Appendix D. **Description of SIPP 1990 Panel File and Data Quality**

Description of SIPP 1990 Panel File

Most of the estimates presented in this report are based on the 1990 SIPP panel file. This file contains monthly data for persons over a 32-month period. The staggered SIPP design (described in appendix A) means that the actual reference periods are January 1990 to August 1992, October 1989 to May 1992, November 1989 to June 1992, and December 1989 to July 1992. The period covered by the 1990 longitudinal panel file consists of 32 interview months (eight interviews) for rotations 1, 2, 3, and 4. Data from all four rotation groups are available only for the reference period January 1990 through May 1992.

Attrition Bias

Each person in the panel file has been assigned three weights: a weight for calendar year 1990, a weight for calendar year 1991, and a weight for the 32-month reference period. In order to receive a non-zero weight, a person must have an observation for each month of the relevant reference period (in this report, 1990 and 1991) or have a complete set of observations up until the time he or she died or became institutionalized. The data shown in this report are affected if characteristics of persons with an incomplete set of observations differed from those with a complete set.

Table D-1 shows three categories of sample persons by sex, age, and program participation status. The numbers in the table are unit counts; they are not weighted. The category "complete set of interviews obtained" includes 43,799 persons. The next category, "Interviewed in first wave, left sample for reasons other than death or institutionalization" includes 14,489 persons. The final category includes 10,827 persons who were not a member of a SIPP household during the first wave of interviews, but who subsequently became a member of a sample household.

A comparison of the first two columns shows the characteristics of those who completed the full set of interviews are reasonably close to the characteristics of those who dropped out of the sample. Differences in the age distribution are for young adults and for the elderly. Young adults are underrepresented and the elderly are overrepresented in the group of persons who completed the full set of interviews. Differences in health insurance coverage between the fully interviewed group and those who left the sample after the first wave are important and probably affected by the differential sample loss by age.

The data in table D-1 are, as noted, unweighted, and any potential problem caused by unrepresentative age distributions are minimized when the file is weighted to independent controls.

Time-in-Sample Bias

The use of the panel file to obtain estimates for 1990 and 1991 raises the issue of time-in-sample bias. There is ample evidence that certain measures vary according to the number of times the respondent has been visited. In the CPS, for example, the measured unemployment rate is always higher for the group of households being interviewed for the first time than for the groups being interviewed for the second or later times.

Time-in-sample bias arises when a person's response to a survey question (or the interviewer's method of asking a question) is influenced by what occurred in a previous visit. The overlapping SIPP sample design provides the data that allows for an examination of the presence of time-in-sample bias in SIPP estimates. That is, it is possible in SIPP to obtain estimates for a given time period from two or more separate panels and the amount of time respondents will have spent in the SIPP panel will differ for each of the panels. For example, estimates for each of the four quarters of 1990 can be obtained from both the 1989 and 1990 panels (respondents in the 1989 panel will have had more visits).

The figures in table D-2 provide very little evidence regarding the existence of time-in-sample bias for several reasons. Most of the observed differences are smaller than the differences that could be explained by sampling error. Also, differences may be attributable to attrition bias rather than time-in-sample bias. In spite of these qualifications, however, the observed relationships offer some reason to be cautious in interpreting the estimates that have been presented in this report.

Table D-1. **Percent Distribution—Three Categories of Sample Persons: 1990 SIPP Panel**

