.0	0.4
$1,500 to 1,999	1.8	0.2	2.6	0.9	-0.3	-0.2	-0.6	0.0
$2,000 to 2,999	1.1	0.0	1.8	0.2	0.0	0.0 a	0.0	0.1
$3,000 to 3,999	0.3	0.0	0.5	0.2	-0.2 *	0.0 a	-0.3	-0.2
$4,000 to 4999	0.1	0.0	0.1	0.0	0.0	0.0 a	0.0	0.0 a
$5,000 or more	0.1	0.0	0.2	0.0	0.0	0.0 a	0.0	0.0 a
SSEC Payments as a Percentage of Total Personal Income, avg. monthly								
Under 25 percent	65.9	91.6	74.5	35.6	-0.6	-2.8	-0.1	1.4
25 to under 50 percent	7.3	1.7	6.1	12.6	0.5	1.6 **	-0.2	1.0
50 to under 75 percent	14.3	4.1	9.9	28.2	0.2	0.0	0.6	-1.4
75 to under 100 percent	12.6	2.7	9.5	23.7	0.0	1.3	-0.3	-1.0
100 percent	0.0	0.0	0.0	0.0	0.0 a	0.0 a	0.0 a	0.0 a

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
THE TOTAL POPULATION

| Characteristic | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | | Age In March 1996 | | | | Age In March 1996 | | |
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Persons	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	66.0	70.9	65.9	55.5	1.3 ***	2.3 ***	1.4 ***	-1.1 ***
No married couple present								
Male householder	4.2	4.4	4.5	2.6	-0.4 ***	-0.6 ***	-0.3 ***	0.0
Female householder	15.4	23.4	13.3	8.1	-0.6 ***	-1.4 ***	-0.5 ***	0.4 **
Nonfamily								
Male householder	6.7	0.8	9.0	8.3	-0.3 ***	-0.2 ***	-0.4 ***	0.2
Female householder	7.4	0.3	7.1	25.3	-0.1	-0.1 *	-0.1	0.5 **
Ownership Status of Living Quarters								
Owned	68.1	63.8	67.2	82.6	1.9 ***	2.8 ***	1.9 ***	0.2
Not owned	31.9	36.2	32.8	17.4	-1.9 ***	-2.8 ***	-1.9 ***	-0.2
Residence in Public Housing	2.6	3.9	1.9	2.9	0.0	-0.3 *	0.1	0.0
Household Size								
1 person	9.5	0.0	9.4	31.6	0.0	0.0 *	-0.1 *	0.4
2 persons	25.5	4.3	29.5	53.2	-0.6 ***	-0.1	-0.8 ***	-0.7 *
3 to 4 persons	42.6	53.7	43.7	12.0	0.4	-0.1	0.5 **	0.3
5 or more persons	22.3	42.1	17.4	3.2	0.3	0.2	0.3	0.0
Family Size								
1 person	15.3	1.1	18.0	34.1	-0.5 ***	-0.2 *	-0.8 ***	0.6 *
2 persons	23.7	6.0	26.0	51.6	-0.6 ***	-0.5 ***	-0.6 **	-0.9 **
3 to 4 persons	40.4	53.5	40.3	11.4	0.6 ***	0.2	0.9 ***	0.2
5 or more persons	20.6	39.4	15.7	3.0	0.5 **	0.5	0.5 **	0.1
Persons under 18 in Family								
None	44.8	1.2	54.1	95.1	-1.1 ***	-0.2 **	-1.7 ***	-0.1
1 person	17.8	21.9	19.0	2.8	0.0	-0.7 **	0.3	0.0
2 persons	21.1	39.0	17.1	1.3	0.8 ***	0.7 *	0.9 ***	0.1
3 persons	10.2	22.6	6.7	0.5	0.2	0.1	0.3 **	0.0
4 persons	3.8	9.2	2.0	0.3	0.1	0.1	0.1	0.0
5 or more persons	2.3	6.0	1.0	0.1	0.0	-0.1	0.0	0.0

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
[a] The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
RETIRED WORKERS

| | | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | |
| | | Age In March 1996 | | | | Age In March 1996 | | |
Characteristic	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	60.7	77.2	66.3	48.8	-1.2 ***	-2.2 **	-1.4 **	-0.5
No married couple present								
Male householder	2.5	2.0	2.4	2.8	0.0	-0.4	0.0	0.2
Female householder	6.3	5.6	5.5	7.7	0.3 *	0.2	0.2	0.5 *
Nonfamily								
Male householder	8.9	6.4	8.3	10.4	0.5 *	1.5 **	0.4	0.2
Female householder	21.2	8.5	17.2	29.9	0.4	1.0	0.7 **	-0.4
Ownership Status of Living Quarters								
Owned	84.3	88.2	86.2	80.8	0.3	-0.3	0.1	0.7
Not owned	15.7	11.8	13.8	19.2	-0.3	0.3	-0.1	-0.7
Residence in Public Housing	2.6	1.9	2.0	3.5	0.1	0.2	0.1	0.1
Household Size								
1 person	28.3	12.7	23.3	39.1	0.5	1.7 **	1.1 **	-0.6
2 persons	57.7	68.8	62.0	49.0	-0.7 *	-0.9	-1.1 **	0.0
3 to 4 persons	11.6	14.9	12.4	9.5	0.2	-0.2	0.2	0.5
5 or more persons	2.5	3.7	2.3	2.3	-0.1	-0.5	-0.1	0.1
Family Size								
1 person	30.5	15.2	25.9	40.7	0.8 **	2.2 **	1.2 **	-0.1
2 persons	56.1	67.0	60.1	47.9	-0.9 **	-1.2	-1.3 **	-0.2
3 to 4 persons	11.1	14.5	11.8	9.1	0.1	-0.2	0.2	0.1
5 or more persons	2.3	3.4	2.1	2.2	-0.1	-0.8 *	-0.1	0.2
Persons under 18 in Family								
None	95.7	92.0	95.5	97.0	0.1	1.1	0.1	-0.2
1 person	2.6	5.1	2.8	1.5	-0.1	-1.0 *	-0.1	0.1
2 persons	1.0	1.9	0.8	0.9	0.0	-0.3	0.0	0.0
3 persons	0.5	0.6	0.5	0.4	0.1	0.2	0.0	0.1
4 persons	0.2	0.4	0.3	0.1	0.0	0.0	0.0	0.0
5 or more persons	0.0	0.0	0.0	0.1	0.0	0.0 a	0.0	0.0

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.

 ** Statistically signficant at 0.05 level.

  * Statistically significant at 0.10 level.

a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE G.3.c

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
DISABLED WORKERS

| Characteristic | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | | Age In March 1996 | | | | Age In March 1996 | | |
	Total	Under 50	50 to 64	65 +	Total	Under 50	50 to 64	65 +
All Disabled Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	48.9	43.0	54.3	48.1	1.6 *	1.5	1.0	3.5 **
No married couple present								
Male householder	5.8	8.3	4.8	4.0	0.3	-0.5	0.5	0.8
Female householder	15.7	21.9	12.2	13.0	-0.1	1.1	-0.7	-1.7
Nonfamily								
Male householder	13.5	16.0	13.1	10.8	-0.9	-1.5	-0.4	-1.0
Female householder	15.4	9.6	15.3	23.0	-1.1	-0.6	-0.4	-1.9
Ownership Status of Living Quarters								
Owned	64.4	51.8	70.9	70.4	0.6	3.2 *	-0.1	-0.2
Not owned	35.6	48.2	29.1	29.6	-0.6	-3.2 *	0.1	0.2
Residence in Public Housing	6.9	7.6	5.9	7.6	0.3	0.7	0.6	-0.8
Household Size								
1 person	23.4	19.2	22.5	30.0	-1.2 *	-0.9	0.5	-3.7 ***
2 persons	38.5	24.6	48.5	40.9	0.3	0.9	-1.3	3.6 **
3 to 4 persons	27.8	40.9	21.4	20.9	0.6	-0.8	0.7	0.4
5 or more persons	10.3	15.3	7.5	8.2	0.4	0.7	0.1	-0.4
Family Size								
1 person	31.4	30.6	28.8	36.4	-2.1 **	-2.8	-0.8	-3.1 **
2 persons	34.8	20.6	44.3	38.2	0.8	1.4	0.1	3.1 **
3 to 4 persons	25.3	37.1	19.9	18.4	0.6	-0.4	0.7	0.0
5 or more persons	8.6	11.7	7.0	7.0	0.7	1.7	0.0	0.0
Persons under 18 in Family								
None	80.6	66.8	86.0	90.0	-0.4	-0.1	0.3	0.1
1 person	9.5	16.3	7.1	4.7	-0.4	-0.7	-0.8	-0.3
2 persons	5.5	10.7	3.4	2.3	0.3	-0.2	-0.1	0.7
3 persons	2.6	3.7	2.2	1.7	0.2	0.8	0.3	-0.8
4 persons	1.2	1.6	1.1	1.0	0.1	0.0	0.4	0.0
5 or more persons	0.5	0.9	0.2	0.4	0.1	0.2	-0.1	0.2

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
[a] The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE G.3.d

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
ALL OTHER SOCIAL SECURITY BENEFICIARIES

| Characteristic | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | | Age In March 1996 | | | | Age In March 1996 | | |
	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	36.4	44.1	36.3	33.7	-1.2 *	-0.8	0.9	-2.1 ***
No married couple present								
Male householder	2.8	6.3	3.3	1.4	-0.4	-1.1	-0.3	-0.2
Female householder	24.5	48.2	32.6	13.8	2.4 ***	1.9	3.4 **	1.3 **
Nonfamily								
Male householder	2.0	1.0	5.1	1.6	-0.4 *	-0.1	-2.1 ***	0.0
Female householder	34.0	0.1	22.6	49.4	-0.3	0.1	-1.8	1.2
Ownership Status of Living Quarters								
Owned	75.9	62.8	71.8	81.8	0.6	0.7	1.6	0.9
Not owned	24.1	37.2	28.2	18.2	-0.6	-0.7	-1.6	-0.9
Residence in Public Housing	4.3	6.1	4.6	3.5	-0.2	0.2	-0.8	-0.2
Household Size								
1 person	34.4	0.0	23.0	49.9	-0.7	0.0 a	-2.3 *	0.7
2 persons	29.4	10.1	29.8	36.5	-0.7	1.7 *	-1.6	-0.9
3 to 4 persons	24.5	54.9	34.7	10.7	0.4	-4.0 **	2.4	0.4
5 or more persons	11.7	35.0	12.4	2.9	1.1	2.3	1.5	-0.3
Family Size								
1 person	36.5	1.4	29.0	51.4	-0.5	0.7	-3.5 **	1.1
2 persons	28.9	11.9	27.2	35.6	-0.8	0.5	0.4	-1.1
3 to 4 persons	24.1	55.6	32.7	10.3	0.9	-1.9	2.6	0.3
5 or more persons	10.5	31.1	11.1	2.7	0.5	0.7	0.5	-0.3
Persons under 18 in Family								
None	68.7	1.4	63.7	94.9	-1.5 **	0.7	-2.5	0.1
1 person	11.7	30.2	19.4	3.0	0.5	-0.2	1.2	-0.2
2 persons	9.8	33.1	9.6	1.3	0.3	-1.2	-0.5	0.3 *
3 persons	5.6	19.4	4.8	0.6	-0.2	-1.8	0.4	-0.2
4 persons	2.4	9.0	1.6	0.2	0.5	1.1	0.8 *	0.0
5 or more persons	1.7	7.0	0.8	0.0	0.5 *	1.3	0.6 *	0.0

