

Measurement of Reliance on Social Security Benefits

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I. Introduction

The economic well being of the elderly is a subject that garners a great deal of attention. Over thirty years ago, the Social Security Administration began producing a popular statistical series, *Income of the Population 55 or Older*, based on data from the Census Bureau's Current Population Survey (CPS) to meet the demand for this information. The series continues to provide statistics on the receipt of income from various sources, income distribution, aggregate income, and poverty. One of the most widely cited statistics is the proportion of total income that elderly beneficiaries receive from Social Security benefits.

Financial planners have often used the metaphor of the three-legged stool—the need for savings, pensions, and Social Security—when discussing the adequacy of retirement income. The elderly receiving all of their income from Social Security are considered economically vulnerable, and the percentage of the elderly population completely dependent on Social Security for income is considered an important indicator of the economic well being of the elderly. As reported in *Income of the Population 55 or Older*, the percentage of elderly beneficiary aged units (defined below) receiving all of their income from Social Security benefits remained stable around 13 to 15 percent from 1978 to 1992, but then proceeded to climb to 22 percent in 2002.

The fundamental question that gave rise to this paper is why this percentage has risen so markedly from 1992 to 2002: to what extent is it a phenomenon of the elderly population's reliance on Social Security and to what extent is it a function of the measurement methodology? This rise in the measure of complete dependence on Social Security from 1992 to 2002 is puzzling considering that the official poverty rate for the elderly (which is also based on the CPS) decreased from 12.9 percent to 10.4 percent over the same time period (U.S. Census Bureau 2004b). In addition, greater numbers of people were participating in a booming financial market, which would suggest that a greater proportion of the elderly would have asset income than in previous decades, suggesting a lower rate of complete reliance on Social Security benefits.

This paper introduces a number of issues to be considered in presenting a measure of reliance on Social Security benefits. It discusses presenting this measure for families and persons within families, which is similar to the method of presenting poverty measures. The paper contrasts basing this measure on the Survey of Income and Program Participation (SIPP) with the currently used (CPS). It discusses underreporting of asset income, its impact on this measure, and ways to address this problem. It also presents the impact of using administrative data to replace survey data in preparing this measure.

II. Background on the *Income of the Population 55 or Older*

The Unit of Analysis in *Income of the Population 55 or Older*

The primary unit of analysis in the *Income of the Population 55 or Older* is the aged unit. The aged unit is defined as married couples living together – including at least one person 55 or older – and nonmarried persons 55 or older. Persons who are married but not living with a spouse are counted as nonmarried persons. The income of an aged unit is either the income of a nonmarried person or the sum of income from both spouses in a married couple. A married couple is counted as receiving income from a particular source if one or both persons are recipients of that source (Social Security Administration, 1998). The aged unit as a unit of analysis focuses on income of the aged alone, whether they live with other family members or not and recognizes a married couple as an economic unit that shares resources.

Measuring Reliance on Social Security Benefits

A major family of statistics produced in *Income of the Population 55 or Older* relates to the source of income received from a variety of sources (including income from Social Security benefits, government employee pensions, private pensions and annuities, earnings, assets, and public assistance). The *Income of the Population 55 or Older* includes a number of tables

showing the percentage of income derived from major sources of income for aged units receiving those sources of income. These tables show distributions of the level of reliance on various income sources plus three measures of high reliance—50 percent or more, 90 percent or more, and 100 percent—by age, sex, and marital status. Of special interest is the percentage of income of aged units derived from Social Security benefits. This paper analyzes the measures of reliance on Social Security benefits contrasting 90 percent or more reliance with 100 percent reliance measures for different units of analysis (other than the aged unit) and compares the results based on the SIPP with those based on the CPS.

III. Data Sources Used in this Analysis

Survey Data

Current Population Survey (CPS). The CPS is a monthly survey of approximately 50,000 households conducted by the Census Bureau for the Bureau of Labor Statistics. The CPS is a representative sample of the “civilian noninstitutional population”. The survey has been conducted for more than 50 years and is used for official monthly unemployment and labor force statistics. Annual income data have been collected in the March supplement since 1948 with information gathered concerning income received the previous calendar year for approximately 35 cash and in-kind sources. Official estimates of income and poverty in the United States are based on the March supplement (see Herz 1996, Dippo 1996, and Census Bureau 2005a).

