

SOCIAL SECURITY INCOME MEASUREMENT IN TWO SURVEYS

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As a major source of income for retired persons in the United States, Social Security benefits directly influence economic well-being. That fact underscores the importance of measuring Social Security income accurately in household surveys. Using Social Security Administration (SSA) records, we examine Social Security income as reported in two Census Bureau surveys, the Survey of Income and Program Participation (SIPP) and the Current Population Survey (CPS). Although SSA usually deducts Medicare premiums from benefit payments, both the CPS and the SIPP aim to collect and record gross Social Security benefit amounts (before Medicare premium deductions). We find that the Social Security benefit recorded in the CPS closely approximates the gross benefit recorded for CPS respondents in SSA's records, but the Social Security benefit recorded in the SIPP more closely approximates SSA's record of net benefit payments (after deducting Medicare premiums).

Introduction

Social Security benefits are a major source of retirement income in the United States, and they directly influence the economic well-being and poverty status of many beneficiaries. Social Security retired-worker benefits replace a portion of preretirement income. That portion is greater for low lifetime earners than for higher earners; consequently, Social Security benefits account for a greater share of retirement income for lower-income beneficiaries (SSA 2012; Butrica and others 2012). Because Social Security income influences economic well-being, it is important that household surveys measure it accurately.

The payment of Medicare premiums complicates the survey measurement of Social Security income. Most beneficiaries elect to have the Social Security Administration (SSA) deduct those premiums from their monthly Social Security benefit, so that the amount they receive reflects a net monthly benefit that is lower than their gross benefit.¹ For all Social Security beneficiaries, income tax liability, poverty status, and eligibility for means-tested federal benefit programs—such as Supplemental Security Income and the Supplemental Nutrition Assistance Program—

are determined using the gross benefit before any deductions. However, because the actual cash income that most beneficiaries receive is net of Medicare deductions, they may report the net amount in household surveys as their monthly Social Security income. Analysts who use household surveys to measure income need to know whether the Social Security income recorded on these surveys reflects the gross amount or the benefit net of Medicare premiums.

This article assesses the accuracy of Social Security income as it is recorded in the Census Bureau's Survey of Income and Program Participation (SIPP) and Current Population Survey (CPS). A major goal of the SIPP is to measure income amounts by source to

Selected Abbreviations

CPS	Current Population Survey
MBR	Master Beneficiary Record
PHUS	Payment History Update System
SIPP	Survey of Income and Program Participation
SSA	Social Security Administration

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allow analysts to estimate how many individuals and families are eligible for government income-security programs. A major goal of the CPS is to measure total individual and family income and the percentage of the population with income below the poverty threshold. Accurately measuring Social Security income is essential to achieving those goals.

The SIPP and the CPS ask similar questions about Social Security income, but the two surveys' reference periods differ. The SIPP, as a longitudinal survey, groups its respondents in 4-year panels, in which participants are interviewed every 4 months.² The SIPP asks respondents whether they received any Social Security benefits during the 4 months prior to the month of the interview and, if so, they are asked to report the monthly amount of Social Security income they received. Those respondents are then told that "some people have what is called a 'Medicare Part B' premium taken out of their Social Security benefit before it reaches them," and are asked if they had the Part B premium deducted from their check and if they know the amount deducted (Census Bureau 2010, 233).³

An annual social and economic supplement to the CPS, conducted in March, asks respondents if they received Social Security income in the year before the interview. Those who received Social Security income are asked to report their benefit as either a monthly, quarterly, or annual amount. Respondents are then asked the amount of Social Security benefits they received in the month before the interview, and whether that amount was before or after the Medicare Part B deduction (Census Bureau 2009, D-27).⁴

Previous research has demonstrated that Social Security income is often underreported in surveys (Davies and Fisher 2009). Several studies have examined SIPP data matched to Social Security administrative records (for example, Huynh, Rupp, and Sears 2002; and Sears and Rupp 2003). Koenig (2003) studied both the SIPP and the CPS for the misreporting of Supplemental Security Income as Social Security benefits. This article uses SIPP and CPS data matched to SSA records. Specifically, we compare data on Social Security benefit payments (before and after Medicare premium withholding) from SSA's Payment History Update System (PHUS) to the benefit amounts recorded on the SIPP and the CPS. With the PHUS data, we ascertain whether the Social Security benefit amounts recorded in the surveys more closely approximate gross benefits or benefits net of Medicare premiums.