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY CHARACTERISTICS IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
SSI RECIPIENTS

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | Age In March 1996 | | | | Age In March 1996 | | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Type								
Family								
Married couple present	34.6	37.9	35.8	30.5	0.7	-2.8	1.4	1.3
No married couple present								
Male householder	5.8	5.3	6.5	4.6	0.1	0.8	0.3	-0.5
Female householder	29.6	55.2	28.0	20.3	0.0	2.0	0.4	-0.1
Nonfamily								
Male householder	10.7	1.5	14.2	8.1	-0.9 *	0.3	-1.6 *	-0.3
Female householder	18.5	0.2	14.4	35.8	0.0	-0.2	-0.5	-0.3
Ownership Status of Living Quarters								
Owned	44.1	41.7	42.7	48.0	1.9 *	2.0	1.9	1.4
Not owned	55.9	58.3	57.3	52.0	-1.9 *	-2.0	-1.9	-1.4
Residence in Public Housing	12.4	12.5	11.4	14.3	1.3 **	3.6 *	1.7 **	-0.6
Household Size								
1 person	23.6	0.0	21.1	40.4	-0.7	0.0 a	-1.2	-1.8
2 persons	24.9	7.0	26.8	30.0	2.5 ***	0.7	2.4 *	2.4 **
3 to 4 persons	30.7	46.3	33.3	17.7	0.0	3.2	0.2	-0.5
5 or more persons	20.8	46.7	18.9	11.8	-1.8 **	-3.9	-1.4	-0.1
Family Size								
1 person	32.9	2.1	34.1	45.7	-1.4	1.6 **	-3.0 **	-1.4
2 persons	22.2	10.4	22.5	27.3	2.3 ***	0.4	2.7 **	1.8 *
3 to 4 persons	26.8	43.7	27.7	16.5	0.3	1.5	1.4	-1.0
5 or more persons	18.2	43.8	15.7	10.5	-1.3	-3.5	-1.0	0.5
Persons under 18 in Family								
None	64.9	2.1	70.3	85.1	1.5	1.6 **	0.4	-0.2
1 person	11.5	19.3	12.2	6.3	0.0	-0.5	0.6	-0.4
2 persons	10.8	30.8	8.8	4.8	-0.7	-0.7	-0.4	-0.1
3 persons	7.2	24.2	5.2	2.7	0.6	4.9	0.3	0.3
4 persons	2.9	12.6	1.9	0.3	-0.9 **	-4.1 *	-0.5	0.1
5 or more persons	2.7	11.0	1.6	0.8	-0.5	-1.3	-0.5	0.3 *

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
THE TOTAL POPULATION

| Characteristic | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | Total | Age In March 1996 | | | Total | Age In March 1996 | | |
		Under 18	18 to 64	65 +		Under 18	18 to 64	65 +
All Persons	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	2.7	4.2	2.1	2.7	0.1	-0.2	0.1	0.2 **
Housing assistance	2.0	3.3	1.5	1.3	0.0	-0.1	0.0	-0.1
Food stamps	10.2	16.8	8.2	5.1	-0.2	-1.0 ***	0.0	0.5 ***
Total Household Income, avg. monthly								
Less than $500	4.8	5.6	4.3	5.3	-0.3 ***	-0.6 ***	-0.2 **	0.0
$500 to 999	7.7	8.0	5.7	16.9	0.1	0.1	0.1	0.4
$1,000 to 1,499	8.8	8.8	7.2	16.7	-0.2	-0.3	-0.2	0.1
$1,500 to 1,999	8.9	8.4	8.0	14.6	-0.1	-0.5 **	0.0	0.4
$2,000 to 2,999	17.0	16.4	16.7	19.6	-0.2	-0.5 **	0.1	-0.4
$3,000 to 3,999	14.6	14.6	15.3	10.9	0.1	0.2	0.1	-0.6 **
$4,000 to 4,999	11.5	11.6	12.5	6.4	0.5 ***	0.5 *	0.6 ***	0.2
$5,000 or more	26.8	26.5	30.3	9.7	0.0	1.2 ***	-0.4 **	-0.1
Total Family Income, avg. monthly								
Less than $500	6.6	7.7	6.3	5.7	-0.6 ***	-0.9 ***	-0.6 ***	0.1
$500 to 999	8.6	8.6	6.9	17.6	0.1	0.0	0.0	0.4
$1,000 to 1,499	9.4	9.0	8.0	17.0	-0.1	-0.3	-0.1	0.1
$1,500 to 1,999	9.1	8.3	8.3	14.3	-0.1	-0.4 **	0.0	0.4
$2,000 to 2,999	16.7	15.8	16.6	19.2	0.0	-0.4	0.2	-0.5
$3,000 to 3,999	13.8	13.9	14.3	10.6	0.1	0.4	0.2	-0.6 **
$4,000 to 4,999	10.9	11.2	11.7	6.2	0.6 ***	0.5 *	0.7 ***	0.2
$5,000 or more	25.0	25.4	27.9	9.4	0.0	1.1 ***	-0.4 **	-0.1
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	2.0	1.9	2.3	0.5	-0.3 ***	-0.1	-0.4 ***	-0.1
10 to under 50 percent	4.5	8.1	3.5	1.4	-0.3 **	-0.5 *	-0.2 **	0.0
50 to under 100 percent	9.1	12.6	7.4	10.3	0.1	-0.2	0.2	0.4 *
100 to under 125 percent	4.8	5.8	3.9	7.3	-0.2 **	-0.5 ***	-0.1	0.2
125 to under 150 percent	5.2	5.8	4.5	7.4	0.0	-0.1	0.1	0.0
150 to under 200 percent	10.3	11.3	9.1	13.8	0.1	-0.2	0.1	0.2
200 to under 300 percent	19.3	19.7	18.4	23.2	0.2	0.3	0.2	-0.3
300 to under 400 percent	14.8	13.7	15.5	14.1	0.4 ***	0.8 ***	0.4 **	0.0
400 percent or more	29.9	21.2	35.3	22.0	-0.1	0.5 *	-0.3	-0.4
Distribution of Family Income by Source, avg. monthly								
Social Security	4.8	1.5	2.5	36.1	0.1	0.0	0.1 ***	0.4
SSI	0.6	0.7	0.5	1.0	0.1 ***	0.0	0.1 ***	0.1 ***
Other public assistance	0.7	1.3	0.4	0.3	0.0 *	-0.2 ***	0.0	0.1 **
Earnings	85.5	91.5	89.7	28.2	0.1	0.3 **	0.0	-0.6
Asset income	3.4	2.1	2.8	12.7	-0.1 *	0.0	-0.1	-0.2
All other	5.1	2.9	4.1	21.7	-0.1	-0.1	0.0	0.3

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
RETIRED WORKERS

Characteristic	Cross-sectional Sample				Difference between Full Panel and Cross-sectional Samples			
		Age In March 1996				Age In March 1996		
	Total	Under 65	65 to 74	75 +	Total	Under 65	65 to 74	75 +
All Retired Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	2.4	1.6	2.1	3.0	0.2 *	-0.1	0.1	0.4 *
Housing assistance	1.2	0.5	1.2	1.3	-0.1	0.1	0.0	-0.1
Food stamps	3.6	3.9	4.0	3.1	0.3 **	0.8	0.1	0.3
Total Household Income, avg. monthly								
Less than $500	3.9	2.9	3.1	5.3	0.1	0.0	0.0	0.3
$500 to 999	15.3	7.5	12.6	21.1	0.2	1.1 *	0.5	-0.6
$1,000 to 1,499	16.9	14.6	16.4	18.3	0.0	-0.4	0.5	-0.4
$1,500 to 1,999	15.0	12.5	15.1	15.7	0.5 *	0.4	0.2	1.0 **
$2,000 to 2,999	21.2	24.8	22.7	18.2	-0.4	0.6	-0.4	-0.7
$3,000 to 3,999	11.6	13.6	13.3	8.7	-0.4	-1.0	-0.2	-0.5
$4,000 to 4,999	6.9	10.9	7.1	5.6	0.2	-0.2	0.1	0.5
$5,000 or more	9.1	13.4	9.7	7.2	-0.2	-0.6	-0.6 *	0.4
Total Family Income, avg. monthly								
Less than $500	4.2	3.0	3.5	5.4	0.2	0.1	0.1	0.3
$500 to 999	16.0	8.0	13.3	21.6	0.3	1.2 *	0.6	-0.4
$1,000 to 1,499	17.2	14.8	16.6	18.7	0.0	-0.2	0.4	-0.3
$1,500 to 1,999	14.9	12.7	14.9	15.4	0.4	0.2	0.2	0.9 *
$2,000 to 2,999	21.0	25.0	22.4	18.0	-0.4	0.7	-0.4	-0.7
$3,000 to 3,999	11.3	13.5	13.2	8.3	-0.5 *	-1.0	-0.2	-0.6 *
$4,000 to 4,999	6.7	10.2	6.8	5.5	0.2	-0.3	0.1	0.5
$5,000 or more	8.8	12.8	9.4	7.0	-0.3	-0.7	-0.7 **	0.4
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
10 to under 50 percent	1.1	1.2	0.9	1.3	0.0	0.1	0.2	-0.1
50 to under 100 percent	8.7	6.8	7.7	10.7	0.3	0.6	0.1	0.3
100 to under 125 percent	6.6	3.6	6.0	8.1	0.2	0.0	0.4	-0.1
125 to under 150 percent	7.5	7.2	5.9	9.6	0.1	1.2	0.1	-0.2
150 to under 200 percent	14.1	11.5	13.5	15.5	-0.1	-2.1 **	0.1	0.2
200 to under 300 percent	24.5	24.6	25.1	23.7	0.2	2.9 **	0.2	-0.5
300 to under 400 percent	15.2	17.7	16.2	13.1	-0.3	-1.5	-0.8 *	0.5
400 percent or more	22.4	27.2	24.8	17.9	-0.3	-1.1	-0.3	-0.1
Distribution of Family Income by Source, avg. monthly								
Social Security	39.2	31.1	37.7	44.8	0.2	1.1	0.2	-0.4
SSI	0.5	0.4	0.5	0.5	0.0 *	0.1	0.1	0.0
Other public assistance	0.3	0.3	0.2	0.3	0.1 ***	0.1	0.0	0.1 ***
Earnings	24.1	32.2	25.3	19.1	0.0	-2.1	0.0	1.1 *
Asset income	12.8	10.0	12.1	14.9	-0.5 *	-0.2	-0.7 **	-0.5
All other	23.2	26.1	24.2	20.4	0.2	1.0	0.4	-0.3

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.