Characteristic	Complete set of interviews obtained[1]	Interviewed in first wave, left sample for reasons other than death or institutionalization	Not a member of sample household during first wave, interview obtained in second or later waves
Total	43,799	14,489	10,827
	(100.0)	(100.0)	(100.0)
SEX			
Male	47.0	50.4	51.0
Female	53.0	49.6	49.0
AGE AT FIRST INTERVIEW			
Under 18 years	28.6	27.4	38.0
Under 6 years	10.7	9.4	25.1
18 to 24 years	8.6	15.6	20.8
25 to 44 years	31.5	33.3	27.5
45 to 64 years	18.6	16.5	10.4
65 years and over	12.7	7.3	3.2
75 years and over	5.1	2.6	1.1
Program participation, first month in sample:			
Persons 18 years and over	31,267	10,523	6,711
	(100.0)	(100.0)	(100.0)
Participated in major assistance program	9.1	10.5	11.4
AFDC or general assistance	2.0	2.9	2.7
Food stamps	4.4	5.1	5.8
Medicaid	5.5	5.9	7.1
Public/subsidized housing	3.9	4.8	2.8
SSI	2.3	1.8	2.2
Did not participate	90.9	89.2	88.6
Covered by private health insurance	79.7	70.2	67.9
Provided through employer	44.2	39.2	39.5
Not covered by private health insurance	20.4	29.8	32.1

[1]Includes 1,832 persons who died, were institutionalized, moved to Armed Forces barracks or out of the country.

Table D-2. **Number of Persons Without Health Insurance Coverage—Monthly Averages of Calendar Quarters: 1985, 1986, 1987, 1988, 1990, 1991, and 1992 Panels***

[Numbers in thousands]

Year and quarter	Panel						
	1985	1986	1987	1988	1990	1991	1992
1986							
Quarter 1	33,971	34,333	(X)	(X)	(X)	(X)	(X)
Quarter 2	33,894	34,144	(X)	(X)	(X)	(X)	(X)
Quarter 3	33,794	34,419	(X)	(X)	(X)	(X)	(X)
Quarter 4	33,778	33,156	(X)	(X)	(X)	(X)	(X)
1987							
Quarter 1	33,433	32,357	33,374	(X)	(X)	(X)	(X)
Quarter 2	(X)	32,117	32,715	(X)	(X)	(X)	(X)
Quarter 3	(X)	32,240	32,782	(X)	(X)	(X)	(X)
Quarter 4	(X)	32,144	31,475	(X)	(X)	(X)	(X)
1988							
Quarter 1	(X)	(X)	30,795	33,627	(X)	(X)	(X)
Quarter 2	(X)	(X)	30,824	31,931	(X)	(X)	(X)
Quarter 3	(X)	(X)	30,742	31,804	(X)	(X)	(X)
Quarter 4	(X)	(X)	31,507	32,031	(X)	(X)	(X)
1989							
Quarter 1	(X)	(X)	(X)	31,679	(X)	(X)	(X)
Quarter 2	(X)	(X)	(X)	31,383	(X)	(X)	(X)
Quarter 3	(X)	(X)	(X)	31,271	(X)	(X)	(X)
Quarter 4	(X)	(X)	(X)	31,760	(X)	(X)	(X)
1990							
Quarter 1	(X)	(X)	(X)	(X)	33,581	(X)	(X)
Quarter 2	(X)	(X)	(X)	(X)	32,202	(X)	(X)
Quarter 3	(X)	(X)	(X)	(X)	31,687	(X)	(X)
Quarter 4	(X)	(X)	(X)	(X)	32,139	(X)	(X)
1991							
Quarter 1	(X)	(X)	(X)	(X)	32,337	34,608	(X)
Quarter 2	(X)	(X)	(X)	(X)	32,281	33,005	(X)
Quarter 3	(X)	(X)	(X)	(X)	32,734	32,205	(X)
Quarter 4	(X)	(X)	(X)	(X)	33,042	33,426	36,106
1992							
Quarter 1	(X)	(X)	(X)	(X)	(X)	33,768	36,695
Quarter 2	(X)	(X)	(X)	(X)	(X)	33,557	(X)
Quarter 3	(X)	(X)	(X)	(X)	(X)	34,208	(X)
Quarter 4	(X)	(X)	(X)	(X)	(X)	(X)	(X)

X Not applicable.

* The 1989 panel was reduced to only three waves and data from that panel are not currently available.

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