In this paper, analysis of CPS income data is based on income received during 1996 collected on the 1997 March supplement to the CPS. In this paper, persons classified as “65 or older” were at least age 65 as of the interview in March 1997 with families classified as “65 or older” when they contain at least one person who was at least age 65 as of the interview in March 1997.

Survey of Income and Program Participation (SIPP). SIPP is a longitudinal panel survey conducted by the Census Bureau designed to collect data on sources and amounts of income in order to provide improved statistics on the distribution of income in the country. SIPP is a representative sample of the “noninstitutional population”. The first SIPP panel began in October 1983; panels begin periodically and their durations range from two-and-a-half to four years. Data are collected on approximately 70 cash and in-kind sources of income (U.S. Census Bureau 2005a, 2005b).

In this paper, analysis of SIPP income data is based on information collected in the 1996 SIPP panel concerning income received during 1996. Persons classified as “65 or older” were at least age 64 as of the interview in March 1996 and families classified as “65 or older” contain at least one person who was at least age 64 as of the interview in March 1996.¹

Administrative Data

SSA administers two income-maintenance programs—Social Security benefits which are paid to persons eligible for benefits under the Old-Age, Survivors and Disability Insurance (OASDI) program and the separate program of Supplemental Security Income (SSI) for low income aged and disabled persons. In this report, statistics based on administrative data refer to statistics based on a combination of survey-reported and administrative information. Self-reported data were replaced with Social Security’s administrative data for survey records having a valid Social Security number (SSN) and the age from the administrative record was within five years of the self-reported age; these are referred to as “matched records”. Self-reported data from the survey were used when there was not a valid SSN for survey respondents. A greater proportion of observations in the 1996 SIPP are matched with Social Security administrative records (83.0 percent of those present in March 1996) than in the CPS (77.5 percent).

¹ The classification of age 64 as of March 1996 as 65 or older makes the sample comparable to the CPS sample which is 65 as of March 1997. This analysis uses the longitudinal core files for waves 1 through 4 of the 1996 panel of SIPP. For observations that were missing data, either because their first interviews did not collect information on January and/or February 1996 or due to lack of interview, the income data for the missing months were replaced with the average income for the reported months. March 1996 weights were used for three reasons: first, March 1996 is the first month in which all rotation groups were interviewed; second, the 1996 calendar year weights would eliminate observations that had not been present the entire year, making attrition bias a concern; third, using the March 1996 weights excludes persons who entered the sample because of association with an original respondent.

Survey-based Social Security benefit amounts have been replaced with the amount paid in the Social Security benefit check plus the beneficiary's Medicare Part B premium (when the latter is applicable) in both SIPP and the CPS. These administrative benefit amounts reflect the actual payment made, and they are the basis of Social Security reports to the IRS for annual income received by the beneficiary. Survey-based SSI payments have also been replaced by administrative payment amounts reflecting actual payments made to recipients.² The process is somewhat more complicated for the SSI program because there are federal and state components to SSI payments, and the two surveys treat this differently. SIPP asks specifically for federal payments and state payments separately, while CPS asks respondents for a single, combined SSI payment amount.

For states with federally-administered state SSI payments, SSI payment amounts (both federal and state) were taken directly from administrative payment data files and used to replace reported SSI payments for matched observations for both SIPP and the CPS. For states without federally-administered SSI payments, the process is different when processing the SIPP and the CPS. For SIPP, survey-collected federal payments were replaced by administrative data and survey-based state payments are not changed. For the CPS, the survey-based SSI payment (combined state and federal) amount was replaced by administrative information.³

For all matched cases, survey-based earned income amounts were replaced by administrative data for earned income. The SSA administrative information on earnings is derived directly from the W-2 and Schedule SE forms filed by survey respondents.⁴

IV. Examining the Unit of Observation

As discussed above, the *Income of the Population 55 or Older* uses the construct of the aged unit as the unit of observation, however, other units of analysis may be more useful for gauging economic well-being. Poverty statistics and related measures of economic well-being commonly use families or persons based on family income as units of observation; Proctor and Dalaker (2003) provides examples. This paper discusses three options for using persons or families as the unit of observation in analyzing reliance measures for Social Security benefits.

