THE SURVEY OF INCOME AND PROGRAM PARTICIPATION

MEASURING THE DURATION OF POVERTY SPELLS

No. 86

P. Ruggles The Urban Institute R. Williams Congressional Budget Office

U. S. Department of Commerce BUREAU OF THE CENSUS

This paper is based on work supported in part by the National Science Foundation under grant Number SES-87-13643. The research was partially conducted at the U. S. Bureau of the Census while the first author was a participant in the ASA/ NSF fellowship program, which is supported by the National Science Foundation and the Bureau of the Census. Any opinions expressed in this paper are those of the authors only, and do not necessarily reflect the views of The Urban Institute, The Congressional Budget Office, NSF, or the Bureau of the Census.

TABLE OF CONTENTS

Data and Meth	nods	2
Estimated Dur	rations of Poverty Spells	4
Conclusions		7
References		8
Table 1.	Spells of Monthly Poverty Under Three Poverty Criteria	10
Table 2.	Poverty Entrances and Spell Durations Under Alternative Poverty Definition, for Persons with Annual Income Below the Poverty Line	11
Table 3.	Poverty Entrance and Spell Durations Under Alternative Poverty Definition, for Persons with Annual Income Above the Poverty Line	12
Table 4.	Percentage Distribution of Poverty Entries by Annual Income as a Percentage of Annual Poverty Thresholds	13
Table 5.	Number of Poverty Entries Experienced Over 32 Months Under Three Poverty Definitions	14

Measuring the Duration of Poverty Spells

Most studies of the incidence and duration of poverty rely on annual income data, which are compared to a set of poverty thresholds adjusted for family size and composition to determine whether or not a given family is in poverty official U.S. poverty statistics on the percentage of the population in poverty, for example, are computed by the Bureau of the Census using data on annual incomes as reported in the Current Population Survey (U.S. Bureau of the Census 1987). Similarly, the well-known article by Mary Jo Bane and David Ellwood on the duration of poverty spells (Bane and Ellwood 1986) uses annual income data from the University of Michigan's Panel Study of Income Dynamics. Indeed, until recently only annual income data were available on a regular basis for a large-scale, representative sample of the U.S. population.

With the advent of the Survey of Income and Program Participation (SIPP), however, longitudinal monthly data or, personal and family incomes over a period of 32 months are now available for an initial sample of more than 60,000 persons.¹ Examination of these data have already made it clear that there is an enormous amount of fluctuation in incomes within the annual period, particularly for the low income population (Ruggles 1988a). Because the SIPP data are longitudinal, they allow a variety of options for measuring poverty over different periods of time, and because income fluctuations are so common for the low income population, these alternative poverty measures can be strikingly different. For example, for the population as a whole the 1984 poverty rate based on annual income as measured in the SIPP is about 11 percent.² However, only about 5 percent of the population were poor in every month--that is, were in a family every month that had a monthly income that was below one-twelfth of the appropriate annual poverty threshold. In contrast, a relatively large proportion of the population-over 26 percent-had at least one month in 1984 when they were in a family with an income below the monthly poverty threshold (Williams 1986; Ruggles and Williams 1986.)

As these figures imply, a large number of people who are not poor on the basis of their annual incomes do experience subannual spells of poverty. The incidence of these short-term spells may be of substantial interest for several policy-related purposes. For example, most means-tested assistance programs such as Aid to Families with Dependent Children (AFDC) and the Food Stamp Program (FSP) calculate eligibility on the basis of monthly rather than annual incomes, and these data imply that many more people may be eligible for such programs than would be estimated using annual income data alone. In addition, to the extent that such sub-annual poverty spells are experienced by families and individuals who typically have near-poverty incomes and thus have limited savings or other resources, even relatively short spells of very low income may represent substantial hardships.

¹See Nelson et al. (1984) for a general introduction to the SIPP.

²Because of the SIPP collects more total income than the CPS, particularly for the low income population, its poverty rates tend to be lower. See Williams (1986) for further discussion.

This paper expands upon our earlier research on poverty-related issues in the SIPP, which primarily focused on alternative poverty measures within an annual period.³ For this study, we have focused instead on estimating a distribution of the total duration of poverty spells, using a complete 32 month research file constructed from the 1984 panel of the SIPP. Within this context of duration estimates, the paper also considers the impact of several different poverty definitions. The final section of the paper comments on the implications of our findings relative to those derived from more conventional cross-sectional poverty measures, or even from longitudinal data using an annual accounting period. Before turning to a discussion of our results, however, a brief description of our data and of the methods we have used to calculate spell durations is appropriate.