 ** Statistically signficant at 0.05 level.

  * Statistically significant at 0.10 level.

a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE G.4.c

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
DISABLED WORKERS

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | | Age In March 1996 | | | | | Age In March 1996 | | |
Characteristic	Total	Under 50	50 to 64	65 +	Total	Under 50	50 to 64	65 +
All Disabled Workers	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	6.8	7.5	6.2	6.9	1.1 **	1.9 **	0.9	0.0
Housing assistance	4.0	5.8	2.6	4.0	-0.3	-0.1	0.0	-1.3 *
Food stamps	20.5	27.5	15.3	19.4	1.2 *	0.0	2.0 *	0.7
Total Household Income, avg. monthly								
Less than $500	6.9	4.9	6.5	10.3	0.7	1.1	0.6	0.3
$500 to 999	20.7	20.0	18.5	25.0	-0.6	-0.6	0.7	-2.5 *
$1,000 to 1,499	16.8	16.1	16.8	17.5	0.8	0.1	1.0	1.6
$1,500 to 1,999	13.9	12.9	13.2	16.1	-0.3	-1.5	-1.3	2.9 **
$2,000 to 2,999	16.8	19.4	17.4	12.7	-0.3	0.0	-0.2	-1.0
$3,000 to 3,999	11.0	11.8	12.5	7.7	-0.5	0.1	-0.4	-1.6
$4,000 to 4,999	6.0	4.6	7.8	4.8	-0.2	0.2	-0.8	0.2
$5,000 or more	7.9	10.3	7.3	6.0	0.4	0.5	0.4	0.0
Total Family Income, avg. monthly								
Less than $500	8.8	8.4	7.2	11.9	0.4	0.0	0.7	0.7
$500 to 999	24.3	24.6	21.5	28.4	-1.0	-1.0	-0.1	-2.4 *
$1,000 to 1,499	15.8	15.2	16.0	16.3	1.0 *	0.4	1.0	1.8
$1,500 to 1,999	12.6	10.7	12.8	14.9	0.1	-0.5	-0.6	2.3 *
$2,000 to 2,999	15.8	18.6	16.4	11.4	-0.6	-0.1	-0.8	-1.4
$3,000 to 3,999	9.9	10.5	11.5	6.7	-0.3	0.1	-0.1	-1.2
$4,000 to 4,999	5.5	3.6	7.5	4.8	0.0	0.8 *	-0.6	0.2
$5,000 or more	7.2	8.5	7.1	5.7	0.3	0.3	0.5	0.0
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.1	0.2	0.0	0.0	-0.1	-0.2	0.0 a	0.0 a
10 to under 50 percent	2.4	1.7	2.5	3.2	0.1	-0.2	0.5	-0.1
50 to under 100 percent	21.8	27.4	16.4	23.0	0.6	-0.6	1.6	-0.1
100 to under 125 percent	10.7	9.8	10.5	12.3	-0.7	-0.2	-0.7	-1.3
125 to under 150 percent	9.3	9.0	9.1	10.0	0.8 *	1.2	0.2	1.3
150 to under 200 percent	14.6	13.5	14.4	16.2	0.0	-0.6	-0.6	1.8 *
200 to under 300 percent	19.3	19.4	20.7	17.0	0.4	1.1	-0.3	0.6
300 to under 400 percent	11.0	10.9	11.8	10.0	-0.9 *	-0.4	-0.7	-1.9 **
400 percent or more	10.8	8.2	14.5	8.4	-0.2	-0.1	0.1	-0.3
Distribution of Family Income by Source, avg. monthly								
Social Security	38.3	36.5	37.0	43.5	0.6	0.0	1.0	1.0
SSI	3.5	4.6	2.2	4.1	0.1	-0.4	0.4	0.3
Other public assistance	1.2	1.2	1.0	1.6	0.0	0.1	-0.2	0.0
Earnings	39.4	44.7	40.3	29.5	-0.8	-0.8	-0.7	-1.6
Asset income	3.6	2.4	3.4	5.9	0.3	0.1	0.4 *	0.8
All other	14.1	10.6	16.2	15.3	-0.2	1.0	-0.8	-0.4

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

TABLE G.4.d

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
ALL OTHER SOCIAL SECURITY BENEFICIARIES

| | Cross-sectional Sample | | | | Difference between Full Panel and Cross-sectional Samples | | | |
| | | Age In March 1996 | | | | Age In March 1996 | | |
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All Other Beneficiaries	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	4.4	6.3	4.2	3.7	0.4	0.1	0.1	0.5 *
Housing assistance	2.3	4.9	1.7	1.5	0.3	0.9	0.0	0.0
Food stamps	10.8	22.0	13.4	5.9	1.3 **	3.0	0.7	0.3
Total Household Income, avg. monthly								
Less than $500	5.4	1.7	5.1	6.9	-0.5	-0.2	-1.3 *	-0.2
$500 to 999	19.8	11.8	14.8	24.0	0.9 *	1.9 *	2.1 *	0.6
$1,000 to 1,499	18.3	15.8	18.9	19.1	-0.4	-0.4	-0.7	-0.3
$1,500 to 1,999	12.3	11.6	12.8	12.4	-0.3	-0.3	-1.6	0.1
$2,000 to 2,999	17.5	21.2	19.5	15.7	0.5	0.1	2.9 **	-0.2
$3,000 to 3,999	10.5	17.2	10.8	7.9	-0.4	-1.6	-0.6	-0.1
$4,000 to 4,999	5.5	6.7	7.3	4.6	0.1	0.4	-0.4	0.0
$5,000 or more	10.7	14.0	10.8	9.5	0.1	0.0	-0.5	0.1
Total Family Income, avg. monthly								
Less than $500	6.2	3.6	6.4	7.0	-0.4	0.2	-1.5 *	-0.3
$500 to 999	21.0	13.0	17.7	24.8	0.9	2.3 *	0.7	0.6
$1,000 to 1,499	18.4	15.8	19.4	19.2	-0.2	-0.1	-0.3	-0.1
$1,500 to 1,999	12.2	12.0	12.3	12.2	0.1	0.1	-0.1	0.2
$2,000 to 2,999	17.0	20.5	18.6	15.2	-0.1	-1.2	2.3 *	-0.4
$3,000 to 3,999	10.0	16.2	9.5	7.9	-0.3	-1.3	0.1	-0.1
$4,000 to 4,999	5.2	6.2	6.4	4.5	0.1	0.2	0.1	0.0
$5,000 or more	10.1	12.7	9.7	9.2	-0.2	-0.4	-1.3	0.1
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.2	0.6	0.0	0.0	0.0	-0.2	0.0 a	0.0
10 to under 50 percent	2.5	3.9	3.9	1.6	0.2	1.5 **	-0.5	-0.2
50 to under 100 percent	15.5	20.9	15.6	13.4	0.9	1.0	1.1	0.6
100 to under 125 percent	9.4	9.2	10.0	9.4	0.3	0.5	0.0	0.2
125 to under 150 percent	8.8	8.0	6.7	9.6	-0.5	-0.3	-0.7	-0.4
150 to under 200 percent	15.4	15.9	17.4	14.7	-0.2	-0.8	-0.8	0.1
200 to under 300 percent	21.1	21.3	23.3	20.5	-0.3	-2.1	1.8	-0.2
300 to under 400 percent	10.6	8.5	9.6	11.6	-0.1	-0.7	0.2	0.2
400 percent or more	16.6	11.7	13.5	19.1	-0.3	1.1	-1.1	-0.4
Distribution of Family Income by Source, avg. monthly								
Social Security	34.9	30.1	36.7	36.8	0.6	-0.3	1.7 *	1.0
SSI	1.2	1.5	2.2	0.8	0.1 *	-0.1	0.4	0.2 **
Other public assistance	0.7	1.2	1.0	0.4	0.1	0.2	0.2	0.0
Earnings	39.3	57.9	39.0	30.4	-0.6	0.1	-2.4	-1.7
Asset income	9.4	1.8	5.7	13.9	0.2	0.5 **	-0.7	0.8 *
All other	14.5	7.4	15.5	17.7	-0.4	-0.3	0.7	-0.3

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.
 ** Statistically signficant at 0.05 level.
  * Statistically significant at 0.10 level.
a The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

DISTRIBUTION OF HOUSEHOLD AND FAMILY INCOME IDENTIFIED IN THE 1996 SIPP PANEL, BY AGE:
FULL PANEL SAMPLE WITH FULL PANEL WEIGHTS VERSUS WAVE 1 CROSS-SECTIONAL SAMPLE FOR
SSI RECIPIENTS

