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Social Security Benefit Reporting in the Survey of Income and Program Participation and in Social Security Administrative Records

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Summary

The quality of Social Security benefit reporting in household surveys is important for policy research on the Social Security program and, more generally, for research on the economic well-being of the aged and disabled populations. This is particularly true for the aged among whom receipt of Social Security benefits is nearly universal and reliance on such benefits is considerable. This paper examines the consistency between Social Security benefit amounts for May 1990 as reported in the Survey of Income and Program Participation (SIPP) and given in the Social Security Administration's (SSA's) administrative records for the respondent.

Results show that only 25 percent of the aged and 42 percent of the nonaged reported consistent amounts, as seen in the summary tabulation below.

Subgroup	Percentage reporting consistent amounts	Percentage reporting amounts net of Part B premium
Aged spouse (62–64) or widow(er) (60–64)	52	a
Retired workers, aged 62–64	50	a
All beneficiaries, aged 62–64	49	a
All beneficiaries, aged 18–64	42	a
Concurrent SSI beneficiaries, aged 18–64	39	1
Concurrent SSI beneficiaries, aged 65 or older	34	2
Disabled workers, aged 18–64	28	13
All beneficiaries, aged 65 or older	25	12

a. The subgroup is not covered or not generally covered by Medicare.

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The tabulation presents SIPP- and MBR-reported Social Security benefit amount comparisons, by subgroup. About three-quarters of both groups reported an amount within 10 percent of that in the records. The analysis suggests that beneficiaries under age 65 who were retired workers, aged spouses, and aged widow(er)s are the more accurate reporters. The result is consistent with the idea that newer beneficiaries are more likely to remember the amount of their benefits. In contrast, only about a quarter of disabled workers and of beneficiaries aged 65 or older (regardless of type) reported consistent amounts. Somewhat more than one-third of those who were concurrent SSI beneficiaries reported Social Security benefits that matched those in SSA records, a rate that fell between the most and the least consistent reporters.

Underreporting of Social Security benefit amounts by the amount of the Medicare premium does not appear to be a major problem among aged or disabled beneficiaries in the SIPP, although disproportionate shares of both groups make such reports. However, possible measurement error, particularly substantial underreporting by those at the low end of reported benefit amounts (and, to a lesser degree, overreporting at the high end), may be a nontrivial problem, especially among the aged. Potential causes of the apparent misreporting are discussed, as are limitations in the SSA administrative record measure used in the analysis. The paper also describes directions for further research.

Introduction

The quality of Social Security benefit reporting is important to policy research on the Social Security program and, more generally, to research on the economic well-being of the aged and disabled populations. This is particularly true for the aged among whom

receipt of Social Security benefits is nearly universal and reliance on such benefits is considerable. This paper examines the consistency between Social Security benefit amounts as reported in the Survey of Income and Program Participation (SIPP) and those shown in the Social Security Administration's (SSA's) administrative records. Results provide insights into the quality of data in the SIPP, point to some areas of concern, and lead to suggestions for further research.

A particular interest, especially for the aged, is whether or not the amounts reported in the SIPP include the amount of the Supplementary Medical Insurance (SMI), or Medicare Part B, premium. (For persons electing Part B coverage, except those with a Medicaid buy-in, the premium amount is withheld from the monthly benefit payment.) An earlier study, based on data from the Current Population Survey (CPS), showed that 40 percent of the aged in 1973 reported benefits net of the Medicare premium amount (Poehls 1979).[1]

The question of whether reported SIPP amounts include SSI premiums takes on increased importance in light of current discussions surrounding recommended revisions in the official poverty measure that were made by a National Academy of Sciences panel (Citro and Michael 1995). One recommendation is to estimate poverty using the SIPP rather than the CPS, which is currently the official data source. Another recommendation would adjust available resources for medical out-of-pocket expenditures (MOOP), including Medicare premiums. As noted in Vaughan (2000a), insofar as the Medicare premium is erroneously excluded from respondents' benefit income reports but deducted from income as part of MOOP expenses under proposed new poverty measures, the

[1] Poehls used data from a special supplement to the June 1973 Current Population Survey that had been linked to SSA administrative records.

Medicare premium would be effectively double-counted. Misclassifications of poverty status could result, and because Medicare coverage is so widespread among the aged, there could be many such misclassifications.[2]

Data and Limitations

The data used are from a Master Beneficiary Record (MBR) extract file that is exactly matched to a 1990 SIPP extract file.[3] The resulting file was chosen for this analysis to yield some results relatively quickly. Although it is valuable for showing differences between SIPP-reported benefits and those given in SSA administrative records, the extract contains very little ancillary information and is not useful for investigating reasons for some differences in benefits that are found.

Comparisons in this paper focus on Social Security benefits for May 1990. June SIPP reports, using three rotations of a linked wave 2 file, are used from the larger SIPP extract file. SIPP reports for June (rather than May) are used because Social Security benefits for May would be received in June. Following Vaughan (2000b), only SIPP cases with a positive person weight for June 1990 are included. Tabulations are limited to respondents whose MBR record showed them to be in current pay status with at least $1 in benefits paid for May and whose SIPP record showed that at least $1 in benefits

[2] In 1990, 29.7 million aged persons were enrolled in Medicare's SMI program, and 30.5 million were enrolled in Medicare's basic Hospital Insurance (HI) program (Social Security Administration 1993). Those groups overlap to a major degree, although it is possible to be enrolled only in HI or only in SMI.

[3] The Master Beneficiary Record is a massive SSA database that contains the information needed to generate checks under the Social Security program. The records used in this analysis were extracted from the MBR about 18 months after the SIPP interview. The resulting linked files are highly restricted. They can be used only for research and only by sworn agents of the U.S. Census Bureau. See Vaughan (2000b), Appendix B, for a description of the record match. As he notes, mismatches of SIPP data with MBR records will have occurred in some cases, but the prevalence of such mismatches is believed to be low.

was reported.[4] Patterns of reporting differences among aged beneficiaries and among beneficiaries under age 65 are separately examined.[5] Of the 4,168 SIPP respondents aged 65 or older reporting a positive benefit and with a linked MBR record, 4,084 (or 98 percent) also showed a benefit in the MBR and are used in this analysis.[6] Among younger respondents aged 18–64, 1,116 reported a benefit in the SIPP file and had a linked MBR. Of them, 1,047 cases (or 94 percent) also showed a May 1990 benefit in the MBR and are used in the second part of the analysis.

The SIPP asks respondents for the total benefit amount before deductions, including any deductions for Medicare. Therefore, the MBR benefit used is the monthly benefit credited (MBC), which reflects the amount payable before withholdings, if any, for the Medicare Part B premium.[7] Like several other payment amounts on the MBR, the MBC shows the amount the beneficiary is *credited* with getting for a given month. It is not necessarily the amount *received* by the respondent for that month, even after

[4] Appendix A gives reporting and linkage rates for aged and nonaged respondents on the file and briefly explores some effects on receipt and amounts reported of the restriction to cases with benefits shown in both data sources.
[5] Age and other respondent characteristics are based on SIPP data.
[6] As noted, SIPP cases for which benefit data could not be linked (for example, because respondents refused to provide their Social Security number) are missing from this analysis. In addition, work by Vaughan (2000a) suggests that errors in the original procedures used to obtain benefit records may have caused a little more than 200 MBR cases to be missing from this file. The missing cases are SIPP respondents who received spouse or widow(er) benefits and who were not dually entitled.
[7] The MBR contains several payment variables. Among them, the monthly benefit amount (MBA) is the amount payable after reduction, if necessary, for age, family maximum, and other reasons but before withholdings, if any, for the Medicare premium. In general, the MBC is obtained by subtracting the Part B Medicare premium (if any) from the MBA, rounding the result down to the nearest whole dollar, and adding the Part B Medicare premium to the rounded amount. (Another benefit variable, the monthly benefit paid, is the MBC minus the Medicare premium.)

correcting for the monthly lag. (As noted, the MBR amount "for" a given month is received the following month.) The amount received in June for May may reflect various temporary reductions or adjustments for overpayments or underpayments. Examples of such adjustments are given in Appendix B. Thus, sources of disagreement between SIPP and MBR amounts may lie with either data source. This issue is discussed further in the concluding section.

SIPP amounts may not exactly match MBR amounts for several survey-related reasons, and benefit imputations are most likely the main cause of differences. While imputation flags were not available on the extract file used for these tabulations, published estimates suggest that, very roughly, about 15 percent may have imputed Social Security benefit amounts (Jabine 1990, Tables 5.9 and 5.10). For respondents who rounded their benefit amount, for example, to the nearest $10, discrepancies would also result. Data processing errors—for example, in recording survey responses, in developing the data file, or incorrect linkages of the SIPP and MBR data—would result in some discrepancies as well.