Data and Methods

The Survey of Income and Program Participation is a panel survey that interviews participating households every four months, collecting information on monthly income, family composition, and other variables. The 1984 panel of the SIPP, which went into the field in mid-1983, contained about 60,000 people in the first set (or "wave") of interviews. Interviews were repeated for each household every four months for up to nine waves, collecting up to 36 months of data. For budget-related reasons, however, the survey underwent a "reduction in sample" in the fifth wave, in which about 20 percent of cases, randomly chosen, were dropped.

The data presented in this paper come from a longitudinally linked research file prepared from the SIPP by the Bureau of the Census.⁴ This file contains up to 32 months of information on all persons ever interviewed during the 1984 SIPP panel.⁵ Some longitudinal editing of this file has been performed by the Census Bureau--for example, imputed interviews for persons missing an interview in an otherwise interviewed household have been removed, in the interests of longitudinal consistency. The file contains a total of about 64,500 persons, interviewed over the period from September 1983 through April 1986.

The estimates of the distribution of spell durations presented in this paper have been derived using a simple survival analysis technique. Spells are observed from their beginning until they either end or the observation is right-censored. For each month t, the conditional probability of leaving

³One partial exception is an earlier working paper that examined the distribution of spells using a 15 month file. See Ruggles 1988b.

⁴For more information on the preparation of this file, see Coder et al. (1987).

⁵The final was was dropped from the panel file because only about half the remaining sample received the final interview. Additionally, persons not present for all 32 months do not have panel file weights. Because our analysis already adjusts for spell censoring through attrition, however, we include part-panel cases. Consequently, we have not used the panel weights--all results presented here are unweighted. We expect to repeat this analysis at some point in the future using persons present in the first wave ("one-hundred level" cases) only, with their first wave weights, but based on our preliminary analysis of the impacts of alternative weighting schemes we expect this procedure to make very little difference to the overall distributions of spell durations observed.

poverty that month given that the case has remained in poverty up to month t is calculated. This probability is equal to

$$h(t,X) = \underline{F(t,X)},$$

$$(1 - F(t,X))$$

where f(t,X) is the probability density function for spell exits at t months for an individual with characteristics X, and F(t,X) is the cumulative probability function for exits to time t for such an individual. The survival function, which is essentially the probability that an individual will still be in poverty at time t, is simply the denominator of the expression above:

$$\mathbf{S}(\mathbf{t}, \mathbf{X}) = 1 \quad \mathbf{F}(\mathbf{t}, \mathbf{X}).$$

In assessing the distributions of spell durations that result from this analysis, it is helpful to remember that the universe over which spells are examined includes spell entrants only. In other words, left-censored spells are excluded from the analysis. Estimated survival rates thus give the probability that a given <u>entrant</u> into poverty will still be poor t months later. This estimate does not align in a direct fashion with cross-sectional data on poverty, which tell us what proportion of people are poor at a given point in time. Because someone who is poor for a long period of time has a higher probability of being included in a randomly chosen cross-sectional analyses will include more people with long spell durations than will an analysis based on the population of all people entering poverty over a given period of time.

As discussed in the introduction to this paper, a longitudinal data file provides one the opportunity to construct a variety of poverty measures for various analytic purposes. For this study, three alternative definitions of a poverty spell were used. The first and simplest definition is just monthly poverty--that is, family income in any month below one-twelfth of the appropriate annual income threshold (using the official poverty thresholds as defined by the Census Bureau.⁶

Measuring poverty by comparing monthly income to a monthly poverty threshold measure has been widely criticized, however, because many people may have little or no income in a given month-for example, when changing jobs--without being in any real sense poor. Further, even very small changes in income--for example, an extra pay period falling into some months but not others-could put some borderline cases on one side of the line or the other, resulting in apparent

⁶See U.S. Bureau of the Census (1986) for a table of these thresholds for 1984. SIPP monthly poverty thresholds are also adjusted on a monthly basis for changes in price levels (i.e., the annual adjustment to the thresholds is allocated evenly across the months).

short poverty spells with very little real change in income.