The three options compared here are measures of reliance for persons based on their own income, families based on the family income, and persons based on the income of their family. Using the person as a unit of observation and basing reliance on their income only would assume that no income sharing occurs between family members, including spouses. The structures of various surveys, including the Survey of Consumer Finances and the Consumer Expenditure Survey, and even the official poverty statistic, indicate that this no-sharing assumption is not widely held. Reliance of persons based on family income allows for income sharing and is more appropriate when the focus of a reliance measure is person based.

Note that an important distinction in this section is the contrast between person-based and more aggregated measures. The implications of using aggregated units of analysis are similar whether the aggregate unit is a family, an aged unit, household, or any other unit larger than the person. When using an aggregated unit, no distinction is made among units of different sizes. In addition, there is a risk that the measure based on an aggregated unit will be erroneously interpreted as a person-based measure.⁵

² OASDI administrative data come from the Payment History Update System (PHUS). Other studies have used the monthly benefit credited from the Master Beneficiary Record (MBR), which is usually, but not always, the amount received by the beneficiary. Discrepancies may arise between the MBR and the PHUS when payment for retroactive benefits is issued in a single check. SSI administrative data come from the Supplemental Security Record (SSR).

³ Any state-administered state SSI amounts would be replaced with a value of zero during the substitution of administrative data resulting in the administrative estimate of SSI receipt for the CPS being a lower bound.

⁴ Earnings data come from the Master Earnings File which contains both the Summary Earnings Record (SER) and the Detailed Earnings Record (DER). The SER has a record of OASDI-covered earnings for every valid Social Security number; this file was used to determine whether an observation had a match. The DER contains income from employment regardless of whether the job was covered under the Social Security system. SIPP earnings were replaced with earnings from the DER. CPS earnings were replaced with earnings from the SER pending resolution of difficulties with the DER matched to the CPS.

⁵ The magnitude of the error in interpretation depends on whether a systematic difference exists between families based on size.

The following example based on three elderly persons illustrates how different the results may look depending on the unit of observation and whose income is considered. The analysis is summarized in Table 1.

Suppose person X receives all of his income from Social Security benefits, while persons Y and Z receive other income in addition to their Social Security benefits. If the statistic is for persons based on person income, then 33.3 percent of the elderly are completely reliant on Social Security benefits, regardless of family relationships. This corresponds to the first row in the table below.

The second row of the table presents results for families based on family income. The percentage completely reliant on Social Security changes for different family relationships. If all three are unrelated, then 1 of 3 families (33.3 percent) is completely reliant on Social Security. If X and Y are a family, then no families (0.0 percent) are completely reliant on Social Security. Finally, if Y and Z are a family and X is unrelated, then 1 of 2 families (50 percent) is completely reliant on Social Security.

The last row presents the calculations for persons based on family income. In this case, if X and Y are a family and Z is unrelated, then the rate of complete reliance on Social Security is 0 percent. If X is not in a family with Y or Z, the rate of complete reliance on Social Security is 33.3 percent.

The difference in rates of reliance between the two measures with the person as the unit of observation comes solely from what income is considered to be a resource for a person.

Table 1. Example of the effects of unit of observation, income basis, and family relationships on a complete reliance on Social Security benefits statistic

| <i>Unit of observation</i> | <i>Income basis</i> | All unrelated | X and Y family, Z unrelated | Y and Z family, X unrelated | All related |
|----------------------------|---------------------|---------------|-----------------------------|-----------------------------|-------------|
| Person | Person | 33.3 | 33.3 | 33.3 | 33.3 |
| Family | Family | 33.3 | 0.0 | 50.0 | 0.0 |
| Person | Family | 33.3 | 0.0 | 33.3 | 0.0 |

Classification by age, race, and other demographic characteristics is more straightforward when the person is the unit of observation. Classifying families by age, for example, requires a decision that may place family members in an age group in which they would not have been classified as a person; multigenerational families and spouses with age differences are examples of families that would be affected. In addition, a change in family composition at any time in the survey period or any change of reference person can lead to changes in demographic classification of the family or other aggregate.⁶

This section raised some of the factors involved when choosing a unit of analysis and the effects on measurement of economic well being of those choices. Ultimately, the selection of a unit of observation, whose characteristics to use, and whose income to include will require decisions based on the intended use of and inference from a particular statistic.