The increased use of direct deposit for Social Security benefit payments may play a role in misreporting. In 1992, 58 percent of retired workers and their dependents used direct deposit, up from 16 percent in the mid-1970s (Bondar 1994). Like other beneficiaries, those using direct deposit are informed annually of the monthly amount they will receive, but they do not see the payments and may be only generally aware of the amount. The MBR field indicating the use of direct deposit is not on the extract file

used for the tables in this paper, nor is a field from the SIPP that indicates whether the respondent's check was directly deposited in the bank.[8]

Results for Aged Beneficiaries

Only a small percentage of respondents aged 65 or older report a Social Security benefit amount in the SIPP that is relatively close to the MBC amount. The distribution of the difference between the Social Security benefit amount as reported in the SIPP and the MBC amount is shown in Table 1. For only 16 percent of aged respondents did the amounts match exactly, and 9 percent were within $1 (plus or minus) of the exact amount.[9] The 1973 CPS column in Table 1 shows that the low, general level of agreement is quite close to that achieved in a special June 1973 CPS supplement.[10]

As noted, nonmatches may occur with respondents who round monthly benefit amounts in their reporting. In an exploration of potential rounding effects, we found that the end digit for the reported benefit amount was zero in 22 percent of the cases. When all cases with SIPP-reported amounts ending in zero are removed, the proportion in the remaining subsample with agreement within $1 rises from 25 percent to 28 percent.

Could it be that respondents forgot their latest cost-of-living increase? Effective December 1989, a 4.7 percent benefit increase had been put into effect. For a crude look at the possibility of such forgetfulness, we removed that increase from the MBC amounts

[8] The 1990 SIPP questionnaire captures reports of direct deposits in Section 3, Item 8A.
[9] SIPP amounts were given in dollars on the file, and MBR amounts, to the nearest dime. The amounts were rounded to the nearest dollar for these calculations.
[10] 1973 CPS results shown here are from Poehls (1979). Only results based on unweighted data are available.

Table 1.
Number and percentage distribution of the difference between Social Security benefit amounts reported in two surveys and in the MBR for respondents aged 65 or older

Survey amount minus MBR amount (dollars)	1990 SIPP			1973 CPS
	Number	Percent	Percent (weighted)	(percent)
Total	4,084	100.0	100.0	100.0
-100 or less	437	10.7	11.3	a
-50 to -99	290	7.1	6.8	a
-11 to -49	1,114	27.3	26.7	a
-2 to -10	460	11.3	11.5	47.7
-1	264	6.5	6.8	3.3
0	617	15.1	15.6	15.0
1	87	2.1	2.2	7.9
2 to 10	299	7.3	7.2	5.2
11 to 49	215	5.3	5.0	b
50 or more	301	7.4	6.9	b

NOTES: SIPP estimates are for respondents with a SIPP-reported benefit of $1 or more in June 1990 and an MBR amount in current pay status for June 1990. June 1973 CPS estimates are from Poehls (1979).

a. Detail shown for the SIPP was not available for the CPS data. Poehls (1979) reported that 16.6 percent reported an amount $11 or more too low; that compares with 44.8 percent (11.3 + 6.8 + 26.7) in the 1990 SIPP data.

b. Detail shown for the SIPP was not available for the CPS data. Poehls (1979) reported that 4.3 percent reported an amount $11 or more too high; that compares with 11.9 percent (5.0 + 6.9) in the 1990 SIPP data.

of the 2,301 respondents whose SIPP-reported benefits were lower than their SSA amounts. Comparisons of the result with the SIPP amount showed that only 51 of the 2,301 respondents under review reported an amount equal to their previous year's benefit. This finding suggests that forgotten cost-of-living adjustments (COLAs) may not play a major role in discrepant reporting, but further examination is warranted.

Aged respondents are more likely to underreport, rather than overreport, benefit amounts. In the 1990 SIPP, the majority (56 percent) reported an amount that was $2 or more too low compared with 19 percent who reported an amount $2 or more too high. Nominally comparable figures from the 1973 CPS are 64 percent and 10 percent, respectively.

The size of apparent underreporting in the recent data is also striking. Although 38 percent reported an amount less than $50 below the MBR amount, 11 percent reported a benefit amount at least $100 less than the MBR amount, and 18 percent reported an amount at least $50 less. In contrast, only 7 percent reported an amount at least $50 more than the amount shown for them in the MBR.

We also looked at apparent misreporting in percentage terms (not shown). Overall, almost 60 percent reported amounts in the SIPP that were within 5 percent of the MBR amount (including those within $1). About 18 percent reported amounts that were more than 10 percent too low, and for 7 percent, amounts were more than 50 percent too low. At the other end of the distribution, 7 percent reported amounts more than 10 percent higher than the MBR amount, and only 3 percent reported amounts more than 50 percent higher.

Table 2 summarizes the results with a focus on the probable role of the Medicare premium amount in reporting patterns.[11] In 1990, 12 percent reported a benefit amount equal to the MBR benefit amount minus the Medicare premium as shown on the MBR. That result is considerably lower than the 1973 result where 40 percent underreported by an amount equal to the Medicare premium. Some part of this decline may be due to the new role of Medicaid in paying the Medicare premiums for poor beneficiaries.[12] However, the MBR field that might have helped in sorting this out was not on the file used for the tables presented here.

The distribution of the difference between SIPP-reported benefit amounts and amounts shown in the MBR for all respondents aged 65 or older and for subgroups is shown in Table 3. Survey data, rather than administrative data, were used to describe subgroup characteristics to assist researchers without access to the latter. Sex and marital status, age, race and ethnicity, schooling, type of Social Security benefit, SIPP-reported Social Security benefit amounts, and SIPP-reported receipt of at least $1 in Supplemental Security Income (SSI) benefits define the subgroups shown.[13] The $1 or more in reported SSI benefits is used as a proxy for SSI recipiency. For additional perspective on the size of the differences between SIPP

[11] The Medicare premium for 1990 was $28.60 per month, although the MBR data show somewhat different amounts for 118 cases. For 97 percent, monthly Medicare premiums were shown as $28.60, but 54 cases showed premiums of $31.50, 10 showed zero, and 54 others showed some other amount. (Premiums can increase for late enrollment. The 54 cases with $31.50 premiums probably have a 10 percent penalty for enrolling 1 year after first eligibility for Medicare.)

[12] Under the Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360), Medicaid was required to pay Medicare premiums for Medicare beneficiaries below poverty. Coverage under the act was phased in beginning January 1, 1989 (U.S. House of Representatives 1998).

[13] The distribution for the total sample differs slightly from that in Table 1 because Table 3 is restricted to respondents showing a Medicare premium amount of $28.60 on the MBR. That criterion eliminates 118 cases.

Table 2.
Apparent role of SMI premium amount in the difference between Social Security benefit amounts reported in two surveys and in the MBR for respondents aged 65 or older

Survey amount minus MBR amount (dollars)	1990 SIPP			1973 CPS
	Number	Percent	Percent (weighted)	(percent)
Total	4,084	100.0	100.0	100.0
Equals zero or is within $1	968	23.7	24.6	26.2
Equals SMI premium or is within $1	475	11.6	11.7	39.9
All other	2,641	64.7	63.6	33.9

NOTES: SIPP estimates are for respondents with a SIPP-reported benefit of $1 or more in June 1990 and an MBR amount in current pay status for June 1990. June 1973 CPS estimates are from Poehls (1979).

and MBR amounts, mean monthly benefit comparisons using the two sources are also shown in Table 3.

As seen in the column headed "Zero" in Table 3, the percentage reporting amounts consistent with MBR amounts hovers around 25 percent in most of the subgroups shown. The exceptions are the low of 18 percent among black respondents, the high of 34 percent among concurrent SSI beneficiaries, and the relatively wide range—from 16 percent to 31 percent—across subgroups reporting the highest Social Security benefit amounts.[14, 15]

The percentage underreporting by the amount of the Medicare premium generally falls in the range of 10 percent to 13 percent, although it rises to 17 percent among persons who never married and Hispanics and falls as low as 2 percent among concurrent SSI beneficiaries. To the extent that the Medicaid program is paying Medicare premiums for SSI beneficiaries, we would expect fewer SSI beneficiaries to underreport by the amount of the premium. This low underreporting level among SSI beneficiaries is not evident among all those reporting low Social Security benefits, however, despite some overlap between the two groups.[16]

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[14] Note that fairly small numbers of respondents are in the $1–199 (N = 167), $900–999 (N = 132), and $1,000 or more (N = 109) SIPP-reported benefit groups.

[15] To roughly test whether Table 3's distribution of differences in benefit amounts among categories of the classifying variables are the same, chi square tests were done using unweighted data. Results showed $p < .01$ for marital status ($p = 0014$); race ($p = .0002$), calculated only across whites and blacks; schooling ($p = .0089$); type of Social Security benefit, calculated only across retired-worker, spouse, and widow(er) benefit types ($p < .0001$); Social Security benefit ($p < .0001$); and SIPP-reported SSI recipiency vs. all others ($p < .0001$). For these variables, most analysts would reject the null hypothesis that all the percentage distributions are the same for the categories in each variable and would conclude that there is a difference across categories. Variations in the percentages across categories in the sex, age, and ethnicity (Hispanic or other ethnicity) variables in Table 3 are more likely to be due to chance.

[16] Concurrent SSI beneficiaries fall disproportionately in the low benefit groups. For example, 15 percent of concurrents report Social Security benefits of $199 or less, 41 percent of $299 or less, and 74 percent of $399 or less. While fairly large majorities of those reporting low Social Security benefits do not receive SSI, a disproportionate percentage do. SSI benefits are reported by 19 percent of those reporting Social Security benefits under $199, 13 percent of $299 or less, and 12 percent of $399 or less.