Two other more stringent poverty definitions were therefore used as well. The first (referred to as alternative criterion one) attempts to eliminate short spells that result from very small fluctuations in income, by requiring a fairly large change before an entry or exit is recorded. Thus, for a spell entry to occur under this criterion, income must decline by at least one-third (and the poverty line must be crossed). For an exit to be recorded, income must increase by a similar dollar amount (resulting in a percentage increase of at least 50 percent), and the poverty line must be crossed again. To terminate poverty spells for cases that eventually reach fairly high incomes but do so by small increments, we also considered a poverty spell to be ended if total income reached 125 percent of the poverty line.

The second alternative poverty criterion is designed to eliminate short spells resulting from very temporary income fluctuations caused by, for example, temporary changes in employment status--e.g., taking two weeks off between jobs. It uses the same definition as the first alternative, but in addition the person must maintain the new status for at least two months for an entry or exit to be coded. The next section presents the results of our spell analyses using these definitions.

Estimated Durations of Poverty Spells

Survival rates for poverty spells under each of the definitions discussed above are shown in Table 1. Although, as would be expected, the estimated durations of poverty spells do vary across the definitions, under all three most entrants leave poverty within a surprisingly short time.

Table 1 includes all cases with a poverty entrance under the appropriate definition at any time during the 32 months of the panel file. Under the least restrictive poverty definition--monthly income less than monthly poverty threshold--about 23 percent of the sample experienced an entrance. The addition of restrictions on the amount of change necessary to record an entrance or exit does eliminate a substantial number of these entrances-under alternative criterion one, 19 percent of the sample had a poverty entrance over the 32 month period, and under criterion two only about 13 percent of the sample did so. Nevertheless, those cases that do remain still typically experience relatively short spells. Using the monthly income less than monthly poverty threshold criterion, median spell length is less than four months. Use of criterion one increases the median by about one month, while under criterion two the median is just over six months. At twelve months, the probability that an entrant will still be in poverty ranges from less than 13 percent under the least restrictive definition to about one-third under criterion two. By 24 months, more than 80 percent of entrants have left poverty under all three definitions.

Before turning to a discussion of the meaning of these estimates, we should point out that all of the duration estimates cited in this paper are subject to "seam bias"--the tendency of respondents to report more transitions in the interview month than in the other months of the wave. As a result, the hazard rate for spell exits is two to three times as great at the wave "seams"--the fourth, eighth, twelfth, etc. months, when interviews are done--than in each of the within-wave

months. We believe that this phenomenon is probably results primarily from faulty recall of the dates of income changes, rather than from mis-reporting of the existence of an income change. In other words, people are probably more likely to get confused about when a specific change occurred than they are to report a change that didn't actually occur at all. Consequently, this type of reporting error probably introduces only a small error into our duration estimates, since given the wave interviewing structure it would be difficult for respondents to err in their recall by more than four months (and most are probably off by only one or two months). Further, presumably some respondents recall shorter spells than actually occurred, while others recall longer spells, causing the errors in duration estimates to offset each other somewhat.

Returning to the figures on spell durations cited above, they imply that estimates of poverty spell durations are indeed somewhat sensitive to the specific definition used. even under a definition that is designed to eliminate very short spells or those arising from trivial income changes, however, very long spells--those lasting two years or more--appear to be relatively rare. Comparing across definitions, it also appears that restrictions on the minimum duration of spells have much more impact on both the number of spells observed and the durations of spells than do restrictions on the amount of income change needed. This in turn implies that accounting period issues are quite important in considering the extent and depth of poverty in a comparative context.

This point is reinforced by the results seen in Tables 2 and 3, which show survival. rates for those who are and are not in poverty on the basis of their annual incomes. In each table, two sets of estimates are supplied--first, spell entries in 1984 classified by 1984 annual income, and second, spell entries in either 1984 or 1985, classified by average annual income over the 1984-1985 period.⁷ Under either type of definition, it can be seen that only about 20 to 25 percent of all those with spell entries would be included in the poverty population if a measure based on annual incomes were used. Although there are some clear differences in spell durations for those who are poor on an annual basis and those who are not, over half of those poor on an annual basis still leave poverty within twelve months of entry under two of the three poverty definitions. For alternative criterion two, spells for those poor on the basis of their 1984 annual incomes are somewhat longer-only about one-third leave poverty in the first 12 months, and the median spell length is just under 18 months. Nevertheless, even these spells are short compared to the median poverty spell length of two years or more found in studies using annual income data from the PSID. And of course, spell lengths for poverty entrants who are <u>not</u> in poverty on the basis of