V. Selecting the Survey to Use When Producing the *Income of the Population 55 or Older*

As noted in earlier sections, the *Income of the Population 55 or Older* is produced based on data from the CPS. One could alternatively produce the *Income of the Population 55 or Older* based on data from the SIPP. This section compares the different estimates obtained from these two surveys and presents possible explanations for these differences.

Relating the discussion above concerning unit of analysis to the issue of choice of survey data, Table 2 below compares the results for the different units of observation and income bases for both the SIPP and CPS for 1996. One can see that including contributions to family income from all family members results in a lower level of complete reliance on Social Security benefits for persons based on family income when compared to persons based on their own income. This pattern can be seen both for estimates based on CPS and SIPP.

⁶ In this analysis, the family (for family based on family income statistics) is defined to be the family of the March 1996 reference person and the weight used is the March 1996 family weight.

Table 2. Heavy reliance on Social Security by persons 65 or older or families containing at least one person 65 or older and income basis, 1996

| Unit of observation | Income basis | 90 percent or more reliant | | 100 percent reliant | |
|---------------------|--------------|----------------------------|------|---------------------|------|
| | | SIPP | CPS | SIPP | CPS |
| Person | Person | 24.1 | 33.9 | 9.4 | 19.4 |
| Family | Family | 15.4 | 23.7 | 5.7 | 12.5 |
| Person | Family | 13.8 | 21.9 | 4.9 | 11.3 |

Table 3 presents the differences in the percentages of persons 65 or older reporting various sources of income in the CPS and SIPP, and one can see from that table that respondents in SIPP are more likely to report receipt of income in every major category than respondents in the CPS, but particularly asset income and private pensions. The Census Bureau has found that respondents in SIPP are more likely to report small and/or infrequently received amounts of income than respondents in the CPS because they are interviewed more frequently regarding a smaller time frame with more detailed questions about their sources of income (U.S. Census Bureau, 2005a).⁷ For example, for questions involving asset income, SIPP respondents are asked about ownership of a particular asset immediately before being asked about income from that asset; CPS respondents are only asked about income from a particular type of asset.

Table 3. Weighted percentage of persons 65 or older with income from specified source, 1996

| | SIPP | CPS |
|--------------------------------------|---------------|---------------|
| Number of persons (thousands) | 33,694 | 31,877 |
| N | 12,048 | 15,955 |
| Earnings | 15.7 | 15.6 |
| Retirement benefits* | 96.1 | 92.6 |
| Social Security* | 94.1 | 90.1 |
| Pensions* | 47.5 | 34.6 |
| Public* | 16.4 | 11.1 |
| Private* | 35.5 | 24.5 |
| Asset income* | 75.3 | 64.2 |
| Interest* | 73.4 | 62.0 |
| Not interest* | 32.6 | 24.3 |
| Public assistance* | 7.8 | 4.7 |
| SSI* | 6.4 | 4.5 |
| Other public assistance* | 1.8 | 0.3 |
| Veterans' benefits* | 4.5 | 3.6 |
| Unemployment compensation | 0.4 | 0.5 |
| Workers' compensation* | 0.8 | 0.4 |
| Personal contributions | 0.5 | 0.6 |

*Difference between the surveys is significant at the 1 percent level.