Table 3.
Percentage distribution of the difference between the SIPP-reported Social Security benefit amount and the MBR amount and mean benefit amounts for respondents aged 65 or older, by subgroup, June 1990

	SIPP minus MBR benefit amount											Mean benefit		
Subgroup	-100 or less	-99 to -50	-49 to -31	Equals Medicare premium	-27 to -11	-10 to -2	Zero	2 to 10	11 to 49	50 or more	Total	SIPP (dollars)	MBR (dollars)	SIPP as percentage of MBR
Total aged 65 or older	11.3	6.5	8.7	11.7	6.0	11.3	25.2	7.4	5.1	6.9	100.0	536	563	95.2
Sex														
Men	12.6	7.6	8.6	11.3	6.1	11.6	24.1	7.4	3.6	7.2	100.0	637	671	94.9
Women	10.3	5.8	8.8	12.0	5.9	11.1	26.0	7.4	6.1	6.6	100.0	462	484	95.5
Marital status [a]														
Married	11.3	7.2	8.6	10.9	6.3	12.0	24.7	6.8	4.4	7.8	100.0	527	553	95.3
Widowed	12.5	5.9	8.5	12.7	5.0	9.6	26.3	8.1	5.8	5.7	100.0	552	586	94.2
Divorced	9.3	5.2	8.2	10.8	8.7	13.0	24.5	8.5	8.4	3.4	100.0	517	548	94.3
Never married	4.7	4.6	11.9	16.9	5.6	12.7	24.3	8.0	4.4	7.0	100.0	541	543	99.6
Age														
65-69	8.9	5.6	10.9	12.0	7.0	11.3	25.6	7.0	4.9	6.9	100.0	511	532	96.1
70–74	13.0	6.6	7.8	12.6	5.3	12.5	24.1	7.2	4.0	6.9	100.0	545	579	94.1
75–79	10.8	6.1	7.3	12.2	5.5	12.0	26.7	8.1	5.4	6.0	100.0	563	591	95.3
80–84	13.0	8.4	7.9	9.5	5.9	9.0	24.7	7.6	6.5	7.6	100.0	535	562	95.2
Race and ethnicity [a]														
White	11.4	6.4	8.5	11.8	5.9	11.4	25.8	7.5	4.7	6.8	100.0	545	573	95.1
Black	11.1	8.8	11.8	11.0	5.9	11.2	18.4	4.9	9.1	7.8	100.0	428	456	93.9
Hispanic, of any race	6.4	6.9	13.5	16.5	7.1	9.2	24.2	4.7	5.0	6.7	100.0	410	430	95.3
Years of school [a]														
8 or less	13.4	6.8	7.0	12.2	4.7	9.2	25.9	6.5	8.3	5.9	100.0	477	506	94.3
> 8 < 12	9.5	6.3	11.1	12.4	5.4	12.6	25.3	6.4	4.8	6.3	100.0	516	542	95.2
12	10.5	6.9	8.4	11.5	6.9	12.0	24.2	8.1	3.8	7.8	100.0	540	561	96.3
Some college	9.2	6.0	8.5	11.1	6.7	12.0	26.7	8.4	4.2	7.3	100.0	596	619	96.3
College graduate	13.7	5.7	10.2	10.9	6.3	11.1	24.6	7.4	3.3	6.7	100.0	606	655	92.5
Type of benefit [a]														
Retired worker	11.7	7.0	8.9	11.8	5.9	11.4	24.9	7.3	4.4	6.7	100.0	566	597	94.8
Aged spouse	6.6	4.0	9.6	10.3	7.9	12.3	26.1	6.0	7.0	10.1	100.0	322	314	102.5
Aged widow(er)	12.5	5.4	7.0	12.3	4.9	10.3	26.4	8.5	7.7	5.1	100.0	516	548	94.2
SIPP-reported Social Security benefit (dollars) [a]														
1–199	20.9	5.3	8.7	11.9	7.1	8.3	26.1	5.1	6.0	0.7	100.0	147	231	63.6
200–299	15.0	5.1	12.2	12.0	7.0	11.3	24.6	6.8	5.2	1.0	100.0	252	310	81.3
300–399	16.4	5.1	6.7	9.9	6.8	13.7	24.9	5.1	8.1	3.1	100.0	345	401	86.0
400–499	13.1	5.4	8.2	13.2	5.8	11.1	21.2	7.2	7.1	7.9	100.0	445	479	92.9
500–599	10.9	9.6	8.9	13.0	5.9	11.2	24.7	6.7	3.7	5.6	100.0	547	578	94.6
600–699	8.0	6.2	9.8	12.9	4.8	12.0	26.9	9.6	3.6	6.2	100.0	647	671	96.4
700–799	5.8	6.0	9.2	11.0	4.1	8.7	30.6	10.3	3.9	10.3	100.0	742	743	99.9
800–899	5.6	7.2	6.3	11.7	6.8	10.1	29.6	7.4	3.1	12.3	100.0	842	830	101.4
900–999	3.1	7.2	8.9	7.1	7.4	15.5	19.6	6.0	4.4	20.8	100.0	940	892	105.4
1,000 or more	7.7	11.6	5.2	6.2	7.2	6.1	16.4	9.9	1.7	28.2	100.0	1,170	1,065	109.9
SIPP-reported SSI [a]														
Yes	3.9	5.1	1.2	1.8	4.1	2.3	34.4	7.1	31.3	8.8	100.0	334	319	104.7

NOTES: Based on weighted data. Estimates are for respondents with a SIPP-reported benefit, MBR amount in current pay status, and a Medicare premium equaling $28.60. The latter constraint excludes 118 of the 4,084 cases. Rows based on fewer than 200 unweighted cases include: Never married (N = 191), Hispanic (N = 176), and SIPP-reported benefit groups $1-199 (N = 167), $900–999 (N = 132), and $1,000 or more (N = 109). Not shown separately because of their small numbers are 45 cases reporting a race other than black or white and 14 cases with benefit types other than those shown. Also not shown separately are 3,790 cases reporting they were not Hispanic and 3,744 cases reporting they did not receive SSI benefits. Distributions for those two large groups are virtually the same as the total distributions.

a. Chi square tests using unweighted data showed $p < .01$ for marital status (.0014); race, white or black (.0002); schooling (.0089); type of benefit (< .0001); Social Security benefit (< .0001); and SIPP-reported SSI (< .0001).

If underreporting by the amount of the Medicare premium no longer appears to be a major problem, reporting patterns across subgroups defined by their SIPP-reported benefit amount may be one. Those reporting the lowest benefits show the most apparent underreporting, and the size of the differences can be striking. More than 20 percent of the lowest benefit group reported amounts that were $100 or more below the amount given for them on the MBR, and 44 percent to 47 percent of those in the two groups with the lowest benefit amounts underreported by at least the Medicare premium amount ($28.60). In general, these apparent underreporting levels are inversely related to SIPP-reported benefits (except among those in the highest benefit group), and overreporting is generally positively related to benefit level. Among those with reported benefits of $900 or more, more respondents overreported their benefit by $50 or more than underreported by that amount.

As noted above, aged SIPP respondents who reported both SSI and Social Security benefits are most likely (34 percent) among the subgroups in Table 3 to report a Social Security amount that matches the amount shown for them in the MBR. While the amounts they report are generally low (not shown), SSI beneficiaries in the sample are more likely to overreport than underreport the Social Security benefit amount. That result is in strong contrast to the patterns discussed earlier among all those with low benefits.

We looked further at the 66 percent (150 cases) of concurrent SSI cases with under- or overreports relative to the MBR. Do they appear to be confusing the programs and reporting their Social Security benefit when asked for their SSI benefit? A

comparison of the SIPP-reported SSI amount with the MBR Social Security amount showed no such tendency.[17]

We might expect larger differences between the SIPP and MBR Social Security amounts among those aged 65–69 than among other age groups because of the retirement earnings test. In 1990, only those under age 70 were subject to the test,[18] and benefit adjustments for them might result in apparently inaccurate SIPP reports. As seen in Table 3, however, no particular reporting differences appear by age.[19]

The three right-most columns labeled "Mean benefit" in Table 3 show average benefit levels in the two sources and the ratio of the SIPP-reported benefit to that in the MBR. Overall, the average monthly benefit amount in the SIPP ($536) is 95 percent of the MBR amount ($563) for the aged, and relationships between SIPP-reported and MBR mean amounts among aged subgroups echo the distributional results previously discussed. Most show SIPP amounts to be 94 percent to 96 percent of the MBR amount, but the ratio increases consistently across subgroups defined by SIPP-reported benefit amounts. At the extremes, the mean monthly benefit amount for the lowest SIPP-reported benefit group ($147) is only 64 percent of the MBR mean amount ($231) for

[17] Only 2 of the 150 concurrent cases with potential misreports reported SSI benefits that equaled the MBR amount for Social Security, and only 7 reported SSI benefits within $10 of the MBR amount. In comments on earlier drafts of this paper, both Denny Vaughan and Kalman Rupp suggested a wider exploration of reporting among SSI beneficiaries who may be confusing the programs. However, administrative records for the SSI program were not linked to the analysis file used, so we could not explore the question of whether the benefit reported as Social Security was, in fact, the SSI benefit instead.

[18] This is not quite correct, as noted by Bert Kestenbaum in comments on an earlier draft. Because a worker's earnings affect the total monthly family benefit, the benefit of a spouse aged 70 or older could also be affected. But that is thought to affect a relatively small number of cases.