⁷An individual has been defined to have been in poverty on the basis of 1984 annual income if his or her family income, summed over all months of 1984, was less than the monthly poverty thresholds for his or her family in each month, summed over the same months. For individuals not in the sample for all months of 1984, this calculation was made including all months in which they were present. Poverty status based on average annual income over the 1984-1985 period was computed similarly, by summing family income over all 24 months and comparing it to the sum of family poverty thresholds over the same months. For the purposes of this analysis, months 5 through 16 of the panel have been considered 1984, while months 17 through 28 have been considered 1985. These periods will include slightly different sets of calendar months for different sets of respondents, although in all cases at least nine of the twelve months included will fall in the designated calendar year. See Coder et al. (1987) for more detail.

their annual incomes are much shorter, as shown in Table 3; the median is just under three months for the monthly income less than monthly poverty threshold definition, about four months for criterion one, and just under six months for criterion two.

Because those entrants who stay in poverty longer are more heavily represented in the crosssectional statistics than are the short stayers, however, these findings should not be interpreted to mean that most of those seen to be in annual poverty at a given point in time are actually in short spells. Again, the statistics presented here refer to expected spell durations for a sample of entrants, not for a representative sample of those in poverty at a given point in time. Less than 40 percent of those in poverty on an annual basis over the 1984 calendar year also have an observed entry during our sample period, and of course those without an observed entry--i.e., those already in poverty at the start of the survey--are likely to include a higher proportion of longer spell cases.

Nevertheless, the results shown in Tables 2 and 3 have some important implications for the way that we think about poverty. Specifically, they imply that a very large proportion of those who spend some time in poverty are not poor on the basis of their annual incomes, and are consequently not picked up in our official poverty statistics. This finding is particularly important in considering issues such as the estimated size of the population eligible for means-tested programs. Since typically only one or two months of low income are needed to qualify for benefits, the population eligible for AFDC or the Food Stamp Program, for example, may be much larger than would be estimated using annual income data alone.

To some extent, the importance that we attach to short spells of poverty depends on the longer term income levels attained by those who experience such spells. If, as one observer suggested, these cases are all "college professors taking the summer off"--that is, cases with reasonably substantial resources over the longer period, who experience short spells with low incomes--there may be less call for any policy response to these spells than there might be if those experiencing them also had relatively low annual incomes.

As Table 4 demonstrates, however, this scenario is not typical. The two panels of Table 4 show the distribution of annual incomes for poverty entrants under each of the two annual income measures examined in Tables 2 and 3. Under all three poverty definitions and both annual income measures almost 90 percent of poverty entrants have an annual income at or below 300 percent of the poverty line-a level approximately equal to the median income for the population as a whole. under the annual income definition based on 1984 incomes, over half of all entrants have incomes below 150 percent of poverty, and about three-fourths are below 200 percent. Even when annual incomes are averaged over a two year period the distribution of annual incomes edges up only slightly. Most entrants, in other words, still have quite low incomes, even over a fairly long accounting period. Thus, while there are a few cases of relatively high income individuals who experience short spells of low income, the typical case is someone with a low annual income who probably does not have enormous resources to call upon in withstanding even a short poverty spell.

One further issue to be considered in assessing the findings presented here is the extent to which those experiencing short poverty spells tend to return to poverty fairly quickly. The spell durations examined in Tables 1 through 4 of this paper refer to first entries into poverty only for any given individual. As Table 5 demonstrates, some poverty entrants do indeed experience more than one spell of poverty under all three definitions. The probability of multiple entries varies in a predictable manner across the poverty definitions. Under the monthly income less than monthly threshold definition, about 60 percent of those with any entry over the 32 months have only one. Under criterion one, this proportion rises to about 70 percent, and under criterion two, about 86 percent. Additionally, cases with more than two entries are quite rare under alternative criteria one and two-less than 10 percent of all cases with entries under criterion one and less than 2 percent under criterion two have three or more entries. Thus, the poverty definitions designed to eliminate small fluctuations and very short spells also appear to eliminate a large proportion of multiple spells.