Other studies have compared aggregate amounts of income from SIPP or CPS to other benchmarks. A study conducted by Roemer (2000) found that the CPS only captured 92.6 percent of the aggregate income benchmark in 1996, underestimating Social Security and Railroad Retirement by 8 percent, SSI by 16 percent, pensions by 23 percent, and asset income by 29 percent. He also found that in 1996, SIPP underestimated aggregate income by more than the CPS in these categories, except for pensions, which were underestimated by 14 percent, and SSI, which was overestimated by 1 percent. Koenig (2003) found, however, that SIPP does a better job of classifying Social Security and SSI beneficiaries, and that the SIPP was more likely than CPS to reflect the net Social Security benefit rather than the gross benefit. Czajka et al. (2003) found that the amount of assets in the 1996 SIPP was underestimated; this may have led to underestimating the amounts of asset income received in SIPP. When considered together, the evidence suggests that the CPS underestimates whether or not a source of

⁷ A comparison of the two surveys by U.S. Census Bureau (2005a) notes that the CPS has gaps in the area of income measurement relative to SIPP because a “yearlong reference period means that CPS respondents are more likely than SIPP respondents to forget or misreport certain asset income or irregular income sources.” It also notes that the CPS is less comprehensive in the areas of program participation and the measurement of assets.

income was received, but estimates higher amounts for those receiving it, while the SIPP may slightly overestimate receipt but underestimate the amount.

VI. Evaluating the Role of Asset Income

Underreporting asset income is a problem in a number of current demographic surveys. Unreported or underreported asset income may be responsible for higher values of reliance on Social Security than would be computed with more complete asset income reporting.

According to *Income of the Population 55 or Older*, the proportion of beneficiary aged units 65 or older reporting that they received all of their income from Social Security benefits rose from a low of 13 percent in 1990 to a high of 22 percent in 2002. The percent reporting receipt of asset income in the CPS appears to be negatively correlated with the percentage of beneficiary units reporting complete dependence on Social Security since 1976, especially from 1994 to 2000 when asset income receipt fell from 67 percent to 55 percent.⁸

To better understand the role of reporting asset income in measures of reliance on Social Security, Fisher (2005) conducted an in-depth analysis comparing assets held and asset income using the Surveys of Consumer Finances (SCF)⁹. In the 1992 SCF, 77 percent of primary economic units (PEUs) 65 or older¹⁰ reporting no asset income held one or more assets; by the 2001 SCF, 87 percent of PEUs reporting no asset income held one or more assets. Many PEUs reporting no asset income held only checking accounts, but the proportion holding savings accounts grew from 24 to 36 percent from 1992 to 2001.

Using the 1992 to 2001 SCF, Fisher (2005) computed a reliance measure based on the SCF using market rates of interest to impute asset income for those PEUs units not reporting any. Fisher (2005) found that unreported asset income has played a substantial role in the increase in the percentage of beneficiaries reporting complete dependence on Social Security. In the 1998 SCF, approximately 50 percent of PEUs 65 or older reported asset income; imputation of asset income yielded a range of 70 percent to 76 percent of PEUs 65 or older receiving asset income, and caused the percentage of PEUs 65 or older completely dependent on Social Security in the SCF to fall from 18.2 percent to a range of 10.1 to 11.4 percent. While the percentage of PEUs in the SCF reporting that all of their income came from Social Security rose from 15 to 18 percent from 1991 to 2000, imputation of asset income for money market and savings accounts showed this percentage remaining relatively constant at around 12 percent.

It is interesting to observe that the proportion of elderly persons reporting asset income in the SIPP for 1996 (73.7 percent) falls in the middle of this range estimated from the SCF (70 percent to 76 percent) after imputing for asset income based on assets held.

VII. Using Administrative Data

An ongoing objective of SSA research staff is to take advantage of the analytic potential afforded by linking survey and administrative data. Through linkages of SSA administrative data to survey information, SSA produces demographic estimates of the current beneficiary population and develops models to project demographic and economic characteristics of the current working population into the future. Linked survey and administrative data are used to evaluate and enhance the quality of demographic survey data, to improve estimates from demographic surveys, and to augment information collected in demographic surveys. SSA's administrative data covers all program beneficiaries and program participants. These data are essential for administering federal social insurance programs, and they serve as the basis of program eligibility and program benefit computation. Accordingly, they are of exceptionally high quality. As noted in the section on data sources, the administrative data used in this study are the actual amount paid to Social Security beneficiaries and SSI recipients and are the basis of annual reports of these payments to the IRS.