	Cross-sectional Sample				Difference between Full Panel and Cross-sectional Samples			
		Age In March 1996				Age In March 1996		
Characteristic	Total	Under 18	18 to 64	65 +	Total	Under 18	18 to 64	65 +
All SSI Recipients	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
Household Receipt of:								
Energy assistance	12.7	13.3	12.3	13.2	-0.1	-2.2	0.1	0.4
Housing assistance	8.9	12.9	8.5	7.6	-0.5	-2.8	-0.1	0.1
Food stamps	45.0	41.2	47.0	42.8	0.0	-2.9	0.2	0.8
Total Household Income, avg. monthly								
Less than $500	15.4	2.4	13.7	25.4	1.0	0.4	1.3	-0.2
$500 to 999	25.9	18.6	25.0	31.3	-0.8	-1.6	-1.1	-0.3
$1,000 to 1,499	17.4	25.5	15.5	17.2	1.3 *	3.7	0.9	1.5
$1,500 to 1,999	10.8	17.2	11.4	6.3	-0.4	1.5	-0.7	0.0
$2,000 to 2,999	13.6	17.9	15.8	7.1	-0.9	-1.6	-0.7	-0.6
$3,000 to 3,999	6.2	10.4	6.7	2.9	-0.4	0.1	-0.2	-0.6
$4,000 to 4,999	4.4	4.4	4.2	4.6	-0.3	-0.7	-0.2	-0.5
$5,000 or more	6.4	3.7	7.6	5.1	0.5	-1.8	0.7	0.8
Total Family Income, avg. monthly								
Less than $500	20.3	5.8	20.0	27.9	0.6	2.0	0.2	0.0
$500 to 999	28.4	20.8	27.6	33.8	-0.8	-3.4	-0.9	0.0
$1,000 to 1,499	16.0	24.4	14.5	14.8	1.5 **	3.8	1.2	1.7
$1,500 to 1,999	9.0	17.3	8.9	5.0	-0.3	0.4	-0.3	-0.3
$2,000 to 2,999	12.3	16.6	13.8	6.9	-0.5	-1.6	0.1	-0.8
$3,000 to 3,999	5.1	8.3	5.5	2.7	-0.2	0.5	-0.1	-0.4
$4,000 to 4,999	3.9	4.4	3.8	3.8	-0.4	-0.6	-0.1	-0.8
$5,000 or more	5.0	2.4	5.7	5.0	0.0	-1.1	-0.1	0.7
Family Income in Relation to Poverty, avg. monthly								
Under 10 percent	0.3	0.4	0.3	0.3	0.0	-0.1	0.0	0.1
10 to under 50 percent	3.9	6.6	3.6	3.1	0.2	0.2	0.2	0.4
50 to under 100 percent	42.5	35.1	42.3	46.4	-0.9	-3.2	-0.5	-1.3
100 to under 125 percent	12.8	16.3	10.7	15.6	0.3	2.6	-0.6	1.2
125 to under 150 percent	9.6	11.7	9.0	10.0	1.1 *	-0.5	1.4 *	1.1
150 to under 200 percent	10.8	14.8	11.6	7.3	0.6	4.7 *	-0.2	0.5
200 to under 300 percent	10.6	9.1	11.4	9.7	-0.5	-0.9	0.4	-2.2 **
300 to under 400 percent	4.9	4.7	5.5	3.9	0.0	-1.6	0.1	0.4
400 percent or more	4.4	1.2	5.6	3.6	-0.7 *	-1.2 **	-0.8	-0.2
Distribution of Family Income by Source, avg. monthly								
Social Security	16.0	6.6	15.0	24.1	0.7	1.4	0.7	-0.6
SSI	28.2	34.9	28.2	23.9	1.0	3.1	1.2	0.0
Other public assistance	3.5	7.0	3.2	1.8	0.0	-0.4	-0.1	0.5 **
Earnings	45.0	46.4	45.1	43.9	-2.2 *	-4.9	-2.5	0.0
Asset income	1.1	0.6	1.2	0.9	0.1	0.1	0.1	0.1
All other	6.3	4.5	7.2	5.3	0.4	0.7	0.5	0.0

Source: Mathematica Policy Research, from the 1996 SIPP panel.

*** Statistically significant at 0.01 level.

 ** Statistically signficant at 0.05 level.

 * Statistically significant at 0.10 level.

[a] The cross-sectional sample estimate is zero or 100 percent; the full panel estimate cannot deviate from that value.

APPENDIX H

**EVALUATION OF ATTRITION BIAS IN THE 1996 SIPP PANEL:
TABLES AND FIGURES**

TABLE H.1

PROPORTION OF PERSONS WITH POSITIVE EARNINGS IN THE SER
BY AGE AND CALENDAR YEAR

Age in January	1994	1995	1996	1997	1998
		Wave 1 Sample with Matched Data			
18+	65.7	65.1	64.1	62.8	61.5
18-24	87.5	86.6	86.0	85.3	84.3
25-34	84.1	84.5	84.1	83.1	81.7
35-44	80.6	80.7	80.4	79.9	79.1
45-54	71.8	71.7	71.1	69.9	69.3
55-64	38.8	38.8	38.7	39.0	39.5
65+	9.0	9.0	8.5	7.9	7.6
		Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Matched Data			
18+	-0.3 **	-0.2	0.0	0.3 **	0.3 **
18-24	-1.1 **	-0.5	-0.2	0.2	0.6
25-34	-0.4	-0.3	-0.1	0.3	0.2
35-44	-0.2	0.0	0.4	1.0 ***	0.5
45-54	0.0	-0.4	-0.2	0.0	0.4
55-64	0.3	0.5	0.5	0.1	0.0
65+	0.1	0.1	0.1	0.3	0.1

Source: Mathematica Policy Research, from linked 1996 SIPP-SER records.

Note: All earnings have been adjusted for inflation and are in 1996 dollars.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

MEAN AND MEDIAN ANNUAL EARNINGS OF WORKERS WITH POSITIVE EARNINGS
IN THE SER, BY AGE AND CALENDAR YEAR

Age in January	1994	1995	1996	1997	1998
			Mean Earnings		
			Wave 1 Sample with Matched Data		
18+	30,080	30,671	30,916	30,936	31,115
18-24	23,211	23,916	23,773	23,164	22,965
25-34	31,032	31,597	31,949	32,049	32,395
35-44	34,627	35,034	35,036	34,937	35,236
45-54	33,805	34,565	34,920	34,992	35,247
55-64	21,871	22,165	23,092	24,302	24,505
65+	11,414	11,620	11,308	11,190	11,337
		Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Matched Data			
18+	290 ***	257 **	200 *	143	248 **
18-24	338	87	18	-151	130
25-34	725 ***	687 ***	521 **	319	550 **
35-44	420 ***	482 ***	604 ***	608 ***	697 ***
45-54	-459 **	-234	-400	-213	-220
55-64	-126	-520	-441	-581	-568
65+	-1,734 ***	-1,769 ***	-1,533 ***	-1,567 ***	-1,578 ***
			Median Earnings		
			Wave 1 Sample with Matched Data		
18+	25,660	26,202	26,184	26,070	26,086
18-24	20,509	21,255	21,129	20,466	20,175
25-34	27,105	27,542	28,060	27,784	28,089
35-44	30,576	30,814	30,356	30,356	30,566
45-54	29,210	29,896	29,867	29,492	29,719
55-64	13,281	13,971	15,000	17,284	16,768
65+	5,568	5,772	5,580	5,496	6,087
		Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Matched Data			
18+	382 ***	267 *	336 **	314 **	508 ***
18-24	455 *	367	5	196	299
25-34	806 ***	719 **	672 **	531 *	941 **
35-44	587	431	760 ***	659 **	944 ***
45-54	-253	-99	-50	101	194
55-64	-161	-689	-215	-687	-480
65+	-589 **	-658 **	-822 ***	-730 ***	-1,057 **

Source: Mathematica Policy Research, from linked 1996 SIPP-SER records.

Note: All earnings have been adjusted for inflation and are in 1996 dollars.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE H.3

25TH AND 75TH PERCENTILES OF ANNUAL EARNINGS OF WORKERS WITH
POSITIVE EARNINGS IN THE SER, BY AGE AND CALENDAR YEAR

Age in January	1994	1995	1996	1997	1998
	25th Percentile of Earnings				
	Wave 1 Sample with Matched Data				
18+	12,085	12,344	12,425	12,208	12,094
18-24	10,251	10,727	10,329	9,990	9,489
25-34	13,667	13,816	14,040	13,927	13,840
35-44	15,958	16,235	16,085	15,441	15,627
45-54	14,901	15,179	15,310	15,157	15,132
55-64	4,826	5,013	5,310	5,897	5,442
65+	1,718	1,715	1,750	1,755	1,569
	Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Matched Data				
18+	745 ***	494 ***	442 ***	465 ***	689 ***
18-24	1,139 ***	1,073 ***	928 ***	833 **	910 **
25-34	959 ***	888 ***	689 ***	601 *	1,174 ***
35-44	870 ***	905 ***	716 ***	978 ***	1,183 ***
45-54	-52	20	-129	-147	-80
55-64	0	-165	-231	-260	-115
65+	-130	-104	-148	-278	-166
	75th Percentile of Earnings				
	Wave 1 Sample with Matched Data				
18+	43,337	44,086	44,360	44,050	44,345
18-24	32,368	33,137	33,150	32,532	32,264
25-34	44,356	44,887	45,319	45,229	45,544
35-44	50,158	50,956	50,788	50,061	50,324
45-54	49,928	51,736	52,004	51,434	51,654
55-64	32,820	32,392	33,800	35,413	36,161
65+	12,023	12,427	12,996	13,034	14,031
	Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Matched Data				
18+	142	287	218	142	220
18-24	-67	-504 *	-93	-756 *	-315
25-34	900 *	905 **	857 *	689	829 *
35-44	-108	479	952 **	511	747
45-54	-969 **	-710	-1,116	-554	-858 *
55-64	-56	-111	-509	-595	-1,218
65+	-1,420 **	-1,598 **	-1,681 **	-1,840 ***	-2,007 ***

Source: Mathematica Policy Research, from linked 1996 SIPP-SER records.

Note: All earnings have been adjusted for inflation and are in 1996 dollars.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE H.4

PROPORTION OF PERSONS WITH A CHANGE IN SER ANNUAL EARNINGS,
BY DIRECTION, 1996 TO 1998: PERSONS WITH
POSITIVE EARNINGS IN BOTH YEARS

Age in January 1996	Positive Change	No Change	Negative Change
	Wave 1 Sample with Matched Data		
18+	58.6	0.0	41.4
18-24	61.1	0.0	38.9
25-34	61.4	0.0	38.6
35-44	60.5	0.0	39.5
45-54	55.8	0.0	44.2
55-64	41.4	0.0	58.6
65+	34.3	0.0	65.7
	Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Matched Data		
18+	0.6 **	0.0 [a]	-0.6 **
18-24	1.1	0.0 [a]	-1.1
25-34	1.6 ***	0.0 [a]	-1.6 ***
35-44	0.1	0.0 [a]	-0.1
45-54	-0.1	0.0 [a]	0.1
55-64	-0.5	0.0 [a]	0.5
65+	-1.7	0.0 [a]	1.7

Source: Mathematica Policy Research, from linked 1996 SIPP-SER records.

Note: All earnings have been adjusted for inflation and are in 1996 dollars.

[a] The cross-sectional sample estimate is zero, so the full panel estimate cannot deviate from that value.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE H.5

FREQUENCY DISTRIBUTION OF GROSS CHANGE IN SER ANNUAL EARNINGS,
1996 TO 1998, BY AGE: PERSONS WITH POSITIVE EARNINGS BOTH YEARS
(Thousands of Persons)

Percentage Change in Earnings	Age in January 1996		
	18+	18 to 64	65+
Wave 1 Sample with Matched Data			
(More than -25.0%)	20,372	19,772	601
(-10.1% to -25.0%)	9,706	9,454	252
(-5.1% to -10.0%)	5,826	5,745	81
(-2.1% to -5.0%)	5,857	5,696	161
(-0.1% to -2.0%)	4,321	4,211	110
0	0	0	0
(0.1% to 2.0%)	4,461	4,411	50
(2.1% to 5.0%)	13,363	13,286	76
(5.1% to 10.0%)	9,759	9,693	65
(10.1% to 25.0%)	14,989	14,883	106
(More than 25.0%)	22,565	22,232	333
Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Matched Data			
(More than -25.0%)	-971 ***	-1,042 ***	71 **
(-10.1% to -25.0%)	75	63	12
(-5.1% to -10.0%)	274 **	293 **	-18
(-2.1% to -5.0%)	123	124	-1
(-0.1% to -2.0%)	106	109	-3
0	0 [a]	0 [a]	0 [a]
(0.1% to 2.0%)	158	160	-2
(2.1% to 5.0%)	-103	-80	-23 *
(5.1% to 10.0%)	791 ***	778 ***	13
(10.1% to 25.0%)	235	248	-13
(More than 25.0%)	-105	-112	7

Source: Mathematica Policy Research, from linked 1996 SIPP-SER records.