Even under criterion two, however, about 14 percent of cases with an entry (or 1.8 percent of all cases) experience more than one poverty entry over the 32 month period. This implies that if we were to examine the total time spent in poverty, rather than the duration of first spells, total durations in poverty would be somewhat greater. we hope to consider this issue in more detail in a future study. In the meantime, the numbers presented here should be assessed as indicators of turnover in the poverty population, rather than as estimates of the proportion of the population that experience some substantial-period of low income over an extended period of time.

Conclusions

In conclusion, the monthly income data available from the SIPP challenge our conventional assumptions about the poverty population in two important ways. On the one hand, we see many more poverty entries in the SIP than in databases that collect only annual income information-subannual spells of poverty are extremely common, and typically affect persons whose incomes are near but not necessarily below the poverty level when measured on an annual basis. In this sense, these findings are somewhat pessimistic, in that many more people seem to experience at least some period of poverty within the year than would ever be guessed using annual income data alone.

On the other hand, the SIP data also indicate-that the typical poverty spell is much shorter than would be anticipated using annual income data--even for those who are poor on an annual income basis. overall, only about one-third of those who enter poverty are still poor twelve months later under .even the most restrictive of the poverty definitions explored here. For those whose incomes are below the poverty level on an annual basis poverty spells are longer, but under all definitions over one-third of those in annual poverty who have an observed poverty entrance end their spells within twelve months of that entry, and under the least restrictive poverty definition (monthly income less than monthly poverty threshold) about 70 percent have spells lasting less than one year. All of this implies that there is enormous flux in the poverty population, but that the typical person who falls into poverty manages to leave again in a fairly short time.

These data deserve further investigation, and we have several related projects currently underway. For example, we are exploring the relationship between events--e.g. marital disruption and job loss-and spell entries and durations. We are also considering the impacts of specific characteristics of individuals on their spell durations, given an entry. work is also being undertaken on the implications of these findings for assistance program eligibility estimates and on the role of asset holdings for those with short periods of low income. All of these further estimates will strengthen our understanding of the processes and impacts of short-term income fluctuations, hit even the fairly preliminary findings presented here make clear the importance of these fluctuations in the lives of many individuals in the U.S. population as a whole.

References

Bane, Mary Jo and-David T. Ellwood. 1986. "Slipping Into and Out of Poverty: the Dynamics of Spells." <u>The Journal of Human Resources</u>, Volume XXI, Number 1:1-23, Winter.

Coder, John F., Dan Burkhead, Angela Feldman-Harkins, and Jack McNeil. 1987. "Preliminary Data from the SIPP 1983-1984 Longitudinal Research File." Bureau of the Census SIPP Working Paper No. 8702.

Nelson, Dawn, David McMillen, and Daniel Kasprzyk. 1984. "An Overview of the Survey of Income and Program Participation." Bureau of the Census SIPP Working Paper No. 8401.

Ruggles. Patricia. 1988a. "Short-term Fluctuations in Income and Their Relationship to the Characteristics of the Low-Income Population: New Data from the Survey of Income and Program Participation (SIPP)." Paper prepared for the Bureau of the Census Fourth Annual Research Conference Proceedings, March 20-23, 1988. Also available as Bureau of the Census SIPP Working Paper No. 8802.

Ruggles, Patricia. 1988b. "Accounting Period Impacts on the Measured Duration of Poverty Spells." Urban Institute Working Paper, July.

Ruggles, Patricia and Roberton Williams. 1986. "Transitions In and Out of Poverty." Urban Institute Research Paper, December.

U.S. Bureau of the Census. 1986. "Characteristics of the Population Below the Poverty Level: 1984." Current Population Reports, Series P-60, No. 152. U.S. Government Printing Office, Washington, D.C.

U.S. Bureau of the Census. 1987. "Poverty in the United States: 1985." Current Population Reports, Series P-60, No. 158. U.S. Government Printing Office, Washington, D.C.

Williams, Roberton. 1986. "Poverty Rates and ' Program Participation in the SIPP and the CPS." Paper prepared for the Annual Meetings of the American Statistical Association, August.