Data

For the SIPP, we measure Social Security income for 2009, the first full calendar year of income covered in the 2008 panel. We sum the monthly amounts recorded for 2009 in the SIPP public-use file to obtain annual Social Security income. We weight the data using the December 2009 survey weight. For the CPS, we measure Social Security income for calendar year 2008, as collected in the March 2009 Annual Social and Economic Supplement. As we began our research, that was the most recent CPS file to which SSA data had been matched.

We assess the consistency of the Social Security income in both surveys with the amounts recorded in SSA data. SSA's records include both the gross benefit amounts and the net amounts paid to beneficiaries after Medicare premiums have been deducted. This allows us to compare Social Security income in the surveys to both gross and net Social Security benefits. Because we focus on the income of the aged, we restrict our analysis to persons aged 60 or older in the survey year. We include in our sample all survey respondents who were recorded in the Social Security Master Beneficiary Record (MBR) as receiving Social Security benefits as disabled workers, retired workers, survivors, or spouses. In the SIPP, approximately 90 percent of the records for our sample were matched to Social Security administrative records. The match rate for the CPS was approximately 87 percent.

SIPP Results

For most SIPP respondents, the pattern of benefit receipt is consistent between the SIPP and the PHUS. Table 1 shows SIPP respondents aged 60 or older who were beneficiaries in December 2009 according to the MBR. About 88 percent of the SIPP respondents have a Social Security benefit recorded in both the SIPP and the PHUS. About 10 percent have a false negative on the SIPP: A benefit payment appears in the PHUS, but no Social Security income is recorded on the SIPP. Only 0.2 percent of SIPP respondents aged 60 or older had a false positive, in that they reported Social Security income in the SIPP, although the PHUS indicates no Social Security benefit. Slightly more than 1 percent received no Social Security income according to both the SIPP and the PHUS. In the latter two groups, the presence of beneficiaries for whom PHUS records indicate no benefit payments largely reflects the small portion of the MBR population that is not in current-pay status at a given time.

Table 1.
Social Security beneficiaries aged 60 or older according to SIPP and PHUS records, by age and benefit type: December 2009

Age and type of benefit	Number (thousands)	Percent				
		Total	Beneficiaries with a benefit recorded in—			
			Both PHUS and SIPP	PHUS, but not SIPP ^a	SIPP, but not PHUS ^b	Neither
Age						
60–61	1,018	100.0	73.1	14.9	1.4	10.6
62–64	4,214	100.0	80.0	16.8	0.4	2.8
65 or older	32,689	100.0	90.0	9.2	0.3	0.6
Benefit type						
Disabled worker	2,231	100.0	79.7	15.2	0.6	4.4
Retired worker	31,574	100.0	89.5	9.8	0.2	0.5
Spouse	1,129	100.0	81.0	8.8	2.0	8.2
Survivor	2,987	100.0	85.4	11.1	1.2	2.3
Total	37,921	100.0	88.3	10.2	0.2	1.1

SOURCE: SIPP 2008 panel data matched to SSA PHUS records.

NOTES: Sample includes all individuals in the MBR, including those not in current-pay status.

Rounded components of percentage distributions do not necessarily sum to 100.0.

a. "False negatives" in the SIPP.

b. "False positives" in the SIPP.