Note: All earnings have been adjusted for inflation and are in 1996 dollars.

[a] The cross-sectional sample estimate is zero, so the full panel estimate cannot deviate from that value.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level

TABLE H.6

DISTRIBUTION OF SOCIAL SECURITY BENEFICIARY STATUS IDENTIFIED IN THE MBR, BY AGE:
MARCH 1996 AND NOVEMBER 1998
(Thousands of Persons)

Age	Disabled Worker	Retired Worker	Aged Non-widow	Aged Widow	All Other Beneficiaries	Total
			Wave 1 Sample with Matched Data			
March 1996:						
Under 65	4,479	2,486	191	237	4,057	11,450
65 and older	0	22,911	1,947	3,147	23	28,029
Total	4,479	25,397	2,138	3,385	4,080	39,478
November 1998:						
Under 65	4,889	2,459	175	272	3,989	11,784
65 and older	0	24,447	1,773	3,292	36	29,547
Total	4,889	26,906	1,947	3,563	4,025	41,331
			Difference between Full Panel Sample with Matched Data and			
			Wave 1 Sample with Matched Data			
March 1996:						
Under 65	49	-58	30 **	19	430 ***	470 ***
65 and older	0 [a]	-121	-62	152 **	12 **	-20
Total	49	-179 *	-32	171 **	442 ***	450 **
November 1998:						
Under 65	-39	-106 *	6	6	286 **	153
65 and older	0 [a]	-171	38	163 **	20 ***	50
Total	-39	-277 **	44	169 **	306 **	204

Source: Mathematica Policy Research, from linked 1996 SIPP-MBR-PHUS records.

Note: The category "all other beneficiaries" includes spouses and widow(er)s caring for minor children, disabled widow(er)s, adults disabled in childhood, student children, minor children, and other individuals who have a current payment status and who are not elsewhere classified.

[a] The cross-sectional sample estimate is zero, so the full panel estimate cannot deviate from that value.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE H.7

ENTRIES INTO AND EXITS FROM SOCIAL SECURITY BENEFICIARY CATEGORIES
BETWEEN MARCH 1996 AND NOVEMBER 1998
(Thousands of Persons)

Beneficiary Category	March 1996	Entries into Category	Exits from Category	November 1998
	Wave 1 Sample with Matched Data			
Disabled worker	4,479	1,343	933	4,889
Retired worker	25,397	4,276	2,767	26,906
Aged non-widow	2,138	255	446	1,947
Aged widow	3,385	603	424	3,563
All other beneficiaries	4,080	1,146	1,201	4,025
	0	0	0	0
Total	39,478	7,623	5,770	41,331
	Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Matched Data			
Disabled worker	49	-119 **	-30	-39
Retired worker	-179 *	-115	-18	-277 **
Aged non-widow	-32	14	-63 **	44
Aged widow	171 **	-53	-51 *	169 **
All other beneficiaries	442 ***	-102	33	306 **
Total	450 **	-375 **	-128	204

Source: Mathematica Policy Research, from 1996 linked SIPP-MBR-PHUS records.

Note: The category "all other beneficiaries" includes spouses and widow(er)s caring for minor children, disabled widow(er)s, adults disabled in childhood, student children, minor children, and other individuals who have a current payment status and are not elsewhere classified.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE H.8

MEAN DOLLAR VALUES OF SELECTED PAYMENT VARIABLES AMONG RETIRED AND DISABLED WORKERS
WHO ARE CURRENT BENEFICIARIES, MARCH 1996 AND NOVEMBER 1998

| | March 1996 | | | | November 1998 | | | |
| | Retired Workers | | | | Retired Workers | | | |
Payment Variable	Under 65	65+	Total	Disabled Workers	Under 65	65+	Total	Disabled Workers
				Wave 1 Sample with Matched Data				
Family Maximum Benefit	1,268	1,258	1,259	984	1,360	1,332	1,334	1,037
Indexed Monthly Earnings	1,568	684	771	970	1,707	863	940	1,077
Monthly Benefit Amount	643	736	727	667	676	784	774	714
Monthly Benefit Payable	641	697	692	648	674	744	738	694
Medicare Part B Premium	0	38	35	19	0	39	36	19
Monthly Benefit Paid	616	697	689	641	650	745	737	688
Primary Insurance Amount	749	735	736	679	798	778	780	719
Social Security Income	616	735	724	661	650	785	772	708
				Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Matched Data				
Family Maximum Benefit	1	-2	-1	-11	-1	-5	-5	-15
Indexed Monthly Earnings	1	-1	-2	-12	8	-9	-10	-31
Monthly Benefit Amount	1	-3	-3	-6	-5	-5 **	-5 **	-8
Monthly Benefit Payable	1	-3	-3	-6	-5	-5 **	-5 **	-9
Medicare Part B Premium	0	0	0	0	0	0	0	0
Monthly Benefit Paid	0	-5 *	-4	-4	0	-7 **	-6 *	-8
Primary Insurance Amount	1	-2	-2	-7	-3	-3	-3	-10
Social Security Income	0	-5 *	-4	-4	0	-7 **	-6 *	-7

Source: Mathematica Policy Research, from 1996 linked SIPP-MBR-PHUS records.

 * Statistically significant at 0.10 level
 ** Statistically significant at 0.05 level

TABLE H.9

DISTRIBUTION OF SOCIAL SECURITY PAYMENTS AS A PERCENTAGE OF PERSONAL INCOME AMONG RETIRED WORKERS WITH
POSITIVE SOCIAL SECURITY BENEFIT AMOUNTS AND POSITIVE TOTAL INCOME BY SELECTED PERSONAL CHARACTERISTICS:
MARCH 1996

	Wave 1 Sample with Matched Data					Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Matched Data				
	Social Security Payment as a Percentage of Total Personal Income					Social Security Payment as a Percentage of Total Personal Income				
Characteristic	0-24%	25-49%	50-74%	75-99%	100%	0-24%	25-49%	50-74%	75-99%	100%
All Recipients	10.0	26.3	24.8	27.4	11.5	-0.3	-0.2	0.8 **	-0.1	-0.2
Sex										
Male	12.9	29.6	25.4	22.8	9.3	-0.6	-0.3	0.6	-0.1	0.3
Female	6.7	22.7	24.0	32.6	14.0	0.0	-0.1	1.0 **	-0.1	-0.8 *
Age										
Under 65	14.4	33.9	19.1	21.2	11.4	-1.0	2.1 **	-0.2	-0.8	-0.1
65+	9.5	25.5	25.4	28.1	11.5	-0.2	-0.4	0.9 **	0.0	-0.2
Race										
White	10.3	26.9	24.9	27.9	10.0	-0.1	0.0	0.8 **	-0.4	-0.2
Black	6.7	19.9	25.2	21.3	26.9	-1.2	-2.1 *	0.5	1.8	0.9
American Indian, Alaska Native	5.3	16.8	28.8	25.5	23.6	-0.7	2.5	5.4	-1.3	-5.8
Asian, Pacific Islander	10.8	32.3	8.6	33.0	15.3	-7.1 *	-2.5	2.1	6.0	1.5
Ethnicity										
Hispanic	6.2	19.8	21.7	25.5	26.9	0.3	1.1	-0.6	0.0	-0.7
Non-Hispanic	10.1	26.6	24.9	27.5	10.9	-0.3	-0.2	0.9 **	-0.1	-0.2
Marital Status										
Married	11.5	28.4	24.5	26.6	9.0	-0.6 *	-0.8 *	1.2 **	0.1	0.1
Widowed	6.2	20.9	25.7	31.9	15.3	1.0 ***	1.0	0.4	-0.5	-1.8 ***
Divorced or separated	9.3	25.8	25.5	22.3	17.0	-1.1	1.0	0.0	-0.9	0.9
Never married	12.0	29.2	21.6	22.7	14.4	-1.1	-0.5	0.2	0.4	0.9

Source: Mathematica Policy Research, from 1996 SIPP-SSR and SIPP-MBRPHUS.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE H.10

DISTRIBUTION OF SOCIAL SECURITY PAYMENTS AS A PERCENTAGE OF PERSONAL INCOME AMONG NON-RETIRED BENEFICIARIES
WITH POSITIVE SOCIAL SECURITY BENEFIT AMOUNTS AND POSITIVE TOTAL INCOME BY SELECTED PERSONAL CHARACTERISTICS:
MARCH 1996

| | Wave 1 Sample with Matched Data | | | | | Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Matched Data | | | | |
| | Social Security Payment as a Percentage of Total Personal Income | | | | | Social Security Payment as a Percentage of Total Personal Income | | | | |
Characteristic	0-24%	25-49%	50-74%	75-99%	100%	0-24%	25-49%	50-74%	75-99%	100%
All Recipients	8.3	19.0	20.7	31.1	20.8	-0.6	0.3	-0.7	0.1	0.8
Sex										
Male	6.1	18.9	22.7	26.4	25.9	-0.2	-1.0	-1.0	1.4	0.7
Female	9.2	19.0	20.0	32.9	18.9	-0.7	0.8	-0.6	-0.3	0.8
Age										
15-17	7.9	13.0	22.6	37.1	19.3	1.9	1.6	-2.9	0.6	-1.2
18-64	8.0	20.2	22.6	26.3	22.9	-0.1	-0.6	-0.9	0.6	0.9
65+	8.8	18.0	18.5	36.1	18.7	-1.4 ***	1.2 **	-0.3	-0.3	0.9
Race										
White	8.5	19.4	20.7	31.5	19.9	-0.6	0.6	-0.9	-0.2	1.2 **
Black	7.1	14.4	21.0	29.1	28.4	-0.7	-0.7	0.8	2.9	-2.2
American Indian, Alaska Native	2.1	34.4	24.1	22.9	16.5	-2.1	-12.6 *	3.2	3.9	7.6 *
Asian, Pacific Islander	16.0	26.4	16.7	34.2	6.7	3.7	6.2	-6.2	-6.6	2.8
Ethnicity										
Hispanic	6.7	18.0	24.5	22.3	28.6	-2.0	1.4	-4.6 **	-1.3	6.4 **
Non-Hispanic	8.4	19.0	20.5	31.7	20.4	-0.5	0.2	-0.4	0.2	0.5
Marital Status										
Married	9.7	19.0	19.1	33.9	18.3	-1.0	-0.3	-0.8	1.7 *	0.4
Widowed	7.5	19.5	21.5	31.7	19.8	-0.3	0.7	-0.2	-1.4	1.2
Divorced or separated	8.9	19.4	20.0	25.4	26.3	-1.3	2.5	-1.6	2.1	-1.7
Never married	6.4	17.6	23.6	26.9	25.6	0.7	-0.2	-1.4	-0.6	1.6