Table 1. Spells of Mon	nthly Poverty Under	Three Poverty Criteria

	Monthly Income Less Than Monthly Poverty Threshold	Alternative Criterion One ¹	Alternative Criterion Two ²
Number of Cases with a Poverty Entrance	14,951	12,401	8,353
Percent with a Poverty Entrance	23.2	19.2	12.9
Survival Rate for Poverty Spells After:			
1 month 3 months	1.00 .511	1.00 .597	1.00 .850
6 months	.245	.300	.518
9 months	.158	.202	.392
12 months	.126	.158	.333
15 months 18 months	.100 .081	.126 .112	.276 .241
21 months	.071	.097	.241
24 months	.066	.091	.197
27 months	.055	.078	.160
30 months	.054	.077	.158
Percentage of			
Spells Censored	19.7	24.6	39.9

Source: Computed from a 32 month file drawn from the 1984 panel of the Survey of income and Program Participation. These data cover the period from Sept. 1983 - June 1986.

Notes: 1. Monthly income below monthly poverty threshold and income decline of at least one-third for entry; for exit, increase to above monthly threshold and by at least one half or increase to 125 percent of monthly poverty threshold.

2. As for criterion one, and must maintain new state for at least two months for entry or exit to be coded.

Table 2. Poverty Entrances and Spell Durations Under Alternative Poverty Definition, for Persons with Annual Income Below the Poverty Line

	Cases with 1984 Annual Income Below <u>Poverty Threshold and 1984 Poverty Entry¹</u> And Poverty Entry in Either 1984 or 1985 ¹		Cases with Average Annual Income in 1984 and 1985 Below Average of 1984-19 85 Thresholds			
	Monthly Income Less Than Monthly Poverty Threshold	Alternative Poverty Criterion One ²	Alternative Poverty Criterion Two ³	Monthly Income Less than Monthly Poverty Threshold	Alternative Poverty Criterion One ²	Alternative Poverty Criterion Two ³
Number of Cases with Poverty Spell Entrance	2,124	1,469	1,062	2,724	1,977	1,411
Percent of All Entries Under Definition	26.7	22.3	24.1	23.5	19.9	20.3
Survival Rate for Poverty Spells After:						
1 month 3 months 6 months 9 months 12 months 15 months 18 months 21 months 24 months 27 months 30 months	1.00 .792 .573 .375 .292 .219 .182 .154 .144 .127	1.00 .878 .671 .467 .362 .282 .247 .215 .201 .175	1.00 .986 .880 .737 .662 .570 .496 .416 .379 .273	1.00 .783 .578 .445 .381 .313 .272 .234 .221 .195	1.00 .896 .698 .578 .481 .420 .382 .332 .313 .276 	1.00 .983 .903 .811 .767 .704 .632 .552 .518 .389
Percentage of Spells Censored	31.7	39.1	57.7	41.3	51.3	71.2

Source: Computed from a 32 month file drawn from the 1984 panel of the Survey of Income and Program Participation. These data cover the period from Sept. 1983 - June 1986.

Notes: 1. "1984" income includes months 5-16 of the panel; "1985" includes months 17-28. These months correspond to slightly different sets of calendar months for interviewees in different rotation groups. See Coder et al. (1987) for further discussion.

2. Monthly income below monthly poverty threshold and income decline of at least one-third for entry; for exit, increase to above monthly threshold and by at least one Ka-If or increase to 125 percent of monthly poverty threshold.

3. As for criterion one, and must maintain now state for at least two months for entry or exit to be coded.

Table 3. Poverty Entrances and Spell Durations Under Alternative Poverty Definition, for Persons with Annual Income Above the Poverty Line

	Cases with 1984 Annual income Above Poverty Threshold and 1984 Poverty-Entry ¹ and Poverty Entry in Either 1984 or 1985 ¹		Cases with Average Annual Income in 1984 and 1985 Above Average of 1984-1985 Thresholds.			
	Monthly Income Less Than Monthly Poverty Threshold	Alternative Poverty Criterion One ²	Alternative Poverty Criterion Two ³	Monthly Income Less than Monthly Poverty Threshold	Alternative Poverty Criterion One ²	Alternative Poverty Criterion Two ³
Number of Cases with Poverty Spell Entrance	5,833	5,127	3,352	8,874	7,951	5,538
Percent of All Entries under Definition	73.3	77.7	75.9	76.5	80.1	79.7
Survival Rate for Poverty Spells After:						
1 month 3 months 6 months 9 months 12 months 15 months 18 months 21 months 24 months 27 months 30 months	1.00 .434 .119 .065 .053 .038 .027 .026 .026 .026	1.00 .528 .169 .096 .078 .055 .049 .040 .038 .035	1.00 .819 .376 .242 .203 .159 .132 .112 .112 .107	1.00 .453 .140 .068 .050 .032 .017 .016 .016 .016	1.00 .544 .196 .107 .080 .049 .042 .033 .031 .027	1.00 .820 .404 .270 .220 .162 .133 .103 .098 .088
Percentage of Spells Censored	10.7	13.5	23.5	11.5	15.3	27.8