[19] In 1989, about 10 percent of beneficiaries aged 65–69 were affected by the earnings test (Bondar 1993). Effects of the earnings test among those aged 65–69 are not a concern in recent survey data. The Senior Citizens' Freedom to Work Act of 2000 eliminated the test for taxable years ending after December 31, 1999. (Since that legislation was enacted in April 2000, corrections were made in benefit payments and in the MBR for about 400,000 beneficiaries affected by the retroactive nature of the change.)

that group, and the ratio is 110 percent ($1,170 compared with $1,065) for the highest SIPP-reported benefit group.

Again, the result for Social Security beneficiaries concurrently receiving SSI benefits does not resemble results for other low-benefit groups. Reported benefits among concurrents are almost 105 percent of the level given in the MBR, rather than the fractions under 90 percent that are seen among those reporting low-benefits.

Results for Beneficiaries Under Age 65

This section looks at reporting patterns among the 1,047 beneficiaries aged 18–64 with a May 1990 benefit shown in both sources. Somewhat more than half (54 percent) are aged 62–64, and the majority of these near-aged persons (64 percent) are receiving retired-worker benefits. Most of those under age 62 are receiving disability benefits (59 percent). Results for all beneficiaries under age 65 are shown in Tables 4 and 5 and are summarized here with some comparisons with patterns among the aged.

Beneficiaries under 65 are much more likely than aged beneficiaries to report amounts consistent with those on the MBR, and that general difference by broad age group was similar in the 1973 data. However, the 42 percent of the younger beneficiaries in 1990 who reported amounts consistent with the MBR represent a decline from the 1973 figure of 59 percent, as seen in Table 4. Underreporting occurred more often than overreporting among those under 65, a pattern similar to that among the aged and roughly similar to that in 1973.

Table 4.
Number and percentage distribution of the difference between Social Security benefit amounts reported in two surveys and the MBR for respondents under age 65

Survey amount minus MBR amount (dollars)	1990 SIPP			1973 CPS (percent)
	Number	Percent	Percent (weighted)	
Total under age 65	1,047	100.0	100.0	100.0
-100 or less	78	7.5	6.7	a
-50 to -99	55	5.3	5.5	a
-11 to -49	191	18.2	18.6	a
-2 to -10	104	9.9	9.3	15.4
-1	37	3.5	3.6	2.9
0	377	36.0	36.4	44.0
1	13	1.2	1.5	11.7
2 to 10	37	3.5	3.7	4.7
11 to 49	57	5.4	5.5	b
50 or more	98	9.4	9.3	b

NOTES: SIPP respondents are aged 18–64. The CPS estimates are from Poehls (1979), who does not give a minimum age, noting only that the respondents are under 65. SIPP estimates are for respondents with a SIPP-reported benefit of $1 or more in June 1990 and an MBR amount of $1 or more and in current pay status for June 1990.

a. Detail shown for the SIPP was not available for the CPS data. Poehls (1979) reported that 8.4 percent reported an amount $11 or more too low; that compares with 30.8 percent (6.7 + 5.5 + 18.6) in the 1990 SIPP data.

b. Detail shown for the SIPP was not available for the CPS data. Poehls (1979) reported that 12.9 percent reported an amount $11 or more too high; that compares with 14.8 percent (5.5 + 9.3) in the 1990 SIPP data.

Examined in percentage terms, 67 percent of beneficiaries under age 65 reported amounts in the SIPP within 5 percent (including differences of $1) of the MBR amount (data not shown). That result is somewhat higher than that found for the aged. About 9 percent of the nonaged reported amounts more than 10 percent lower than the MBR amount, and almost 13 percent reported amounts more than 10 percent higher. The proportion of nonaged persons reporting amounts within 10 percent of the MBR amount was quite similar to that for the aged (78 percent and 75 percent, respectively).

Reporting patterns, including mean benefits, for beneficiaries in 1990 under age 65 and by subgroup are shown in Table 5. The average amount of $483 reported in the SIPP is nearly identical to the $481 average benefit from the MBR, a result consistent with the higher concurrence rates seen in Table 4.

Almost 13 percent of disabled-worker beneficiaries reported an amount net of the Medicare Part B premium (see Table 5).[20] The figure is quite similar to the almost 12 percent of the aged with that reporting pattern. Concurrent SSI beneficiaries under 65, all of whom qualify for SSI on the basis of blindness or disability, do not exhibit that pattern. Fewer than 2 percent of them reported amounts net of the Medicare premium amount. That could indicate that the Medicaid program is paying the premium, that they did not elect Part B coverage, or that they are following SIPP instructions and reporting their benefits prior to Medicare withholdings. (Most beneficiaries under age 65 in Table 5

[20] Basic Medicare coverage is provided to Social Security Disability Insurance (DI) beneficiaries who have been entitled to DI benefits for at least 24 months. At that time, they are also eligible to voluntarily enroll in the SMI program and pay the monthly premium. Neither the dependents of DI beneficiaries nor those aged 62–64 who take early retirement benefits are covered by Medicare or eligible for the SMI program.

The extension of SMI Medicare protection to disabled beneficiaries did not take effect until July 1973, one month after the reference month in the CPS data described by Poehls and discussed for the aged in the previous section. Therefore, 1990-to-1973 comparisons are not made for those under 65. See Ball (1973) for more discussion of the extension of Medicare protection to disabled workers and others under the 1972 Social Security amendments.

Table 5.
Percentage distribution of the difference between SIPP-reported Social Security benefit amount and the MBR amount and mean benefit amounts for respondents aged 18–64, by subgroup, June 1990

Subgroup	SIPP minus MBR benefit amount											Mean benefit		
	-100 or less	-99 to -50	-49 to -31	Equals Medicare premium	-27 to -11	-10 to -2	Zero	2 to 10	11 to 49	50 or more	Total	SIPP (dollars)	MBR (dollars)	SIPP as percentage of MBR
Total aged 18–64	6.7	5.1	5.6	6.0	6.7	9.4	41.8	3.7	5.5	9.4	100.0	483	481	100.4
Sex														
Men	6.1	5.6	5.5	7.7	5.3	10.0	40.6	2.8	6.8	9.7	100.0	596	599	99.5
Women	7.1	4.7	5.6	4.6	7.9	9.0	42.8	4.5	4.5	9.2	100.0	391	386	101.3
Marital status														
Married	5.4	5.1	5.5	6.9	7.6	10.2	40.7	4.1	6.3	8.3	100.0	499	495	100.8
Widowed	10.7	4.8	1.0	1.7	4.0	6.9	53.8	4.1	4.1	8.9	100.0	471	470	100.2
Divorced	5.8	5.7	4.1	5.8	5.4	10.7	37.2	3.7	4.3	17.4	100.0	527	515	102.3
Never married	8.9	5.4	13.0	7.0	7.0	7.7	35.6	1.5	4.7	9.3	100.0	388	404	96.0
Age [a]														
18–40	7.6	4.1	14.2	5.7	8.9	10.8	28.2	2.7	5.4	12.4	100.0	403	381	105.8
41–50	7.9	4.7	8.3	12.2	10.0	6.5	34.7	3.0	3.6	9.2	100.0	504	500	100.8
50–61	7.8	6.0	5.4	9.4	3.9	11.1	35.5	2.8	6.7	11.4	100.0	537	530	101.3
62–64	5.9	5.1	3.1	3.8	6.8	8.9	48.7	4.4	5.4	8.0	100.0	478	484	98.8
Race and ethnicity														
White	7.0	5.0	5.6	5.9	6.4	9.3	42.6	3.9	5.0	9.4	100.0	489	488	100.2
Black	6.1	5.4	6.0	7.3	9.0	10.0	36.5	2.2	7.9	9.6	100.0	451	444	101.6
Hispanic, of any race	6.7	8.2	8.2	9.1	12.1	11.3	26.9	4.7	2.1	10.7	100.0	452	410	110.2
Years of school														
8 or less	8.7	5.8	5.3	5.8	4.9	7.5	44.6	1.3	6.8	9.5	100.0	435	441	98.6
> 8 < 12	7.4	5.9	6.2	9.3	5.3	7.3	38.4	3.6	6.2	10.5	100.0	459	455	100.9
12	5.0	4.8	7.0	4.2	7.7	9.7	40.8	6.2	5.2	9.5	100.0	501	489	102.5
Some college	6.3	4.8	2.8	5.6	7.4	10.3	47.4	2.1	3.8	9.6	100.0	494	494	100.0
College graduate	9.3	4.0	2.8	7.2	8.6	16.2	39.3	0.9	5.5	6.4	100.0	548	580	94.5
Type of benefit [a]														
Retired worker	6.0	4.5	3.2	2.3	6.2	8.8	50.3	4.7	4.8	9.2	100.0	505	510	99.0
Disabled worker	6.9	6.4	8.8	12.5	7.1	10.5	27.7	3.6	6.4	10.2	100.0	538	543	99.1
Aged spouse/widow(er)	7.7	5.5	1.2	1.8	8.9	8.2	52.4	2.2	6.6	5.4	100.0	406	415	97.8
Other	7.5	3.5	8.6	4.2	5.0	9.8	42.2	2.3	4.5	12.4	100.0	353	303	116.5
SIPP-reported Social Security benefit (dollars) [a]														
1–199	16.7	2.7	15.6	5.2	3.8	11.3	38.5	3.3	3.0	0.0	100.0	123	184	66.8
200–299	11.1	4.7	4.1	3.5	11.5	7.6	46.5	2.9	3.9	4.1	100.0	257	285	90.2
300–399	8.1	3.5	5.8	5.2	12.7	7.0	41.9	4.9	5.9	5.0	100.0	344	361	95.3
400–499	7.7	5.1	3.7	8.4	4.2	11.3	33.1	1.3	10.6	14.6	100.0	446	444	100.5
500–599	4.4	7.9	2.8	9.1	2.7	4.8	46.5	4.2	2.2	15.5	100.0	540	531	101.7
600–699	2.8	8.8	3.8	5.7	5.3	13.0	44.4	6.0	1.7	8.4	100.0	648	645	100.5
700–799	3.1	4.0	7.0	5.7	4.7	6.7	53.8	1.5	6.2	7.4	100.0	738	733	100.7
800 or more	0.0	3.7	5.8	4.9	1.2	19.6	23.3	4.8	11.3	25.5	100.0	930	782	118.9
SIPP-reported SSI														
Yes	8.1	2.5	12.3	1.2	9.4	4.8	39.2	2.2	8.2	12.1	100.0	279	276	101.1