The differences between SIPP and PHUS records of Social Security income receipt vary by age and type of benefit. False negatives, in which the SIPP records indicate no Social Security income although payments appear in the PHUS, are more common among respondents aged 60–64 (about 15–17 percent) than among those aged 65 or older (9.2 percent). False negatives also are more common among disabled workers (15.2 percent) than among retired workers (9.8 percent), spouses (8.8 percent), or survivors (11.1 percent). Among the SIPP respondents who have a false positive report of Social Security income, there is little difference by age or type of benefit.

PHUS data for mean annual gross Social Security benefits in 2009 were about \$1,000 higher than the mean annual Social Security income recorded in the SIPP (Table 2).⁵ The mean gross PHUS benefit was \$13,548, which was \$960 (or almost 8 percent) higher than the SIPP mean of \$12,588. The median annual gross PHUS benefit, \$13,595, was \$1,176 (9.5 percent) higher than the median benefit, \$12,419.

Mean gross Social Security benefit amounts in the PHUS exceeded the mean SIPP benefit amounts in all categories, but the extent of the differences varied by age and type of benefit. By age, the largest difference occurred among beneficiaries aged 60–61, and the

smallest occurred among those aged 65 or older. By type of benefit, the largest difference occurred among disabled-worker beneficiaries who were younger than the Social Security full retirement age (66) throughout 2009.⁶ Disabled-worker beneficiaries become eligible for Medicare (and thus subject to premium deductions) after 2 years on the Social Security rolls. Most beneficiaries aged 60–61 are disabled workers, and for them, the amount by which mean gross Social Security income in the PHUS exceeded the SIPP amount (\$2,079) is more than twice as high as the amounts for retired-worker, spouse, and widow beneficiaries (\$942, \$117, and \$1,015, respectively). The difference between median gross Social Security income in the PHUS and the median SIPP benefit also was greater among disabled workers than among retired-worker, survivor, or spouse beneficiaries. The smallest difference between median gross benefits in the PHUS and median benefits in the SIPP occurred among spouse beneficiaries not entitled to worker benefits (\$677).

Another way to measure differences between the data sources is to compare the benefit amounts for individual respondents. This approach finds the mean (or median) of the differences between the SIPP and PHUS record values, as opposed to the difference in

Table 2.**Annual Social Security benefits recorded in the SIPP and gross benefits according to PHUS records, for persons aged 60 or older by age and benefit type: 2009 (in dollars)**

Age and type of benefit	PHUS mean	SIPP mean	PHUS median	SIPP median	Aggregate difference		Individual differences ^a	
					Mean	Median	Mean	Median
Age								
60–61	13,559	11,699	12,624	10,884	1,859	1,740	1,717	371
62–64	11,672	10,448	11,345	9,960	1,224	1,385	1,241	231
65 or older	13,763	12,823	13,817	12,720	940	1,097	942	523
Benefit type								
Disabled worker	14,479	12,399	13,426	11,834	2,079	1,592	2,119	769
Retired worker	13,756	12,813	13,918	12,768	942	1,150	951	496
Spouse	7,021	6,904	7,229	6,552	117	677	22	173
Survivor	12,941	11,927	13,169	12,192	1,015	977	970	569
Total	13,548	12,588	13,595	12,419	960	1,176	989	497

SOURCE: SIPP 2008 panel data matched to SSA PHUS records.

NOTES: Average benefit calculations exclude zero values.

PHUS data reflect benefit amounts before Medicare premium deductions.

a. Reflects the mean or median of the differences between the SIPP and PHUS values for each individual.

the aggregate means (or medians) discussed above. To calculate the individual difference, we subtract the SIPP benefit from the gross PHUS benefit for each SIPP respondent with a Social Security benefit. If the SIPP respondent reported a benefit amount equal to the gross benefit recorded in the PHUS, the difference is zero. Overall, the mean and median differences between the individual Social Security income values reported in PHUS and the SIPP were \$989 and \$497, respectively. The median difference indicates that one-half of the SIPP records contained benefit amounts that were at least \$497 less than the gross amount in that individual's PHUS record.