Source: Computed from a 32 month file drawn from the 1984 panel of the Survey of Income and Program Participation. These data cover the period from Sept. 1983 - June 1986.

Notes: 1. "1984" income includes months 5-16 of the panel; "1985" includes months 17-28. These months correspond to slightly different sets of calendar months for interviewees in different rotation groups. See Coder et al. (1987) for further discussion.

2. Monthly income below monthly poverty threshold <u>and</u> income decline of at least one-third for entry; for exit, increase to above monthly threshold <u>and</u> by at least one half or increase to 125 percent of monthly poverty threshold.

3. As for criterion one, and must maintain new state for at least two months for entry or exit to be coded.

Table 4 Percentage Distribution of Poverty Entries by Annual Income as a Percentage of Annual Poverty Thresholds

Monthly Income Less Than Monthly Poverty Threshold	Alternative Criterion One ²	Alternative Criterion Two ³
7,957	6,596	4,414
2.8	3.2	3.1
23.9	19.1	21.0
32.6	31.1	35.1
16.2	18.3	17.4
9.2	10.2	8.4
5.2	6.0	4.3
10.1	12.0	10.7
	Less Than Monthly Poverty Threshold 7,957 2.8 23.9 32.6 16.2 9.2 5.2	Less Than Criterion Monthly Poverty One ² Threshold 6,596 7,957 6,596 2.8 3.2 23.9 19.1 32.6 31.1 16.2 18.3 9.2 10.2 5.2 6.0

1984 Annual Income Level for Cases with 1984 Spell Entries¹

Average Annual Income, 1984-1985, Relative to Average Poverty Threshold, for Cases with Spell Entries in 1984 or 1985¹

Number of Entries: Percent with Annual Income:	11,598	9,928	6,949
Less than 50 Percent			
of Threshold	2.2	2.5	2.1
50-100 Percent	21.3	17.4	18.2
100-150 Percent	28.5	27.4	30.8
150-200 Percent	17.5	18.9	18.8
200-250 Percent	12.1	13.0	11.9
250-300 Percent	6.5	7.4	6.2
Over 300 Percent	11.8	13.4	11.9

Source: Computed from a 32 month file drawn from the 1984 panel of the Survey of Income and Program Participation. These data cover the period from Sept. 1983 - June 1986.

Notes: 1. "1984" income includes months 5-16 of the panel; "1985" includes months 17-28. These months correspond to slightly different sets of calendar months for interviewees in different rotation groups. See Coder et al. (1987) for further discussion.

2. Monthly income below monthly poverty threshold and income decline of at least one-third for entry; for exit, increase to above monthly threshold <u>and</u> by at least one half <u>or</u> increase to 125 percent of monthly poverty threshold.

3. As for criterion one, and must maintain new state for at least two months for entry or exit to be coded.

Table 5

Number of Poverty Entries Experienced Over 32 Months	
Under Three Poverty Definitions	

	Monthly Income Less Than Monthly Poverty Threshold	Alternative Criterion One ¹	Alternative Criterion Two ²
Percentage of Population with:			
No Spell Entry	76.8	80.8	87.1
One Entry	13.7	13.4	11.1
Two Entries	5.4	4.0	1.6
Three or More Entries	4.1	1.8	0.2

Source: Computed from a 32 month file drawn from the 1984 panel of the Survey of Income and Program Participation. These data cover the period from Sept. 1983 - June 1986.

- Notes: 1. Monthly income below monthly poverty threshold <u>and</u> income decline of at least one-third for entry; for exit, increase to above monthly threshold <u>and</u> by at least one half <u>or</u> increase to 125 percent of monthly poverty threshold.
 - 2. As for criterion one, and must maintain new state for at least two months for entry or exit to be coded.