NOTES: Based on weighted data. Estimates are for respondents with a SIPP-reported benefit, an MBR amount in current pay status, and a Medicare premium equaling $26.80. The latter constraint excludes 2 of the 1,047 cases seen in Table 5. Rows based on fewer than 200 unweighted cases include aged 18–40 (136), aged 41–50 (102); widowed (182), divorced (107), never married (136); black (158), Hispanic (82); education 8 years or less (183), some college (141), college graduate (96); aged spouse/widow(er) benefit (149), other benefit types (139); SIPP-reported benefit groups $1–199 (74), $200–299 (132), $400–499 (147), $500–599 (124), $600–699 (135), $700–799 (119), $800 or more (83); and SIPP-reported SSI income (84). Not shown separately because of their small numbers are 17 cases reporting a race other than black or white. Also not shown separately are 963 cases reporting they were not Hispanic and 961 cases reporting they did not receive SSI benefits.

a. Chi square tests using unweighted data showed $p < .01$ for age groups (< .006), type of benefit (< .0001), and Social Security benefit amount (< .0001).

would not have been eligible for Medicare. Therefore, the "Equals Medicare premium" percentages in Table 5 have little meaning.)

Among subgroups for beneficiaries under age 65, consistent reporting was positively related to age as shown in Table 5.[21] Almost one-half (48.7 percent) of beneficiaries aged 62–64 reported amounts consistent with the MBR; the figure dropped to 35 percent among the middle-aged and to only 28 percent among those aged 18–40. Because most 62- to 64-year-old beneficiaries would have recently retired, their recall of the exact benefit amount may be better than that of longer-term beneficiaries, and we might expect better reporting.[22] Indeed, 50 percent of retired workers aged 62–64 reported benefit amounts matching the MBR amount compared with 30 percent of their disabled counterparts in that age group (data not shown). The comparison of mean benefits showing SIPP as a percentage of MBR in Table 5 indicates that inconsistent reporting occurs primarily among the youngest beneficiary group. Their mean reported amount is 106 percent of the MBR amount for the group.

Reporting patterns vary considerably across some beneficiary types. More than half of the retired workers and aged spouse and widow(er) beneficiaries reported amounts consistent with the MBR, compared with only 28 percent of disabled workers. Average benefit comparisons present a somewhat different picture, however. Retired and disabled workers reported SIPP amounts that, on average, were very similar to MBR amounts. By contrast, the "other" beneficiary group reported an average benefit that was 117 percent higher than the amount given in the MBR. That group primarily included those receiving

[21] Chi square tests using unweighted data showed $p < .01$ for age groups ($p < .006$), type of Social Security benefit ($p < .0001$), and Social Security benefit amount ($p < .0001$).
[22] On the other hand, beneficiaries in this age group are more likely to work and potentially be affected by adjustments because of the earnings test so, a priori, we might have expected less agreement.

benefits because they were adults disabled in childhood or spouses or widow(er)s caring for minor children. Some of the latter groups may be including their child(ren)'s benefits, for which they are representative payees, in their benefit reports.

Patterns by Social Security benefit level are similar to those seen earlier for the aged, although they are less consistent and far less pronounced. Persons reporting very low benefit amounts are more likely to underreport (relative to MBR amounts), and those reporting the highest amounts are more likely to overreport. The SIPP-to-MBR mean benefit ratios increase consistently with the SIPP-reported Social Security benefit amount, rising from 67 percent among those reporting the lowest benefits to 119 percent among those reporting the highest. However, the percentage reporting amounts consistent with the MBR varies considerably—from 23 percent to 54 percent—and shows no particular pattern.

Reporting among concurrent SSI beneficiaries reflects the general pattern for all aged 18–64, and consistent reporting is only 5 percentage points higher than it is among concurrent beneficiaries aged 65 or older.

Size Distributions

This analysis, thus far, has compared the exact amount of benefits (plus or minus $1) reported for the same individual as it appeared in the SIPP and the MBR using the linked data. A final set of comparisons looks at distributions of Social Security benefit amounts grouped into categories of benefit amounts according to their size. In effect, SIPP and MBR results developed for this final set of comparisons were obtained as if the files were

not linked. (Mean benefits shown in Tables 3 and 5 were similarly developed.) The picture, based on benefit categories, is both more reassuring than results from the linked data and generally consistent with them.

To gauge the similarity of the distributions from the SIPP and the MBR, measures of the index of dissimilarity are included for each set of comparisons. The index indicates the percentage of beneficiaries in either the SIPP or the MBR distribution who would have to change benefit categories to obtain equivalent distributions from the two sources. Among the aged, 5 percent would have to make such a change (Table 6), and roughly the same proportion would have to do so among subgroups defined by sex and age. Results by marital status subgroups show a slightly wider range—from 4 percent to 8 percent (Table 7).

Less than 3 percent of the nonaged would have to change benefit categories (Table 8), reflecting the greater concurrence among the nonaged seen in the earlier comparisons. Nonaged subgroup results show the lowest proportion needing to change occurs among retired workers and the highest proportion (almost 7 percent), among those receiving "other" benefit types.

Concluding Remarks

We cannot say with certainty which—the SIPP report or the MBR amount—is the more accurate record of the amount *received* in a given month, and more could be done to understand the causes of the discrepancies. Two different, but complementary, areas for further work are suggested here. One would use a richer set of linked SIPP/MBR data to examine potential causes of the discrepancies. With such data, the role of imputations,

Table 6.
Percentage distribution and measures of the index of dissimilarity for beneficiaries aged 65 or older, by monthly benefit amount, sex, and age group, 1990

Monthly benefit amount (dollars)	Total		Men		Women		Aged 65–69		Aged 70–74		Aged 75–79		Aged 80–84	
	SIPP	MBR	SIPP	MBR	SIPP	MBR	SIPP	MBR	SIPP	MBR	SIPP	MBR	SIPP	MBR
1–199	3.8	3.1	1.7	1.2	5.4	4.5	4.8	4.3	4.4	3.7	3.6	2.5	1.8	1.1
200–299	11.3	9.9	5.0	4.3	15.9	13.9	12.5	10.1	11.7	10.0	10.5	10.6	9.8	8.5
300–399	16.0	15.7	8.0	6.6	21.9	22.3	19.0	19.3	15.1	14.0	13.4	13.2	15.3	14.8
400–499	13.7	12.5	9.1	8.3	17.1	15.6	12.0	11.4	13.2	12.0	14.5	13.4	16.3	14.2
500–599	16.9	15.6	16.7	14.0	17.1	16.7	15.0	13.8	15.0	14.3	17.2	15.2	22.4	20.4
600–699	15.4	16.6	22.5	22.7	10.3	12.2	17.2	17.4	13.7	14.2	14.5	14.4	16.0	20.8
700–799	9.9	12.1	14.5	17.6	6.6	8.1	9.4	12.0	11.6	14.2	10.1	11.8	8.2	9.5
800–899	7.0	7.1	12.9	12.9	2.8	2.9	8.0	8.8	7.2	6.9	7.6	7.1	4.7	4.6
900–999	3.1	4.2	5.1	6.8	1.6	2.2	1.5	2.4	4.9	5.9	4.1	6.4	2.0	2.2
1,000 or more	2.7	3.3	4.5	5.7	1.3	1.6	0.6	0.4	3.1	4.7	4.6	5.4	3.5	4.0
Index of dissimilarity [a]	5.1		6.2		4.8		4.8		5.7		5.0		6.8	

a. The index of dissimilarity indicates the percentage of beneficiaries in either the MBR or the SIPP distribution who would have to change their monthly benefit amount category to obtain equivalent distributions. The index is constructed by taking the absolute difference between the SIPP and MBR percentage for each amount category, summing across all the benefit amount categories for the total or the given subgroup, and dividing by 2.