Administrative data linked to surveys can be used to assess the accuracy of survey reported income because they are the actual amounts paid to individuals as Social Security benefits. Koenig (2003), Sears and Rupp (2003), and Huynh, Rupp, and Sears (2002) have evaluated the impact of substituting Social Security's administrative data for respondents' answers for

⁸ Hungerford et al. (2002) provide an overview of trends in the income and overall economic status of elderly aged units.

⁹ Wealth data is as of the date of collection, but income data is for the calendar year prior to the survey.

¹⁰ A PEU consists of the breadwinner and members of that household who are economically interdependent. The statistics here are for PEUs consisting only of the breadwinner and a spouse (if present), if either is at least 65 years of age.

income received from Social Security and SSI. SSI payments are often misreported as Social Security income. Another frequent and systematic problem is that survey respondents often report net Social Security benefits, excluding the Medicare Part B premium automatically deducted from their Social Security benefit (if applicable). This misreporting represents a systematic underestimate of Social Security benefits and is discussed more in Koenig (2003).

Table 4 below compares the receipt of earnings, Social Security benefits, and SSI by the elderly from the SIPP and CPS and whether administrative data was substituted for self-reported. The administrative statistics use administrative data in place of self-reported survey data for matched observations and use reported data for observations unable to be matched to administrative records.

Table 4. Weighted percentage of persons 65 or older receiving income from selected sources, 1996

| | SIPP | | CPS | |
|-----------------|----------|----------------|----------|----------------|
| | Reported | Administrative | Reported | Administrative |
| Earnings | 15.7 | 14.5 | 15.6 | 15.8 |
| Social Security | 94.1 | 92.3 | 90.1 | 91.5 |
| SSI | 6.4 | 6.1 | 4.5 | 5.4 |

SIPP reports a higher percentage of aged persons receiving earnings income than indicated by administrative data and the CPS reports a lower percentage. A difficulty when using administrative data with SIPP is that administrative earnings are for an entire year and it is difficult to attribute earnings across months, which becomes necessary when family living arrangements change during the year. Accordingly, administrative records for earnings are not used in the remainder of the analysis.

Based on administrative records, the CPS underreports receipt of Social Security benefits and SSI payments, while the SIPP overreports.¹¹ The gaps between the two survey estimates for receipt of Social Security and SSI narrows with the use of administrative information, which is actual payment data, but do not completely disappear. Table 5 characterizes the nature of the misreport of benefits in surveys compared to administrative records for those completely reliant on Social Security benefits. Table 5 uses only survey records that were matched to administrative records.

Table 5. Misclassification of beneficiary status of person observations 65 or older with an administrative match

| | SIPP | | CPS | |
|--|------------|-------------|--------------|-------------|
| | Number | Percent | Number | Percent |
| Number of persons showing all income from Social Security benefits | 902 | 100 | 2,169 | 100 |
| No beneficiary misclassification | 827 | 91.7 | 1,813 | 83.6 |
| 100 percent reliance in self report, but not administrative records | 52 | 5.8 | 196 | 9.0 |
| Self report omitted SSI income | 29 | 3.2 | 138 | 6.4 |
| Not a Social Security beneficiary | 38 | 4.2 | 106 | 4.9 |
| Both reasons above | 15 | 1.7 | 48 | 2.2 |
| 100 percent reliance in administrative records, but not self report | 23 | 2.5 | 160 | 7.4 |
| Self report included SSI income not on administrative records | 15 | 1.7 | 41 | 1.9 |
| Social Security beneficiary by administrative records, not self report | 11 | 1.2 | 128 | 5.9 |
| Both reasons above | 3 | 0.3 | 9 | 0.4 |

The misreporting of SSI as Social Security benefits and vice versa can affect one being classified as a beneficiary and as a completely reliant beneficiary, changing the estimates of complete reliance on Social Security benefits. Overall, the SIPP is less likely than CPS to misclassify a person (Koenig 2003). For the SIPP, misclassification of persons not receiving Social Security as Social Security beneficiaries is the dominant problem. The CPS, however, is only slightly more likely to

¹¹ Koenig (2003) provides a more detailed study of beneficiary misclassification in the two surveys.

misclassify a Social Security beneficiary as a non-beneficiary than vice versa, and SSI benefits are much more likely to be omitted or reported as Social Security benefits.