The pattern of the means of individual differences generally resembles that of the previously discussed differences of aggregate means. The exception is the spouse benefit, which averages \$22 in individual differences, substantially lower than the \$117 difference in aggregate means. That result is attributable mainly to negative values for the 2.0 percent of respondents who have benefit payments recorded in the SIPP but not recorded in the PHUS. By contrast, most of the median values of individual differences are substantially lower than the differences of medians. That result could indicate that differences between the SIPP and the PHUS records are less common among respondents with smaller benefit payments, as well as the effect of including negative values for

respondents with benefit payments recorded in the SIPP but not in the PHUS.

Table 2 shows that the median gross PHUS benefit amounts, like the mean amounts, exceed those reported in the SIPP for all beneficiary categories. For at least some beneficiaries, the SIPP amounts might represent the net benefit after deducting Medicare premiums, which could explain the difference between the sources. Benefit amounts in the SIPP generally approximate the PHUS net benefit more closely than they approximate the PHUS gross benefit for SIPP respondents with positive Social Security amounts. Table 3 shows that the mean annual net PHUS benefit was only \$81 lower than the mean SIPP benefit, and that the median annual net PHUS benefit was \$121 higher than the SIPP benefit. Those differences are substantially smaller than the differences between the gross PHUS benefits and the SIPP benefits.

As with the gross benefit amounts, the differences between the SIPP benefits and the net PHUS benefits vary by age and type of benefit. The mean annual net PHUS benefit was \$201 lower than the mean SIPP benefit among those aged 65 or older. At ages 60–61 and 62–64, the mean net PHUS benefits were \$1,115 and \$987 higher, respectively, than the SIPP means. The mean net PHUS benefit was much larger than the mean SIPP benefit among disabled workers, who become eligible for Medicare benefits (and subject

Table 3.
Annual Social Security benefits recorded in the SIPP and net benefits according to PHUS records, for persons aged 60 or older by age and benefit type: 2009 (in dollars)

Age and type of benefit	PHUS mean	SIPP mean	PHUS median	SIPP median	Aggregate difference		Individual differences ^a	
					Mean	Median	Mean	Median
Age								
60–61	12,814	11,699	12,000	10,884	1,115	1,116	1,283	0
62–64	11,435	10,448	11,148	9,960	987	1,188	1,029	103
65 or older	12,622	12,823	12,672	12,720	-201	-48	-198	-543
Benefit type								
Disabled worker	13,650	12,399	12,876	11,834	1,251	1,042	1,403	0
Retired worker	12,715	12,813	12,816	12,768	-98	48	-82	-429
Spouse	5,780	6,904	5,844	6,552	-1,124	-708	-1,072	-792
Survivor	11,868	11,927	12,092	12,192	-59	-100	-159	-393
Total	12,507	12,588	12,540	12,419	-81	121	-31	-400

SOURCE: SIPP 2008 panel data matched to SSA PHUS records.

NOTES: Average benefit calculations exclude zero values.

PHUS data reflect benefit amounts after Medicare premium deductions.

a. Reflects the mean or median of the differences between the SIPP and PHUS values for each individual.

to premium deductions) after 2 years on the Social Security rolls. Among SIPP respondents with retired-worker or survivor benefits, the mean net PHUS benefits are quite similar to mean SIPP benefits, differing by less than \$100. The mean net PHUS benefit for spouse beneficiaries is substantially lower than the mean SIPP benefit, perhaps reflecting that category's higher share of false positives (respondents with zero benefits in the PHUS and positive benefits in the SIPP; see Table 1). Differences between median net PHUS benefits and median SIPP benefits generally followed patterns similar to those for mean benefits.