Table 7.
Percentage distribution and measures of the index of dissimilarity for beneficiaries aged 65 or older, by monthly benefit amount and marital status, 1990

Monthly benefit amount (dollars)	Married		Widowed		Divorced		Never married	
	SIPP	MBR	SIPP	MBR	SIPP	MBR	SIPP	MBR
1–199	4.7	4.0	2.2	1.6	3.0	3.3	4.5	3.5
200–299	14.2	12.1	6.9	6.4	9.7	7.8	7.6	8.4
300–399	17.7	18.7	13.4	10.6	19.8	19.7	9.5	9.4
400–499	11.2	11.3	16.7	13.8	19.8	13.9	17.2	16.8
500–599	12.5	10.9	23.7	22.4	15.6	16.2	26.2	24.8
600–699	15.0	14.7	16.7	20.1	14.2	18.0	14.0	14.8
700–799	9.9	12.0	10.1	12.7	9.1	9.5	9.9	10.8
800–899	8.5	8.4	4.8	5.0	5.6	6.9	5.6	5.4
900–999	3.4	4.3	3.0	4.2	0.7	2.9	2.4	3.6
1,000 or more	2.8	3.6	2.5	3.2	2.4	2.0	3.2	2.5
Index of dissimilarity [a]	4.9		8.2		8.3		3.7	

a. The index of dissimilarity indicates the percentage of beneficiaries in either the MBR or the SIPP distribution who would have to change their monthly benefit amount category to obtain equivalent distributions. The index is constructed by taking the absolute difference between the SIPP and MBR percentage for each amount category, summing across all the benefit amount categories for the total or the given subgroup, and dividing by 2.

Table 8.
Percentage distribution and measures of the index of dissimilarity for beneficiaries aged 18–64, by monthly benefit amount, sex, and type of benefit, 1990

Monthly benefit amount (dollars)	Total		Men		Women		Retired worker		Disabled worker		Aged spouse/aged widow(er)		Other type of benefit	
	SIPP	MBR	SIPP	MBR	SIPP	MBR	SIPP	MBR	SIPP	MBR	SIPP	MBR	SIPP	MBR
1–199	7.5	7.3	4.0	4.1	10.5	9.9	3.1	3.1	5.1	4.2	4.9	5.7	30.5	29.9
200–299	12.8	12.5	4.6	4.5	19.5	19.1	11.6	10.7	8.2	8.7	17.3	16.0	24.2	24.8
300–399	21.2	22.7	9.2	10.4	31.0	32.7	21.3	22.0	17.7	20.3	33.2	31.4	17.8	22.0
400–499	13.7	13.2	9.7	10.2	17.0	15.7	11.5	12.2	15.4	14.2	18.8	16.5	10.6	10.6
500–599	12.2	11.9	16.2	15.2	8.9	9.2	14.0	13.4	13.7	12.6	11.2	12.4	3.6	5.2
600–699	13.8	13.1	20.6	17.4	8.3	9.6	16.7	15.6	14.4	12.0	12.1	15.6	5.4	5.5
700–799	11.1	12.1	22.6	24.2	1.7	2.2	19.6	20.4	9.0	10.9	2.6	2.6	0	0
800 or more	7.7	7.2	13.2	14.0	3.2	1.7	2.3	2.5	16.5	17.2	0	0	8.0	2.1
Index of dissimilarity [a]	2.5		4.3		3.8		2.5		5.7		5.5		6.6	

a. The index of dissimilarity indicates the percentage of beneficiaries in either the MBR or the SIPP distribution who would have to change their monthly benefit amount category to obtain equivalent distributions. The index is constructed by taking the absolute difference between the SIPP and MBR percentage for each amount category, summing across all the benefit amount categories for the total or the given subgroup, and dividing by 2.

particularly in large discrepancies, should be explored. Depending on the results, ways to improve the quality of Social Security benefit imputations in the SIPP might be developed. The role of rounding in benefit reporting could also be more systematically assessed. With more MBR ancillary data, the role of adjustments for the retirement earnings test, payment changes following widow(er)hood, or other adjustments could be explored. MBR entitlement dates would allow a systematic look at the effect of the recency of entitlement on reporting quality for all beneficiaries, not just those aged 60 or 62–64. MBR indicators would also allow investigation of the degree to which the direct deposit of Social Security benefits may result in less accurate reporting. The study could provide a more careful look at the role of forgotten COLAs in underreports, limiting such an analysis to sufficiently long-term beneficiaries and accounting for recomputations that may also have occurred. It would also be useful to repeat the comparisons made in this study with more recent survey data because the data used here were more than a decade old.

A second and complementary area for further investigation would be aimed at providing a better understanding of SSA's payment system and the frequency of payment adjustments for over- or underpayments.[23] For example, a series of MBR extracts showing benefit status, payment amount, and other indicators for a common month(s) could be pulled at 6-month intervals for a sample of respondents. Because retroactive payment adjustments may occur with greater frequency in the early calendar months,

[23] SSA does not routinely develop estimates of the proportion of beneficiaries with over- or underpayments. However, special estimates developed by Ken Olson in SSA's Office of Quality Assurance suggest that approximately 15 percent of beneficiaries in 2000 had at least one over- or underpayment. (Overpayments are far more frequent than underpayments.) Estimates are based on data from a sample of more than 600,000 accounts created by SSA's Office of Systems, which develops daily samples of transactions that are then cumulated weekly over the year.

January might be one useful common month to include. The resulting data set could provide a better understanding of the size, frequency, and timing of benefit adjustments and the subgroups most likely to experience them. That would inform research using SSA administrative data linked to the SIPP or any other surveys, because SSA data have often been extracted for linkage a few years after the focus of the survey (and, hence, after record adjustments may have been made).

If possible, additional work would incorporate data from SSA's Payment History Update System (PHUS)—a portion of the MBR that has not traditionally been available for SSA research but may become available. The PHUS maintains all transaction information on payment amounts, including all short-term payment adjustments. The amount of benefits that was actually paid *in* a given month (rather than *for* a given month) would be discernible in the PHUS data and could be compared with the MBC amount and the SIPP-reported amount for the month.

As discussed earlier, further research could lead to improvements in the quality of SIPP imputations of Social Security benefits. In addition, depending on what was learned from those investigations, SSA and the Census Bureau could explore introducing benefit information from SSA administrative records on to the SIPP public-use files. Such an addition would complement the information about the type of Social Security benefit recently added to the SIPP public-use files and allow users to make their own adjustments to benefit amounts given in the survey data.

Appendix A: Benefit Reporting Indicators

Comparisons in this paper are of Social Security benefit amounts for Survey of Income and Program Participation respondents who reported receiving benefits in June 1990 and had Social Security Administration administrative data showing that benefits were in current pay status for May. (Benefits are received in the following month.) The analysis excluded cases for which SIPP data and administrative data did not agree about benefit receipt and cases for which no SSA administrative data were available. As noted earlier, somewhat more than 200 records from the Master Beneficiary Record for respondents who received spouse or widow(er) benefits and who were not dually entitled are known to be missing. For the analysis, at least $1 in benefits had to be shown in both the SIPP and the MBR; the MBR also needed to show that the benefit was in current pay status.

This appendix compares Social Security benefit status in the SIPP and MBR and looks at some results that might be obtained under a different approach. The discussion is generally restricted to cases with a positive weight for June 1990 (as noted, they are considered to be "in sample" for the month), but the tables include other cases on the file. The aged, persons aged 18–64, and disabled workers aged 18–64 are examined separately in Tables A-1 through A-6. Two tables are presented for each beneficiary group. The first table in each set looks at reporting and linkage rates in the linked SIPP/MBR extract files. The second compares mean benefit amounts and proportions with low benefits across various subsets of respondents defined by the status of their benefit in one or both sources. Unweighted data are used. Cells for cases used in the analysis in the main paper are highlighted.

Overall, results in this appendix generally show the aged (65 or older) to be better at reporting benefit *receipt* than persons aged 18–64. That finding is in contrast to results of the paper's benefit amount comparisons, which show greater concurrence between SIPP and the MBR among the nonaged on the amount of benefits received. The appendix results also generally show that mean benefit amounts and the percentages with low benefit amounts are quite similar when all respondents reporting benefits in the SIPP are compared with the respondent subset used in the paper.

Aged (Tables A-1 and A-2)

Concurrence between the two sources on benefit receipt was extremely high for the aged. Cases used in the analysis reported benefits that were almost identical to those reported by all SIPP respondents and to those shown for all linked records in the MBR.

- Of the 4,477 aged respondents who reported Social Security benefits in the SIPP, 93 percent (4,168) have linked records, and receipt for 91 percent (4,084) of the reporters was confirmed in the MBR. *Of reporters with linked records, receipt was confirmed for 98 percent.*

- Of the 4,117 aged respondents showing benefits in the MBR and with SIPP weights for the month, 99 percent (4,084) reported benefits in the SIPP.

- The latter result is quite consistent with Vaughan (2000b), who shows that 98 percent of retired workers, 98 percent of aged wives, and 99 percent of aged

widow(er)s in the MBR reported benefits in the SIPP for December 1990 and December 1991.

- Finally, of the 4,201 aged respondents showing benefits in *either* source, 97 percent show receipt in both. The data show 4,084 with receipt in both; 84 with receipt in the SIPP and not the MBR; and 33 with receipt only in the MBR, yielding 4,201 with receipt in either.

For the aged, Table A-2 shows that mean reported benefits are virtually identical when all SIPP respondents who reported benefits are compared with the linked subset who also show positive benefits in the MBR ($535 and $536, respectively). Proportions reporting low benefits in the SIPP are also the same or nearly so in the two groups. Under the MBR indicators, mean benefits and proportions showing low benefits are also very similar for all cases and for corroborating cases.