Source: Mathematica Policy Research, from 1996 SIPP-SSR and SIPP-MBRPHUS.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE H.11

SSI RECIPIENTS IDENTIFIED IN THE SSR BY AGE AND ELIGIBILITY CATEGORY:
MARCH 1996 AND NOVEMBER 1998
(Thousands of Persons)

| Month and Eligibility | Age in Month | | | | | | |
Category	Under 18	18-24	25-49	50-61	62-65	65+	Total
	Wave 1 Sample with Matched Data						
March 1996:							
Aged	4	0	0	0	0	1,300	1,304
Blind	4	12	38	18	2	25	99
Disabled	1,026	472	2,049	984	219	618	5,368
November 1998:							
Aged	4	0	0	0	0	1,243	1,247
Blind	4	0	25	37	2	19	86
Disabled	861	465	2,033	1,043	232	649	5,283
	Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Matched Data						
March 1996:							
Aged	-4	0 [a]	0 [a]	0 [a]	0 [a]	209	205
Blind	-4	-5	20	6	1	4	23
Disabled	-32	78	351	136	15	62	611
November 1998:							
Aged	-4	0 [a]	0 [a]	0 [a]	0 [a]	197	193
Blind	-4	0 [a]	8	11	2	1	18
Disabled	-57	69	367	99	18	85	582

Source: Mathematica Policy Research, from linked 1996 SIPP-SSR records.

[a] The cross-sectional sample estimate is zero, so the full panel estimate cannot deviate from that value.

MEAN DOLLAR VALUES OF SELECTED PAYMENT VARIABLES ON THE SSR FOR SSI RECIPIENTS BY AGE:
MARCH 1996 AND NOVEMBER 1998

	Age in Month						
Month and Payment Variable	Under 18	18-24	25-49	50-61	62-65	65+	Total
	Wave 1 Sample with Matched Data						
March 1996							
Earned Income	0	17	7	3	1	2	4
Unearned Income	46	64	128	132	200	231	143
Federal Money Amount Payment	421	367	353	302	253	220	316
State Support Amount	11	20	31	29	39	44	31
November 1998							
Earned Income	1	18	12	0	0	1	5
Unearned Income	55	74	126	134	170	227	145
Federal Money Amount Payment	497	365	326	282	413	225	319
State Support Amount	20	17	30	30	56	47	33
	Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Matched Data						
March 1996							
Earned Income	0	10 *	0	-1	0	1	1
Unearned Income	13 ***	-5	-3	-7	-4	-5	0
Federal Money Amount Payment	-14	-7	13	8	1	3	2
State Support Amount	2	-3	-4	-4	12 **	2	-1
November 1998							
Earned Income	1	-7	2	0 [a]	0 [a]	0	0
Unearned Income	4	22 **	-1	-1	-16	-7	1
Federal Money Amount Payment	-59	-26	20	4	-126	-5	-12
State Support Amount	11	0	-5	-1	-16	4	0

Source: Mathematica Policy Research, from linked 1996 SIPP-SSR records.

[a] The cross-sectional sample estimate is zero, so the full panel estimate cannot deviate from that value.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE H.13

GROSS CHANGE IN PAYMENT VARIABLES ON THE SSR FILE, MARCH 1996 TO
NOVEMBER 1998, FOR SSI RECIPIENTS BY AGE

| Payment Variable and Gross Change | Wave 1 Sample with Matched Data | | | Difference between Full Panel Sample with Matched Data and Wave 1 Sample with Matched Data | | |
| | Age in January 1996 | | | Age in January 1996 | | |
	Under 65	65+	Total	Under 65	65+	Total
Earned Income						
Positive Change	4.4	0.2	3.2	0.4	-0.2	0.2
Negative Change	3.0	2.0	2.7	0.8	0.6 *	0.7 *
No Change	92.5	97.8	94.0	-1.2	-0.4	-0.9 *
Unearned Income						
Positive Change	36.0	57.9	42.2	1.6	-0.1	1.2
Negative Change	11.2	14.4	12.1	0.6	-0.5	0.3
No Change	52.8	27.7	45.7	-2.2 *	0.7	-1.5
Federal Payment						
Positive Change	60.5	38.0	54.1	0.1	-0.2	-0.1
Negative Change	37.0	54.8	42.0	-0.4	1.3	0.2
No Change	2.6	7.2	3.9	0.3	-1.0	-0.1
State Support Amount						
Positive Change	7.1	6.4	6.9	-0.2	0.7	0.0
Negative Change	24.6	34.0	27.3	-0.9	0.1	-0.6
No Change	68.2	59.6	65.8	1.2	-0.8	0.6

Source: Mathematica Policy Research, from linked 1996 SIPP-SSR records.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

TABLE H.14

DISTRIBUTION OF SSI PAYMENTS AS A PERCENTAGE OF PERSONAL INCOME AMONG PERSONS WITH POSITIVE SSI
AND POSITIVE TOTAL INCOME BY SELECTED PERSONAL CHARACTERISTICS: MARCH 1996

	Wave 1 Sample with Matched Data					Difference between Full Panel Sample with Matched Data Wave 1 Sample and Matched Data				
	SSI Payment as a Percentage of Total Personal Income					SSI Payment as a Percentage of Total Personal Income				
Characteristic	0-24%	25-49%	50-74%	75-99%	100%	0-24%	25-49%	50-74%	75-99%	100%
All Recipients	22.5	17.8	9.7	9.5	40.6	-1.4 *	-0.6	1.1 *	0.8	0.1
Sex										
Male	23.5	16.6	7.3	8.3	44.3	-0.5	-2.0	1.2	1.3	0.0
Female	21.7	18.6	11.3	10.3	38.1	-2.0 **	0.4	1.1	0.4	0.1
Age										
15-17	2.7	1.3	7.4	11.0	77.7	3.5	1.5	-2.7	4.9	-7.2
18-64	20.8	15.9	10.1	11.0	42.3	-1.8	-0.7	1.2	1.5 *	-0.2
65+	27.6	23.0	9.2	6.5	33.8	-1.3	-0.9	1.2 *	-0.9	2.0
Race										
White	22.4	17.5	10.1	9.6	40.3	-1.5	-0.8	1.0	1.0	0.4
Black	25.9	18.8	8.8	8.4	38.1	-0.9	-1.2	1.6	2.0 *	-1.6
American Indian, Alaska Native	11.6	30.2	16.4	14.5	27.2	-1.1	6.1	-3.5	-3.9	2.4
Asian, Pacific Islander	8.4	10.1	6.8	11.6	63.0	-0.4	1.7	2.4 *	-5.3 **	1.6
Ethnicity										
Hispanic	14.6	18.0	11.1	6.1	50.2	-0.3	-4.2 **	2.5 ***	0.4	1.6
Non-Hispanic	23.9	17.8	9.4	10.1	38.9	-1.6 *	0.0	0.9	0.8	-0.2
Marital Status										
Married	22.9	15.9	9.1	6.3	45.8	-0.4	0.5	-0.2	0.7	-0.5
Widowed	27.8	23.0	6.7	5.8	36.7	-4.5 ***	1.2	1.7 *	0.0	1.6
Divorced or separated	21.9	17.9	11.1	9.5	39.5	2.0	-2.5	0.3	1.2	-0.9
Never married	19.5	15.8	10.8	13.2	40.6	-1.9	-0.8	2.0	0.8	-0.1

Source: Mathematica Policy Research, from 1996 SIPP-SSR and SIPP-MBRPHUS.

[a] The cross-sectional sample estimate is zero, so the full panel estimate cannot deviate from that value.

*** Statistically significant at 0.01 level
 ** Statistically significant at 0.05 level
  * Statistically significant at 0.10 level

FIGURE H.1
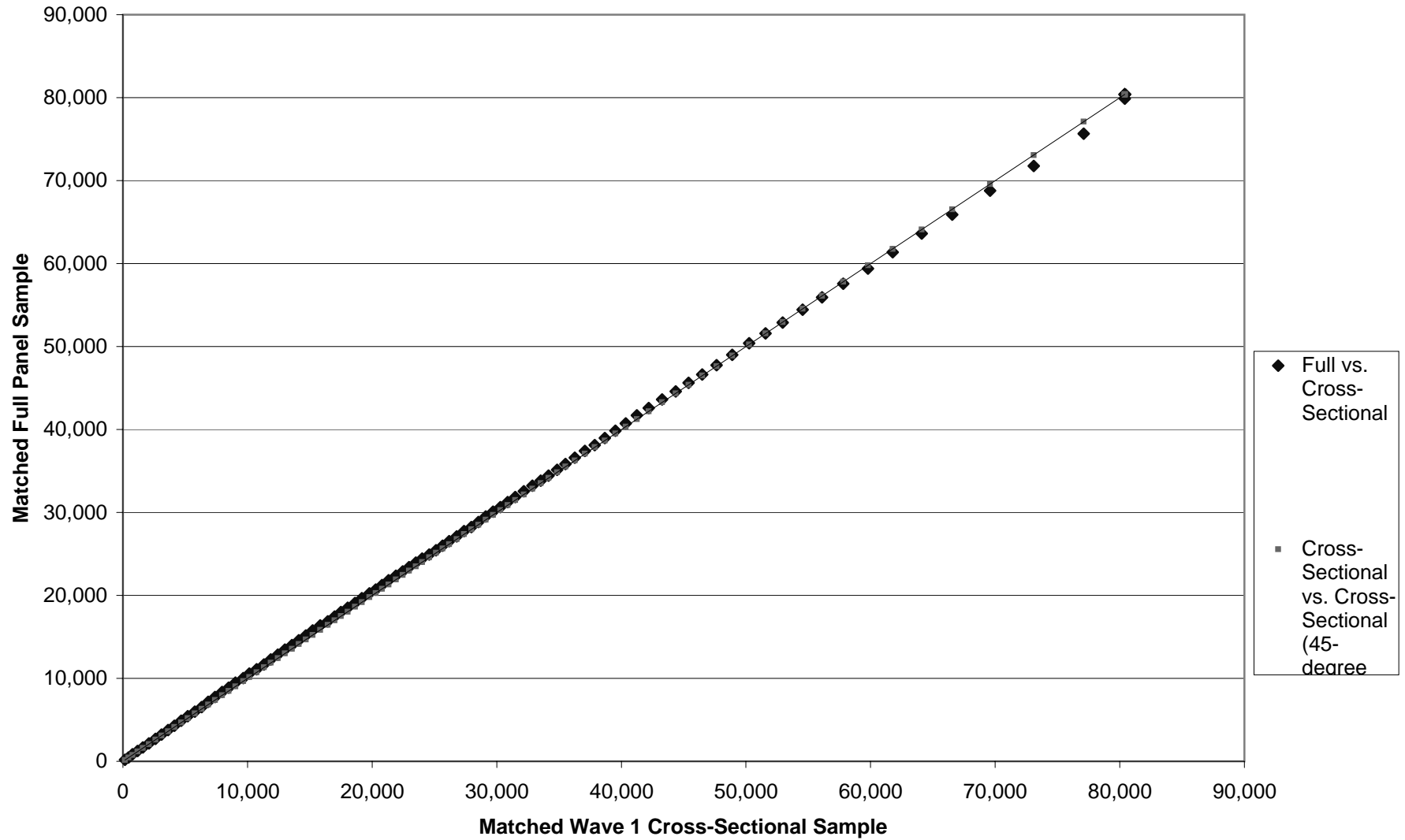**DISTRIBUTION OF POSITIVE EARNINGS IN THE SER IN 1996 AMONG PERSONS AGED 18+**