As we did for gross benefits, we also compare the net benefit payments for individual respondents in the PHUS with those recorded on the SIPP. As before, we subtract the SIPP benefit from the net PHUS benefit for each SIPP respondent with a Social Security benefit. The overall mean individual difference of -\$31 is similar in magnitude to the overall difference in means of -\$81. If the benefit recorded in the SIPP were equal to the gross benefit, the median individual difference for Medicare-eligible beneficiaries would equal the Medicare premium. In 2009, the Part B premium was \$96.40 per month, or \$1,157 for the year, so we would expect to see a median difference of about -\$1,157. The median individual difference for beneficiaries aged 65 or older of -\$543 indicates that for many Medicare-eligible beneficiaries, the SIPP benefit is substantially less than the actual gross benefit.

CPS Results

Patterns of benefit receipt in the CPS were similar to those in the SIPP. Table 4 shows CPS respondents aged 60 or older who were beneficiaries in December 2008 according to the MBR. About 90 percent received Social Security income at some time in 2008 according to both the CPS and the PHUS. About 9 percent of CPS respondents aged 60 or older had false negatives, with the PHUS indicating that they received Social Security income not reported in the CPS. About 1 percent of CPS respondents aged 60 or older received no Social Security income according to both the CPS and the PHUS, and another 0.2 percent reported Social Security income in the CPS although the PHUS indicates no benefits. As noted earlier, instances of beneficiaries having no benefits recorded in the PHUS occur mainly because a relatively small number of people on the MBR are not in current-pay status at a given time.

As was true with the SIPP, the extent to which the CPS records on beneficiary status differed from the PHUS varied by age and type of benefit. False negatives, in which no Social Security income was recorded in the CPS but benefit payments appeared in the PHUS, were more common among respondents aged 60–61 (26.2 percent) and 62–64 (20.0 percent) than those aged 65 or older (7.1 percent). False negatives in the CPS were more common among disabled workers (19.9 percent) than among retired workers

Table 4.
Social Security beneficiaries aged 60 or older according to CPS and PHUS records, by age and benefit type: December 2008

Age and type of benefit	Number (thousands)	Percent				
		Total	Beneficiaries with a benefit recorded in—			
			Both PHUS and CPS	PHUS, but not CPS ^a	CPS, but not PHUS ^b	Neither
Age						
60–61	804	100.0	61.8	26.2	0.0	12.1
62–64	2,811	100.0	73.6	20.0	0.6	5.8
65 or older	30,388	100.0	92.0	7.1	0.2	0.6
Benefit type						
Disabled worker	2,374	100.0	73.1	19.9	0.5	6.5
Retired worker	27,816	100.0	91.6	7.8	0.0	0.5
Spouse	1,074	100.0	81.4	8.8	1.7	8.1
Survivor	2,738	100.0	89.8	7.6	0.5	2.1
Total	34,003	100.0	89.8	8.6	0.2	1.3

SOURCE: March 2009 CPS data matched to SSA PHUS records.

NOTES: Sample includes all individuals in the MBR, including those not in current-pay status.

Rounded components of percentage distributions do not necessarily sum to 100.0.

a. "False negatives" in the CPS.

b. "False positives" in the CPS.

(7.8 percent), spouses (8.8 percent), and survivors (7.6 percent). False positives were relatively rare at 0 to 2 percent, and they varied little by age or type of beneficiary.

The mean annual Social Security benefit before deductions in 2008 was, on average, \$202 lower in the PHUS record than in the CPS (Table 5). The mean annual gross PHUS benefit was \$12,685, compared to \$12,888 in the CPS. The relationship of the median CPS values to the gross PHUS medians reversed that of the means. The median gross PHUS benefit was \$204 (1.6 percent) higher than the median CPS benefit, \$12,761 versus \$12,557.

The differences between the benefit amounts recorded in the PHUS and the CPS were generally smaller than the differences between the PHUS and the SIPP. Moreover, unlike the SIPP benefits, the mean CPS benefit amounts were often greater than the gross means in the PHUS. With respect to age, the largest difference in mean benefits was among beneficiaries aged 62–64. For that group, the mean CPS benefit exceeded the gross PHUS benefit by \$477. Among beneficiary groups, the biggest difference in mean benefits occurred among spouse beneficiaries, whose mean annual CPS benefit was \$968 higher than

the gross PHUS benefit. Only disabled workers had a mean CPS benefit that was lower (by \$638) than the mean gross PHUS benefit.