Among the relatively small numbers of aged respondents reporting benefits in the SIPP but without corroborating evidence in the MBR, mean reported benefits are lower than in the analysis sample used. Indicators of the lowest benefits come from the 84 respondents who reported Social Security in the SIPP but whose linked MBR data did not agree. It could be that some of those respondents received only SSI benefits but mistakenly reported them as Social Security. (As noted, the analysis file lacked data from SSI administrative files.)

Table A-1.
Status of Social Security benefit field for all persons aged 65 or older in linked SIPP/MBR extract file, May 1990

Social Security benefit in SIPP	All records	No linked MBR [a]	Social Security benefit in MBR: Subtotal, with linked MBR	Amount field is not filled	Amount equals zero	Amount is positive but not in current pay status	Amount is positive
Total	5,126	555	4,571	69	107	66	4,329
Records with weights	4,857	508	4,349	69	98	65	4,117
Amount is positive	4,477	309	4,168	69	11	4	4,084
Amount equals zero	10	1	9	0	0	5	4
Amount is missing	370	198	172	0	87	56	29
Records with no weights [a]	269	47	222	0	9	1	212

a. If the year of birth is missing, then the MBR record is considered to not be linked. If there is no SIPP weight for June, then the SIPP record is disregarded.

Table A-2.
Average Social Security benefits of persons aged 65 or older and percentage with low benefits in the SIPP and MBR, by benefit indicator status in data source, May 1990

		SIPP			MBR		
Social Security benefit indicator	Number	Mean benefit (dollars)	Percentage < $199	Percentage < $299	Mean benefit (dollars)	Percentage < $199	Percentage < $299
Positive in SIPP; positive in MBR [a]	4,084	536	3.8	15.2	564	3.1	13.0
Positive in SIPP; not in MBR [b]	84	490	4.2	20.5	n.a.	n.a.	n.a.
Positive in SIPP; no linked MBR [c]	309	523	3.4	18.5	n.a.	n.a.	n.a.
Not in SIPP [d]; positive in MBR [a]	33	n.a.	n.a.	n.a.	528	15.2	27.3
Positive in MBR	4,329 [e]	n.a.	n.a.	n.a.	563	3.2	13.1
Positive in SIPP	4,477	535	3.8	15.5	n.a.	n.a.	n.a.

NOTES: Statistics based on weighted data.

n.a. = not applicable.

a. For MBR amounts to be considered positive, they must also be in current pay status.

b. This group includes records that show an MBR birth year but show MBC as blank, zero, or an amount that is not in current pay status.

c. If the MBR year of birth was missing, the MBR record was considered to not be linked. Work by Vaughan (2000b) suggests that as many as 200 MBR records are missing from this file because of errors in the linkage. In other cases, an MBR is not linked because respondents refused to provide their Social Security numbers or because a record matching the SSN could not be found.

d. This group includes records that are weighted but report Social Security benefit amounts for June 1990 that equal zero or are missing.

e. Number includes 212 unweighted records.

Nonaged (Tables A-3 and A-4)

Concurrence between the two sources on benefit receipt was lower among those aged 18–64 than among the aged, and a somewhat smaller proportion of the group aged 18–64 who reported benefits had a linked MBR. The cases used in the analysis report slightly higher benefits than either all SIPP respondents reporting benefits or all MBR cases with positive benefits.

- Of the 1,244 respondents aged 18-64 who reported Social Security benefits in the SIPP, 90 percent (1,116) had linked records, and benefit receipt for 84 percent (1,047) of reporters was confirmed in the MBR. *Of reporters with linked records, receipt was confirmed for 94 percent.*

- Of the 1,230 nonaged respondents showing benefits in the MBR and with SIPP weights for the month, 85 percent (1,047) reported benefits in the SIPP.

- Finally, of the 1,299 nonaged respondents showing benefits in *either* source, 81 percent (1,047) show receipt in both. The data show 1,047 with receipt in both; 69 with receipt in SIPP and not the MBR; and 183 with receipt only in the MBR, yielding 1,299 with receipt in either.

Among nonaged persons, mean reported benefits of all SIPP respondents is a bit lower than that of the subset whose report is corroborated in the MBR ($479 and $485, respectively). An almost identical difference occurs between those of all respondents

showing positive benefits in the MBR and those of the subset with benefits in both sources ($479 and $484, respectively). Interestingly, the mean benefit reported by all SIPP respondents is identical to that shown in the MBR for all those aged 18-64 with linked records ($479).

A slightly higher proportion of all respondents reported benefits in the SIPP of less than $199 compared with such reports from those with benefit reports in both sources (7.9 percent and 7.5 percent, respectively), but proportions with benefits under $299 are identical in the two groups (20.3 percent). MBR indicators show higher proportions of respondents with low benefits across all MBR cases, compared with the subset used in the analysis (9.5 percent versus 7.3 percent and 21.2 percent versus 19.8 percent).

Disabled Workers (Tables A-5 and A-6)

Estimates for disabled workers (all aged 18–64) are developed using the type of benefit information in the MBR. The result is that estimates are not available for respondents without linked administrative data, including those reporting disabled worker as their benefit type in the SIPP. (Tables A-1 through A-4 used only the age variable given in the SIPP data to define the groups under scrutiny.)

Table A-3.
Status of Social Security benefit field for all persons aged 18–64 in linked SIPP/MBR extract file, May 1990

Social Security benefit in SIPP	All records	No linked MBR [a]	Social Security benefit in MBR				
			Subtotal, with linked MBR	Amount field is not filled	Amount equals zero	Amount is positive but not in current pay status	Amount is positive
Total	26,872	25,347	1,525	74	112	48	1,291
Records with weights	25,353	23,895	1,458	74	106	48	1,230
Amount is positive	1,244	128	1,116	59	1	9	1,047
Amount equals zero	207	145	62	15	7	13	27
Amount is missing	23,902	23,622	280	0	98	26	156
Records with no weights [a]	1,519	1,452	67	0	6	0	61

a. If the year of birth is missing, then the MBR record is considered to not be linked. If there is no SIPP weight for June, then the SIPP record is disregarded.

Table A-4.
Average Social Security benefits of persons aged 18–64 and percentage with low benefits in the SIPP and MBR, by benefit indicator status in data source, May 1990

		SIPP			MBR		
Social Security benefit indicator	Number	Mean benefit (dollars)	Percentage < $199	Percentage < $299	Mean benefit (dollars)	Percentage < $199	Percentage < $299
Positive in SIPP; positive in MBR [a]	1,047	485	7.5	20.3	484	7.3	19.8
Positive in SIPP; not in MBR [b]	69	434	9.7	22.0	n.a.	n.a.	n.a.
Positive in SIPP; no linked MBR [c]	128	449	9.9	19.8	n.a.	n.a.	n.a.
Not in SIPP [d]; positive in MBR [a]	183	n.a.	n.a.	n.a.	452	22.9	29.8
Positive MBR	1,291 [e]	n.a.	n.a.	n.a.	479	9.5	21.2
Positive SIPP	1,244	479	7.9	20.3	n.a.	n.a.	n.a.

NOTES: Statistics based on weighted data.

n.a. = not applicable.

a. For MBR amounts to be considered positive, they must also be in current pay status.

b. This group includes records that show an MBR birth year but show MBC as blank, zero, or an amount that is not in current pay status.

c. If the MBR year of birth was missing, the MBR record was considered to not be linked. Work by Vaughan (2000b) suggests that as many as 200 MBR records are missing from this file because of errors in the linkage. In other cases, an MBR is not linked because respondents refused to provide their SSNs or because a record matching the SSN could not be found.

d. This group includes records that are weighted but report Social Security benefit amounts for June 1990 that equal zero or are missing.

e. Number includes 61 unweighted records.

Among those with MBR disabled-worker benefits, concurrence is lower than among either the aged or nonaged groups.

- Of the 436 weighted cases showing a disabled-worker benefit in the MBR, 361 (83 percent) reported Social Security benefits in the SIPP. That rate is similar to the 85 percent obtained from 1992 and 1993 SIPP panels for December 1994 reported in Social Security Administration (2001), Appendix A.

- However, the result is lower than that given in Vaughan (2000b). He found that 90 percent of disabled-worker cases in the MBR also reported benefits in the SIPP. Vaughan's results were based on weighted data and were from SIPP/MBR linked files for the December 1990 and December 1991 benefits.

- MBR indicators for all disabled workers compared with the subset who also report benefits in the SIPP are quite similar. The mean is slightly higher ($551 versus $547), but the proportion with the lowest benefits is also higher (5.1 percent versus 4.2 percent), and the proportions with benefits under $299 are very similar (12.6 percent and 12.9 percent).

Program and payment features might contribute to the apparently lower SIPP reporting rates noted earlier. Successful SSA Disability Insurance applications may have a relatively long review period, sometimes including additional time for appeals, before an award is made. Once an award is made, however, the disabled worker can be paid retroactively back to the date of initial entitlement, and the MBR is adjusted to show benefits paid in each month of retroactivity. Thus, some SIPP respondents may have been awaiting a disability award decision during the SIPP interview (and correctly reporting no benefit for May), but subsequent changes to the MBR would have made it appear that the benefit had been received. (Those kinds of program features and their representation in the MBR are discussed in Appendix B.) An additional possibility, noted by Vaughan (2000b), is that some new beneficiaries may report their Social Security income as SSI because they had received SSI payments in the 5-month waiting period. Not all new beneficiaries may understand the subsequent change in the source of their benefit income. We were not able to isolate new beneficiaries for this analysis.