FIGURE H.2
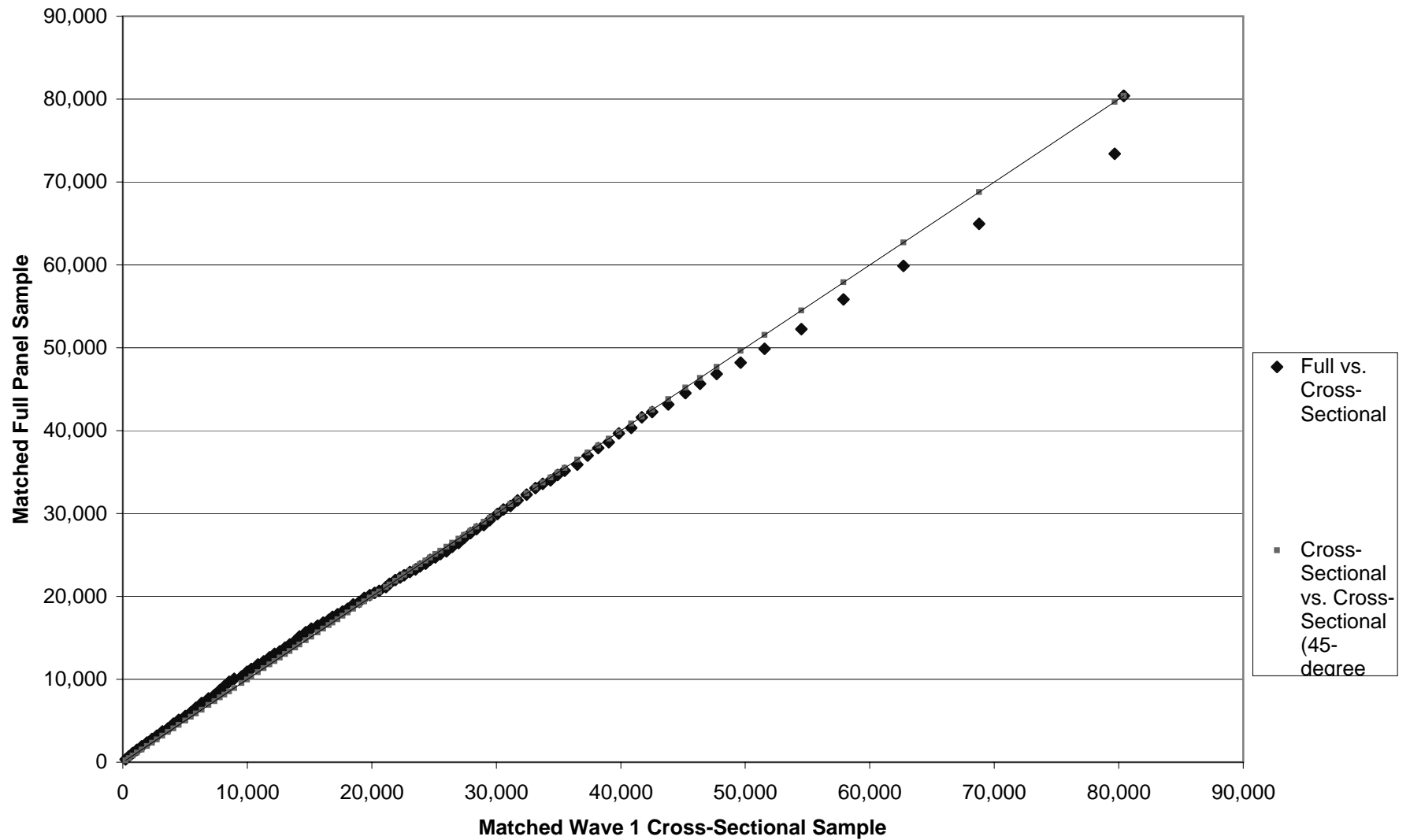**DISTRIBUTION OF POSITIVE EARNINGS IN THE SER IN 1996 AMONG PERSONS AGED 18-24**

FIGURE H.3
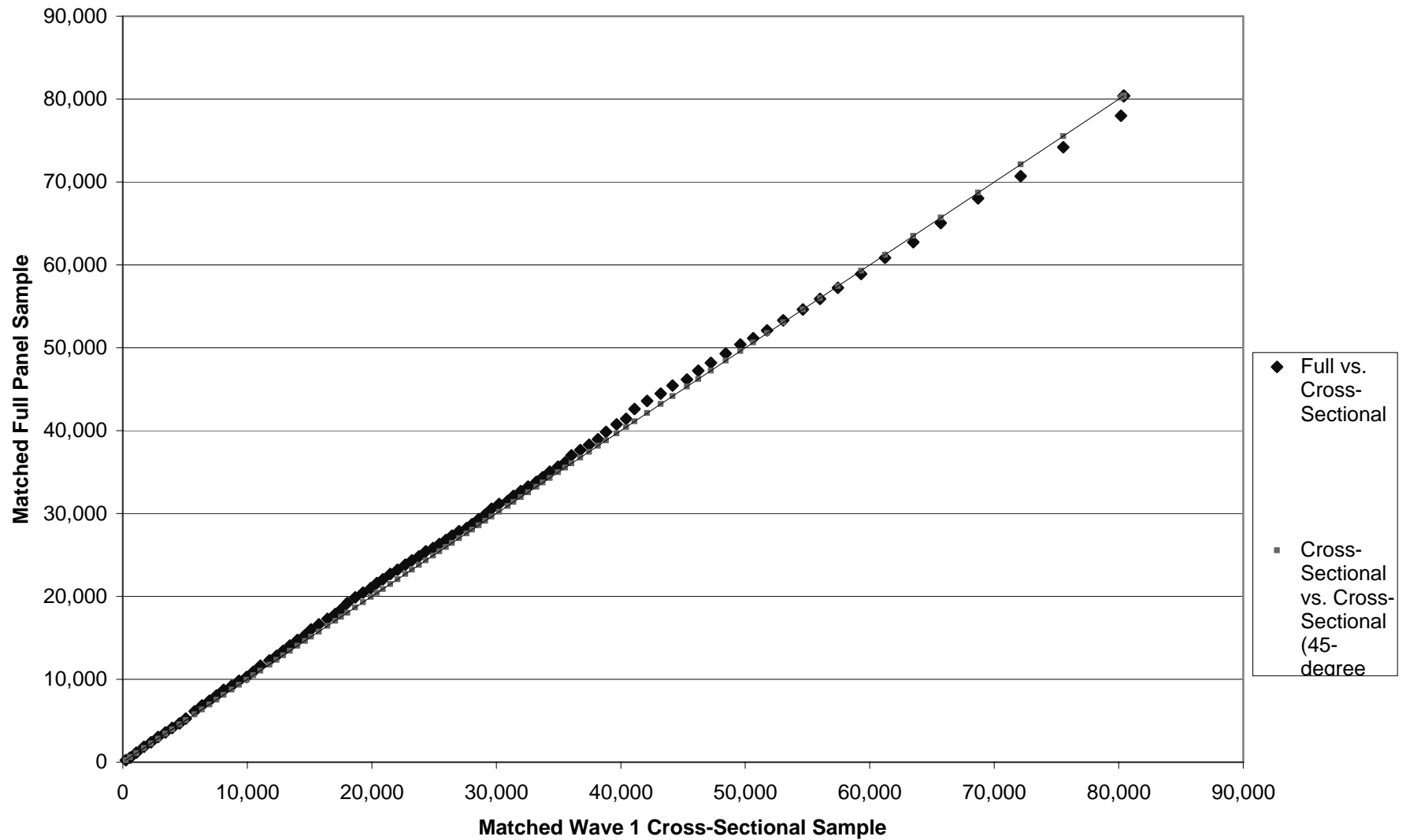**DISTRIBUTION OF POSITIVE EARNINGS IN THE SER IN 1996 AMONG PERSONS AGED 25-34**