In all three age categories, the median annual CPS benefit differed from the median gross PHUS benefit by less than 2 percent. The smallest difference between median gross PHUS benefits and the median CPS benefit occurred among disabled-worker beneficiaries, and the largest occurred among retired workers. For retired-worker and survivor beneficiaries, the median gross PHUS benefit was about 4 percent higher than the median CPS benefit, while for disabled-worker and spouse beneficiaries, the difference between the PHUS and the CPS was less than 2 percent.

As we did for the SIPP, we examined the mean and the median of the differences between benefit amounts for individual beneficiaries by subtracting the benefit reported in the CPS from the benefit in the PHUS for each CPS respondent who reported receiving Social Security. Taking the mean of the differences, the gross PHUS benefits are \$209 lower than the amounts in the CPS, almost the same as the difference in means (\$202). The median individual difference was less than \$1, substantially less than the

Table 5.**Annual Social Security benefits recorded in the CPS and gross benefits according to PHUS records, for persons aged 60 or older by age and benefit type: 2008 (in dollars)**

Age and type of benefit	PHUS mean	CPS mean	PHUS median	CPS median	Aggregate difference		Individual differences ^{a,b}	
					Mean	Median	Mean	Median
Age								
60–61	14,128	14,048	13,337	13,176	80	161	80	-84
62–64	10,471	10,948	10,029	10,193	-477	-164	-495	-139
65 or older	12,824	13,012	12,903	12,677	-188	226	-193	c
Benefit type								
Disabled worker	14,134	13,496	12,989	12,905	638	84	630	0
Retired worker	12,822	13,065	13,452	12,869	-243	583	-248	c
Spouse	6,865	7,833	7,037	7,157	-968	-120	-931	-144
Survivor	12,322	12,459	12,641	12,157	-137	484	-141	c
Total	12,685	12,888	12,761	12,557	-202	204	-209	c

SOURCE: March 2009 CPS data matched to SSA PHUS records.

NOTES: Average benefit calculations exclude zero values.

PHUS data reflect benefit amounts before Medicare premium deductions.

a. Differences were negative for 1.8 percent of records with a benefit in the CPS but no benefit recorded in the PHUS.

b. Reflects the mean or median of the differences between the SIPP and PHUS values for each individual.

c. Less than \$0.50.

difference in medians (\$204). The median difference of almost zero indicates that a large proportion of CPS records had benefit amounts equal to the gross PHUS benefit amount.

The means of individual differences are similar to the differences of means. By contrast, some of the medians of individual differences differ substantially from the differences in medians. For example, among people aged 65 or older, the median annual CPS benefit was \$226 lower than the median gross PHUS benefit, but the median of the individual differences was less than \$1. Likewise, among retired-worker and survivor beneficiaries, the median CPS benefits were \$583 and \$484 lower, respectively, than the median gross PHUS benefits, but the medians of the individual differences were both less than \$1.

We also assessed whether CPS benefit amounts approximate net Social Security benefits. In general, they do not. The amounts reported in the CPS approximate the gross PHUS benefit amounts more closely than they approximate the net PHUS amounts. The mean annual gross PHUS benefit was \$202 less than the mean annual CPS benefit, while the mean annual net PHUS benefit was \$1,190 lower than the mean annual CPS benefit (Table 6). The median net PHUS benefit was \$833 lower than the CPS median.

The differences between net Social Security benefits in the PHUS and the benefits reported in the CPS varied by beneficiary age and type. However, in all three age groups and in three of four benefit categories, the mean CPS benefit amounts were higher than the mean net PHUS benefits, and the median CPS benefit exceeded the median net PHUS benefit in all categories. Overall, the results provide evidence that the Social Security income reported in the CPS approximates gross Social Security benefits.