Table 6. Percentage of persons 65 or older in beneficiary families by ratio of family Social Security benefits to family total income, 1996

| | 90 percent or more reliant | 100 percent reliant |
|-------------------|-------------------------------|------------------------|
| SIPP (reported) | 13.8 | 4.9 |
| SIPP (admin data) | 15.3 | 4.9 |
| CPS (reported) | 21.9 | 11.3 |
| CPS (admin data) | 22.6 | 11.7 |

Use of administrative data does not have a noticeable effect on the proportion of the elderly reporting all of the family income from Social Security in the SIPP. The increase in complete dependence on Social Security in the CPS benefits when using administrative records may be explained by the net gain of Social Security beneficiaries in the CPS by using administrative records.

The increase in the percentage of persons 65 or older in beneficiary families reporting 90 percent or more of family income from Social Security resulting from substituting administrative data is more striking. Koenig (2003) found that SIPP respondents were more likely to report their net Social Security benefit than their gross benefit; substitution of administrative data in the SIPP tends to increase the amount of money being received from Social Security, pushing a greater number of observations into the 90 percent or more reliant category. For the CPS, the change to the 90 percent or more reliance statistic is not as large, and approximately half of the change can be attributed to the addition of persons who had been classified as completely reliant on Social Security benefits. Since respondents in the CPS were more likely to report the amount of their gross benefit than in SIPP (Koenig 2003), there was a smaller increase in the number of observations classified as 90 percent or more reliant when using administrative records.

The Social Security Administration has the ability to match its administrative records for Social Security benefits, SSI, and earnings to the SIPP and CPS, but only after a significant time lag. Based on the increased time needed to produce estimates and the modest potential benefit, there do not seem to be major advantages to advocating the use of administrative data in producing *Income of the Population 55 or Older*.

VIII. Future Directions

The combined effect of these differences in measures of reliance on Social Security benefits is striking. The purpose of these exercises was to ascertain how measurement decisions affect our understanding of the resources available to the elderly. Table 7 below highlights the differences among various measures discussed in this analysis. With these issues identified, follow-up studies can be designed to indicate the meaningful changes to incorporate in the measure of reliance on Social Security and in its presentation in the *Income of the Population 55 or Older*.

Table 7. Percentage of beneficiary families 65 or older or persons 65 or older in beneficiary families with heavy reliance as a result of changes, 1996

| Unit of observation | Administrative data | 90 percent or more reliant | | 100 percent reliant | |
|------------------------------|------------------------|----------------------------|------|---------------------|------|
| | | SIPP | CPS | SIPP | CPS |
| Family | Yes | 16.9 | 24.0 | 5.7 | 12.7 |
| | No | 15.4 | 23.7 | 5.7 | 12.5 |
| Person with family income | Yes | 15.3 | 22.6 | 4.9 | 11.7 |
| | No | 13.8 | 21.9 | 4.9 | 11.3 |

One option to be considered is to include additional measures of reliance on major sources of income in the *Income of the Population 55 or Older* that vary the unit of observation and basis of income. This would, for example, allow the user to take into account the economic well-being of the aged persons based on family income. Such an addition to the publication would add comparability to the measure of poverty statistics.

One of the major findings discussed above is the role of asset income in measures of reliance on Social Security and changes over time in reporting of asset income in surveys. Imputations were produced for persons reporting some types of assets but no asset income and a measure of reliance was recomputed in the SCF. This strategy is possible with surveys such as the SCF or the SIPP, which collect asset holdings; but is not possible with the CPS, which does not collect asset holdings. SSA will continue to study this issue to determine ways to resolve it. One related concern with respect to providing reliable measures of high reliance on a major source of income such as Social Security benefits is whether the 100 percent reliance measure should continue to be the focus of attention. Given that having one dollar of income from another source is the determining factor in whether one is 100 percent reliant or less reliant on a source, this measure is much more subject to error than the measure of a somewhat lower level of reliance such as 90 percent or more or a level between 90 percent and 100 percent.