Table A-5.
Status of Social Security benefit field for disabled-worker beneficiaries aged 18–64 in the linked SIPP/MBR extract file, May 1990 [a]

Social Security benefit in SIPP	Disability Insurance benefit in MBR				
	Subtotal, with linked MBR	Amount field is not filled	Amount equals zero	Amount is positive but not in current pay status	Amount is positive
Total	470	0	7	7	456
Records with weights	450	0	7	7	436
Amount is positive	362	0	0	1	361
Amount equals zero	5	0	1	1	3
Amount is missing	83	0	6	5	72
Record with no weights [a]	20	0	0	0	20

a. MBR indicators are used to identify disabled workers. Therefore, MBR records are available by definition for all cases. SIPP type of benefit information was disregarded.

Table A-6.
Average Social Security benefits of persons aged 18–64 and percentage with low benefits in the SIPP and MBR for those with DI indicated in the MBR, by benefit indicator status in data source, May 1990

		SIPP			MBR		
Social Security benefit indicator	Number	Mean benefit (dollars)	Percentage < $199	Percentage < $299	Mean benefit (dollars)	Percentage < $199	Percentage < $299
Positive in SIPP; positive in MBR [a]	361	541	5.1	13.3	547	4.2	12.9
Positive in SIPP; not in MBR [b]	1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Positive in SIPP; no linked MBR [c]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Not in SIPP [d]; positive in MBR [a]	75	n.a.	n.a.	n.a.	570	9.7	10.9
Positive in MBR	456 [e]	n.a.	n.a.	n.a.	551	5.1	12.6
Positive in SIPP	362	541	5.1	13.2	n.a.	n.a.	n.a.

NOTES: Statistics based on weighted data.
n.a. = not applicable.

a. For MBR amounts to be considered positive, they must also be in current pay status.
b. This group includes records that show an MBR birth year but show MBC as blank, zero, or an amount that is not in current pay status.
c. If the MBR year of birth was missing, the MBR record was considered to not be linked. Work by Vaughan (2000b) suggests that as many as 200 MBR records are missing from this file because of errors in the linkage. In other cases, an MBR is not linked because respondents refused to provide their Social Security numbers or because a record matching the SSN could not be found.
d. This group includes records that are weighted but report Social Security benefit amounts for June 1990 that equal zero or are missing.
e. Number includes 20 unweighted records.

Appendix B: Benefit Amounts in the Social Security Administration's Master Beneficiary Record

A benefit amount in the Social Security Administration's Master Beneficiary Record shows the amount paid *for* a given month, not necessarily the amount paid *in* that month.[24] The latter—the amount the respondent received in a particular month—may differ from the MBR amount because of adjustments for overpayments or underpayments. An overpayment occurs when SSA pays a beneficiary too much. As soon as SSA detects the overpayment, a refund is requested, or, if the beneficiary prefers, amounts may be withheld from future benefits to cover the overpayment, or other arrangements may be made. An underpayment is an amount due a person that has not been paid. SSA may pay in a single check or add the repayment to another benefit payable to the person. Adjustments are subsequently made to the amounts recorded in the MBR to reflect the amount that *should* have been paid in any given month.

We are not aware of any estimates of the size and frequency of such adjustments in 1990, but estimates for 2000 suggest that about 15 percent of beneficiaries had at least one over- or underpayment. Some examples of the conditions surrounding the occurrence of such adjustments are given here.[25]

[24] The exception is the part of the MBR known as the Payment History Update System (PHUS), which maintains transaction information. As noted in this paper's concluding section, PHUS data have not generally been available for research and were not available for the analysis presented here.

[25] These examples were developed by the author based on discussions with SSA colleagues Joel Packman, Bob Hackendorf, and Russ Hudson, all of whom have worked extensively with the MBR. Responsibility for any errors rests with the author.

1. A worker receiving benefits at age 66 in 1990 reports no plans for future work. But he does work in 1990, and in 1992 SSA determines that his 1990 earnings exceeded amounts set by the earnings test and that he was overpaid $2,600 in 1990.

   If his monthly benefit amount is $600 (for easier exposition, examples assume no COLAs or recomputations), SSA might withhold all of his current $600 benefit for 4 consecutive months and $200 in the following month to repay the $2,600. In that case, the 1990 MBA history, which previously showed $600 per month, is changed to show that benefits were reduced. The payment history would then show no benefit for January 1990 through April 1990, an MBA of $400 for May 1990, and an MBA of $600 for the remaining months in 1990.[26]

   The 1992 record—rather than showing that no benefits were received for 4 months and $400 was received for May (as actually happened)—would show $600 every month. If the SIPP respondent reported what actually happened in June 1990—a benefit of $600 was received—the records would agree only if the MBR record pull occurred before SSA determined that an overpayment had been made. If the pull occurred after the determination of overpayment, the record for May (received in June) would show the lower adjusted benefit of $400, and the respondent would appear to have overreported. If the SIPP respondent also reported what actually happened in 1992 (4 "$0 months," 1 "$400 month," and 7

[26] In fact, when the benefit is totally withheld for any month (as opposed to a partial withholding), the MBR shows the full amount rather than zero. Another field (for example, the Reason for Deduction, Work Indication Code, or Benefit Payment Code) shows that the record was not in current pay status for the month.

"$600 months") the records would not agree, and the respondent would appear to be underreporting in the early months.

2. An underpayment could arise if the beneficiary tells SSA that he expected high earnings in 1990 and SSA reduces his MBA for the earnings test. If, in fact, he did not work and SSA determined that in 1992, the agency would adjust the 1990 underpayment with a lump sum. The 1990 record would automatically change to show the unreduced amount that should have been paid, and the 1992 record would not reflect the lump-sum payment that was made in that year.

   The respondent's report of what actually happened in 1990 would agree with the records only before the lump-sum adjustment was made. After that, the respondent would appear to be underreporting. In 1992, if the respondent included the lump-sum amount in his benefit report, he would not agree with the records and would appear to be overreporting.

3. SSA conducts benefit recomputations to credit beneficiaries for additional recent covered earnings. While recomputations occur continuously as needed, major systems operations that result in MBR changes usually occur in October and March. (In roughly 25 percent of all cases, a manual review is required and the cases are processed as workloads permit.) A recomputation to include a particular year's earnings is effective with the January benefit in the year following the year in which the earnings were paid. However, even when things go well, there are

lags of several months for earnings to be posted, so payments reflecting the January increase are made retroactively.

For example, an automatic recomputation for a beneficiary's 1989 earnings would occur in October 1990, if the earnings were posted before the recomputation operation. If the recomputation resulted in higher benefits, a new January 1990 MBA would be created and retroactive payments would be made for January 1990 and later. If the 1989 earnings were not posted until after the October 1990 operation, the automatic recomputation would occur in March 1991, a new January 1990 MBA would be created, the COLA at the end of 1990 would be applied, and a new January 1991 MBA would be created. Retroactive payments based on those amounts would be made for January 1990 and later.

Depending on the month of the interview and the month the 1989 earnings were posted and benefits recomputed, SIPP-reported benefit amounts for 1990 might show the amount received before the recomputation adjustment. In those cases, and assuming the records were pulled after the recomputation adjustment, respondents would appear to be underreporting. Amounts reported in the month a lump-sum retroactive payment was received would appear to be overreports, relative to what the MBR would show for the month.

4. A 62-year-old insured worker develops a disability that prevents his employment, and he applies to SSA for disabled-worker benefits. While waiting for SSA's disability award (which can take many months), he takes reduced retired-worker benefits to meet his income needs. Those benefits begin for January 1990, in the

amount of $580 per month. In October 1990, SSA awards disability benefits in the amount of $725, retroactive back to April 1990.

In that case, the MBA history, which had showed $580 for each month from January through October, would change to show the $725 monthly amount for April through October. If the SIPP respondent reported the $580 that he actually received for May 1990, he would appear to be underreporting relative to the MBR (assuming that the SSA records are extracted after the changes are made.)

The period surrounding new disability awards can also result in discrepancies that are somewhat outside the scope of this paper. For example, workers who are not eligible for retirement benefits while awaiting a disability award might rely on a spouse's income or their own savings to meet their income needs. When retroactive disability awards are made in such cases, a comparison of benefit status in the linked records will show an apparent failure by the respondent to report benefits at all for some months. During the 5-month waiting period, an alternative, temporary income source for some people is the SSI program. Subsequent confusion may arise for some beneficiaries about whether benefits in any given month were obtained from the SSI or the Social Security program.

5. A woman receiving benefits as a retired worker might learn that her divorced husband died the previous year. If she received higher benefits as a dually entitled surviving divorced spouse and established eligibility for those benefits, she would be retroactively paid the difference between the retired-worker benefit she had

received and the survivor benefit she was due back to her former husband's month of death.

If she was interviewed before the adjustment was made and the MBR records were pulled after that time, the monthly benefit amount she reported would be less than the total benefit that the records showed she was paid. She would appear to be underreporting. If she was interviewed in the month she received a retroactive payment plus her retired-worker benefit, she would appear to be overreporting.

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