Also in Table 6, we compare the mean and median net benefit payments to individual respondents in the PHUS and the CPS. The overall mean individual difference of -\$1,199 is similar to the overall difference in means of -\$1,190. If the Social Security benefit recorded on the CPS is equal to the gross benefit, the median individual difference between the PHUS net benefit and the amount in the CPS for Medicare-eligible beneficiaries will equal the Medicare premium. In 2008, the Part B premium was \$96.40 per month, or \$1,157 in total for the year, so we would expect to see a median individual difference of about -\$1,157. The median individual difference of -\$1,155 for beneficiaries aged 65 or older in Table 6 suggests that for nearly all Medicare-eligible beneficiaries, the benefit recorded on the CPS is equal to the gross Social Security benefit.

Table 6.**Annual Social Security benefits recorded in the CPS and net benefits according to PHUS records, for persons aged 60 or older by age and benefit type: 2008 (in dollars)**

Age and type of benefit	PHUS mean	CPS mean	PHUS median	CPS median	Aggregate difference		Individual differences ^{a,b}	
					Mean	Median	Mean	Median
Age								
60–61	13,427	14,048	12,624	13,176	-621	-552	-655	-1,157
62–64	10,220	10,948	9,564	10,193	-728	-629	-710	-521
65 or older	11,779	13,012	11,844	12,677	-1,233	-833	-1,245	-1,155
Benefit type								
Disabled worker	11,827	13,496	11,964	12,905	-1,669	-941	-75	-881
Retired worker	13,409	13,065	12,780	12,869	345	-89	-1,246	-1,145
Spouse	5,742	7,833	5,844	7,157	-2,090	-1,313	-2,055	-1,229
Survivor	11,275	12,459	11,388	12,157	-1,183	-769	-1,204	-1,157
Total	11,698	12,888	11,724	12,557	-1,190	-833	-1,199	-1,145

SOURCE: March 2009 CPS data matched to SSA PHUS records.

NOTES: Average benefit calculations exclude zero values.

PHUS data reflect benefit amounts after Medicare premium deductions.

a. Differences were negative for 1.8 percent of records with a benefit in the CPS but no benefit recorded in the PHUS.

b. Reflects the mean or median of the differences between the SIPP and PHUS values for each individual.

Conclusion

Social Security is a major source of income for retired persons in the United States, and Social Security income strongly affects beneficiaries' economic security and poverty status. Because the Social Security benefit formula replaces a higher proportion of lifetime average wages for lower earners and also provides benefits to disabled workers and survivors, it provides a safety net for people in the lower half of the income distribution. It is important for household surveys of income to measure Social Security benefits accurately in order to generate reliable estimates of household income and the percentage of persons in poverty. To correctly estimate the income of the elderly using data from household surveys, researchers need to know whether the amount of Social Security income reported by respondents represents the gross amount of the Social Security benefit or the amount net of deductions for Medicare premiums. The difference is not trivial. For most Medicare participants, the Part B premium in 2013 is \$105 per month, which amounts to about 8 percent of the mean monthly retired-worker benefit. Additionally, both members of a married couple must pay Medicare premiums. Moreover, federal income tax liability, the official poverty rate, and income limits for federal programs such as Supplemental Security Income, the

Supplemental Nutrition Assistance Program, and the Low-Income Home Energy Assistance Program are based on income before Medicare premiums have been deducted.

Our analysis suggests that among SIPP respondents aged 60 or older in 2009, the mean annual gross Social Security benefit in SSA records exceeded the mean benefit reported in the SIPP by 7.6 percent, and the median gross benefit in SSA's records exceeded the SIPP median benefit by 9.5 percent. Among beneficiaries aged 65 or older, the mean gross benefit in administrative records exceeded the SIPP benefit by 7.3 percent, and the median gross benefit in SSA records exceeded the median SIPP benefit by 8.6 percent.