Most of the difference in Table 7 is attributable to using the SIPP rather than the CPS. The lower SIPP measures may be due to SIPP being better able to capture receipt of sources of income other than Social Security, particularly asset income. Advantages in capturing additional income, especially asset income, through the use of SIPP for *Income of the Population 55 or Older* would have to be weighed against other important considerations. One is the timeliness of being able to publish updated statistics given the much greater time it takes for the Census Bureau to process SIPP than CPS. Another is the ability to produce a regular statistical series with a longitudinal panel that begin every four years, given the sample attrition over the life of the panel that introduces potential bias into measures based on later years of the panel. Finally, Czajka et al. (2003), identified a number of shortcomings in SIPP data on wealth and assets when compared to the SCF.

This paper identified some issues to be addressed in measuring reliance of the elderly on Social Security and highlighted potential avenues for resolution. More research is needed to determine viable options for improvement, their limitations and trade-offs. The Office of Research, Evaluation, and Statistics will be conducting needed studies with a focus on designing improvements for this important measure.

References

- Czajka, John, J. Jacobson, and S. Cody (2003). "Survey Estimates of Wealth: A Comparative Analysis and Review of the Survey of Income and Program Participation." Final report for the Social Security Administration. 23 August 2003.
- Dippo, Cathy (1996). "CPS Annual Demographic Survey March Supplement: History". <http://www.bls.census.gov/cps/ads/shistory.htm>. Last modified 22 May 1996.
- Fisher, T. Lynn (2005). "Dependence on Social Security Benefits." Unpublished memo.
- Herz, Diane (1996). "CPS Overview." <http://www.bls.census.gov/cps/overmain.htm>. Last modified 9 May 1996.
- Hungerford, Thomas, M. Rassette, H. Iams, and M. Koenig (2002). "Trends in the Economic Status of the Elderly, 1976-2000." *Social Security Bulletin*. 64(3): 12-22.
- Hurd, Michael, F. T. Juster, and J. P. Smith (2003). "Enhancing the Quality of Data on Income: Recent Innovations from the HRS." *The Journal of Human Resources*. Summer 2003. 38(3): 758-72.
- Huynh, Minh, K. Rupp, and J. Sears (2002). "The Assessment of Survey of Income and Program Participation Benefit Data Using Longitudinal Administrative Records." The Survey of Income and Program Participation Report No. 238. Washington, D.C.: U.S. Department of Commerce, Census Bureau.
- Koenig, Melissa (2003). "An Assessment of the Current Population Survey and the Survey of Income and Program Participation Using Social Security Administrative Data." presented on November 18, 2003 at the FCSM Research Conference 2003.
- Proctor, Bernadette and J. Dalaker (2003). *Poverty in the United States: 2002*. U.S. Census Bureau. Current Population Reports, P60-222.
- Roemer, Marc (2000). "Assessing the Quality of the March Current Population Survey and the Survey of Income and Program Participation Income Estimates, 1990-1996." <http://www.census.gov/hhes/www/income/assess1.pdf>. Accessed 2 June 2005.
- Sears, James and K. Rupp (2003). "Exploring Social Security Payment History Matched with the Survey of Income and Program Participation." presented on November 18, 2003 at the FCSM Research Conference 2003.
- Social Security Administration (various years). *Income of the Population 55 or Older*.
- U.S. Census Bureau (2004a). "Current Population Survey (CPS) – Definitions and Explanations." <http://www.census.gov/population/www/cps/cpsdef.html>. Last revised 20 January 2004.
- (1997). *Money Income in the United States: 1996*. Current Population Reports, P60-197.

- (2004b). "Table 3. Poverty Status of People, by Age, Race, and Hispanic Origin, 1959 to 2003." *Historical Poverty Tables*. <http://www.census.gov/hhes/poverty/histpov/hstpov3.html>. Last revised 26 August 2004.
- (2005a). "Survey of Income and Program Participation Introduction to SIPP: Comparison of SIPP with Other Surveys." <http://www.sipp.census.gov/sipp/vs.html>. Accessed 8 June 2005.
- (2005b). "Survey of Income and Program Participation Introduction to SIPP: Overview of the Survey of Income and Program Participation (SIPP)." <http://www.sipp.census.gov/sipp/vs.html>. Accessed 9 June 2005.