FIGURE H.4
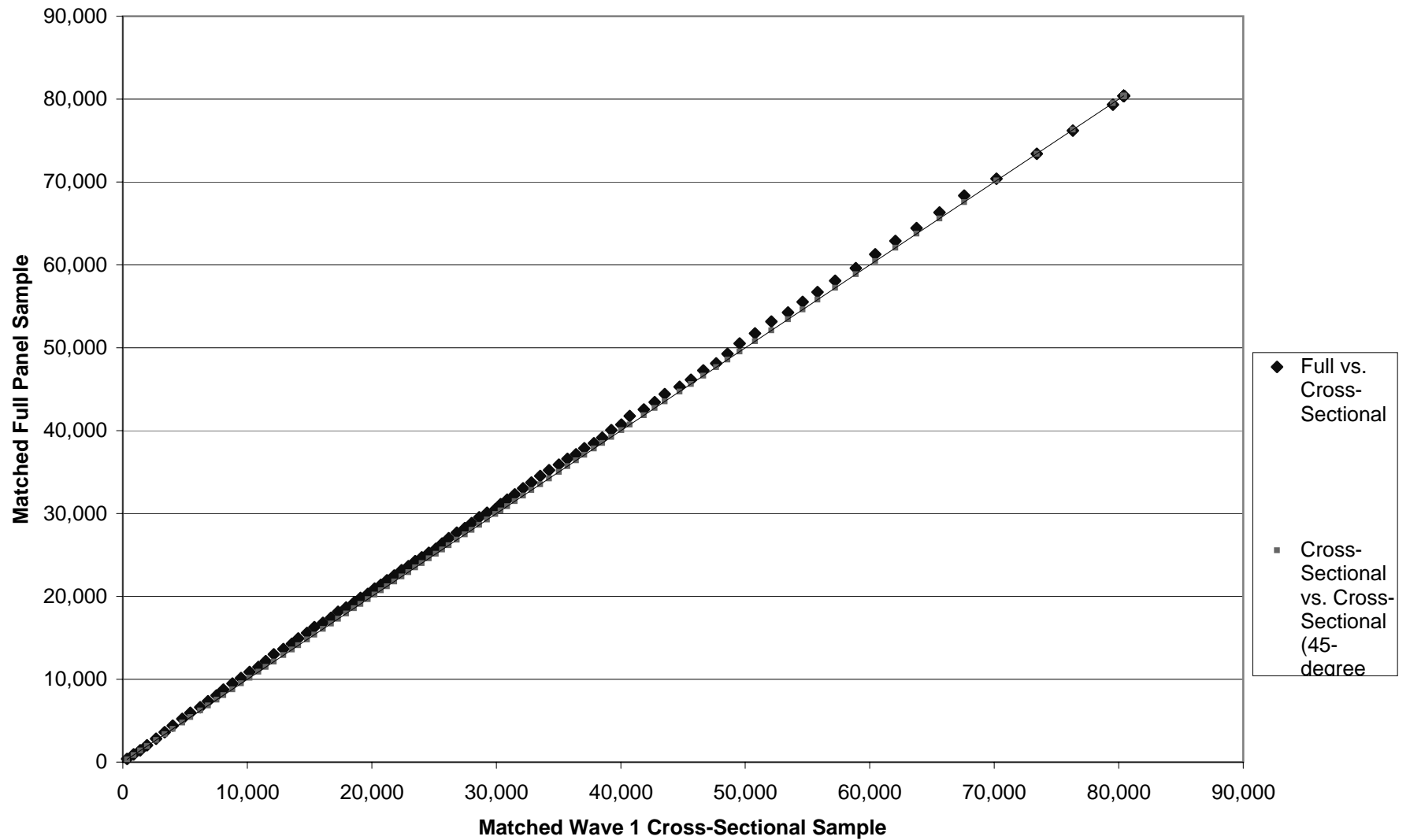**DISTRIBUTION OF POSITIVE EARNINGS IN THE SER IN 1996 AMONG PERSONS AGED 35-44**

FIGURE H.5
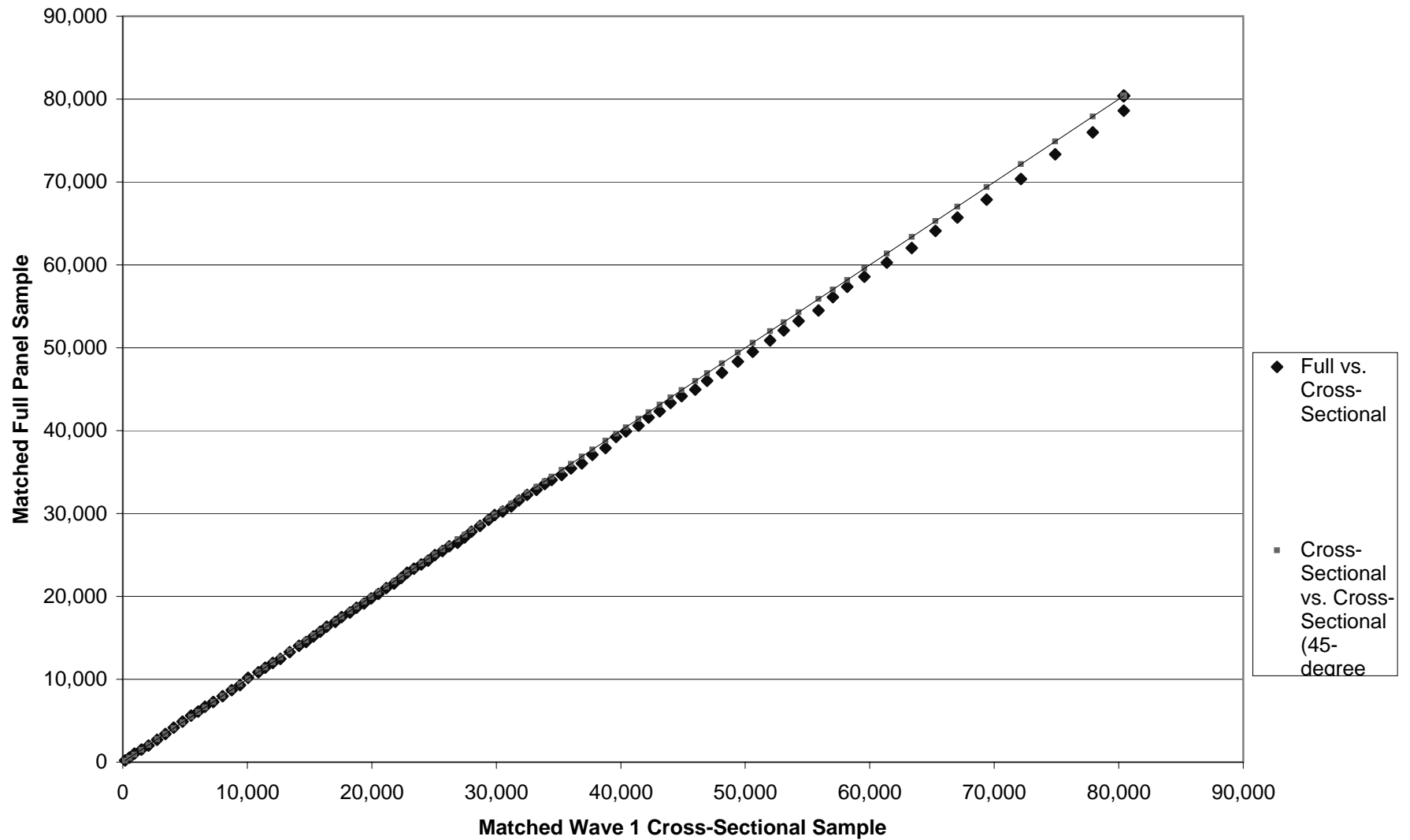## DISTRIBUTION OF POSITIVE EARNINGS IN THE SER IN 1996 AMONG PERSONS AGED 45-54

Legend:
- ♦ Full vs. Cross-Sectional
- ▪ Cross-Sectional vs. Cross-Sectional (45-degree

X-axis: Matched Wave 1 Cross-Sectional Sample

Y-axis: Matched Full Panel Sample

FIGURE H.6
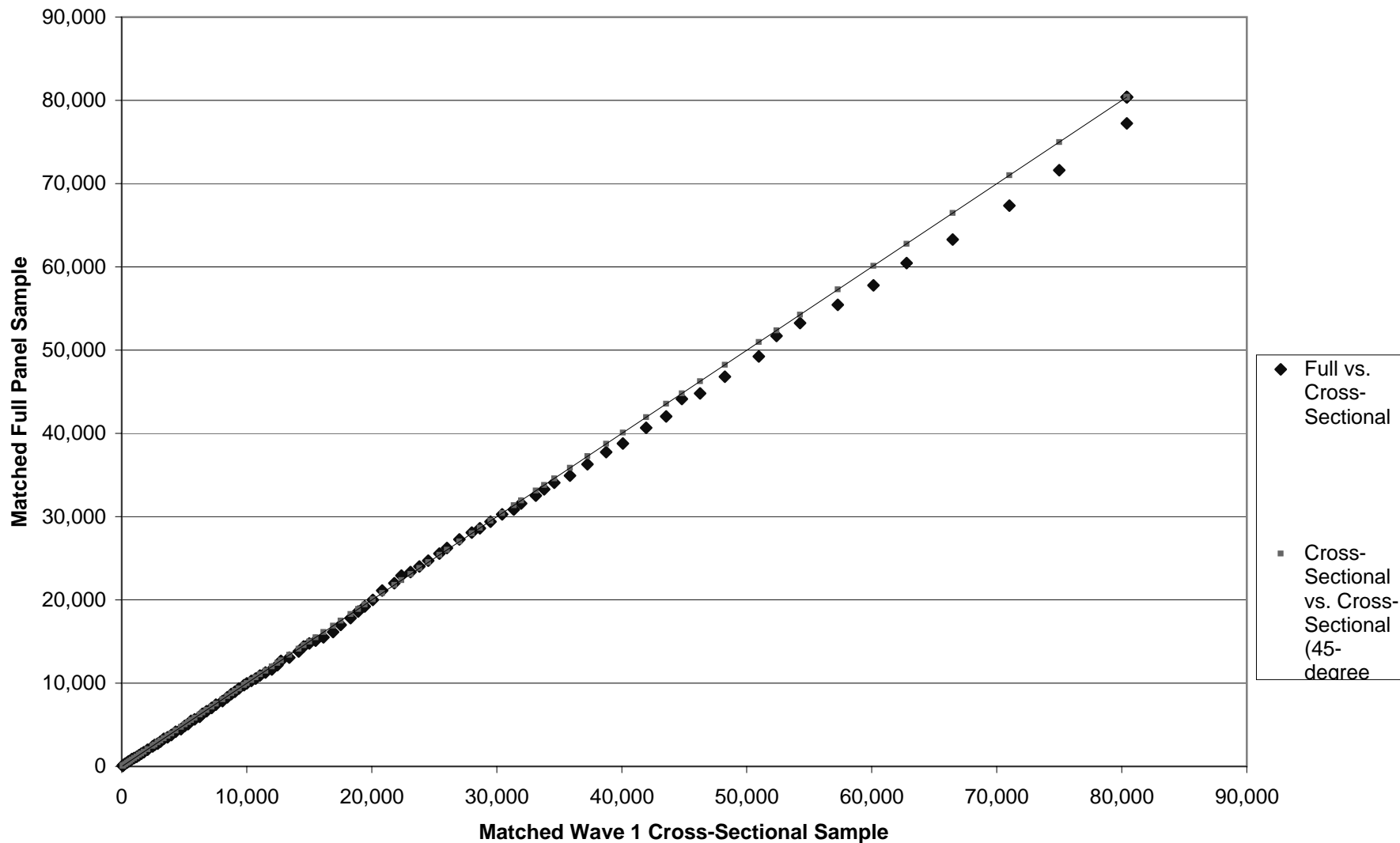**DISTRIBUTION OF POSITIVE EARNINGS IN THE SER IN 1996 AMONG PERSONS AGED 55-64**

FIGURE H.7
DISTRIBUTION OF POSITIVE EARNINGS IN THE SER IN 1996 AMONG PERSONS AGED 65+