Although survey documentation indicates that both the CPS and SIPP record the gross Social Security benefit amounts, our results suggest that the benefit amounts recorded in the SIPP reflect net benefits more closely than they reflect gross benefits. Much of the difference in the amounts recorded in the PHUS and the SIPP could reflect the omission by SIPP respondents of the Medicare premiums that SSA deducts from most Social Security benefit payments. However, some of the difference may also reflect response errors from about 10 percent of SIPP respondents who received payments from SSA, but

reported no payment in the SIPP. As a result, interpreting the Social Security benefit amounts in the SIPP as representing total Social Security income could lead analysts to underestimate total income and to overestimate the proportion of Social Security beneficiaries who are in poverty or are eligible for federal income support programs.

In contrast to the SIPP, the mean and median Social Security benefit amounts recorded in the CPS approximate the gross benefit amounts. In fact, the mean 2008 benefit reported in the CPS was \$202 (or 1.6 percent) higher than the mean gross benefit recorded in the PHUS for CPS respondents. The median CPS benefit was about \$204 (1.6 percent) lower than the median gross PHUS benefit.

Finally, it is interesting to note the differences in Social Security income recorded in the PHUS between SIPP participants and CPS participants. The mean and median Social Security benefits in 2009, as recorded in the SIPP for beneficiaries aged 65 or older, were \$12,823 and \$12,720, respectively (Table 2). The comparable values for 2008 in the CPS were \$13,012 and \$12,677, respectively (Table 5). Even though the SIPP reflects benefits in 2009 and the CPS reflects benefits in 2008, those figures are very similar. The means differ by less than 2 percent and the medians differ by less than 0.5 percent.

We have documented that the mean and median benefits recorded in the PHUS for CPS respondents differ very little from the benefit amounts for 2008 recorded in the CPS, which in turn are similar to the mean and median benefits recorded in the SIPP for 2009. It is somewhat surprising that the mean and median benefit amounts recorded in the PHUS for SIPP respondents are greater than the amounts reported in the SIPP—and are also greater than the amounts in the CPS and in the PHUS for CPS respondents. A number of factors, including sample selection, sample weighting, and imputation procedures could contribute to this discrepancy. Although the cause of the difference is beyond the scope of this analysis, the question warrants further investigation.

Notes

¹ Most beneficiaries pay no premium for Medicare Part A (Hospital Insurance). For Part B (Medical Insurance), the basic monthly premium in 2013 is \$104.90. For those who enroll in a managed care plan, Part C (Medicare Advantage) substitutes for Parts A and B. The Part C premium in many cases is the same as that for Part B. For Medicare

Part D (prescription drug coverage), the basic monthly premium in 2013 is \$31.17; the total Part D premium varies by plan. Higher-income beneficiaries must pay additional premiums under Parts B and D.

² The SIPP will undergo major changes in 2014. For details, see <http://www.census.gov/sipp/dews.html>.

³ Citro and Scholz (2009) state that “the SIPP instrument was changed after the first wave of the 1993 panel to explicitly request that Social Security benefits be reported net of the Medicare premiums. The SIPP instrument was revised again for the 2004 panel to collect the amount of the Medicare premium as a separate quantity, which the Census Bureau could then add to the reported net payment to obtain the gross amount.”

⁴ Neither the SIPP nor the CPS asks specifically about Medicare Part C or D premiums.

⁵ Table 2 includes respondents who reported Social Security benefits in the SIPP even if there is no payment recorded in the PHUS. We estimate the averages for nonzero payments in the PHUS and for SIPP respondents who reported receiving Social Security. Because of false positives in the SIPP, the sample for payments in the PHUS is slightly smaller than the sample for SIPP payments.

⁶ SSA converts disabled-worker beneficiaries to retired-worker status when they reach full retirement age. The full retirement age is 65 for those born before 1938. It increases by 2 months for each birth year after 1938 until reaching age 66 for those born in 1943. Because our sample includes only persons born before 1950, the disabled workers in it were aged 60–65 in 2009.

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