THE SURVEY OF INCOME AND PROGRAM PARTICIPATION

Longitudinal vs. Retrospective Measures of Work Experience

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LONGITUDINAL VS. RETROSPECTIVE MEASURES OF WORK EXPERIENCE

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Annual work experience data are an important part of our statistical data base about the Nation's labor supply. Unlike point-in-time estimates of employment and unemployment, work experience data tell us not only how many people worked in the course of a year, but how much they worked. For example, the Bureau of Labor Statistics (BLS) reported that in 1985 while 107.1 million persons were employed, on average, each month, 123.5 million had some work experience during the year. In addition, the work experience data reveal that 72.4 million persons worked 50 to 52 weeks, usually 35 hours or more a week, or full time (Smith, 1987). Clearly, we obtain a different perspective on the labor force activity of our population from work experience data than we do from monthly labor force estimates.

The Current Population Survey (CPS), a monthly household survey of approximately 59,500 households, provides as with this retrospective view of annual work experience. The CPS, which is conducted by the Census Bureau for the BLS, is also the source of the offical monthly employment and unemployment estimates. In the March supplement to the monthly labor force questions, a battery of retrospective questions are asked of household respondents about their labor force activity in the previous calendar year. This means respondents are reporting on their employment and

unemployment experiences which occurred between 3 and 15 months ago.

Recall error, especially for persons with irregular work patterns, is problematic in retrospective work experience surveys (Horvath, 1982; Morgenstern and Barrett, 1974). While not the only source of error (other sources could be the use of proxy respondents, the misunderstanding of survey questions, and the errors involved in processing the data), recall error is likely to be a major source associated with retrospective work experience data.

In this paper, we compare CPS work experience estimates for 1985 to work experience estimates for the same year derived from a longitudinal survey, the Survey of Income and Program Participation (SIPP). SIPP is a much smaller household survey and its primary purpose is to collect information on income, income sources, participation in Federal government income transfer programs, and so on. 1/ It also contains a labor force component, which is the source of the work experience information for this paper. Eight interviews are conducted every four months in SIPP over approximately a two and one-half year period. Consequently, it takes three or four interviews, each containing only a four month recall period, to develop work experience estimates for a calendar year. 2/

As will be shown below, while the estimates of the total persons with work experience for 1985 from both CPS and SIPP are similar, important differences exist in how much persons worked in that year, or the distribution of annual work experience. For

72.3 = >c 69=100

over reported

example:

year round, full time, but in SIPP only 69.0 mllion with this amount of work experience were found. This also means that a greater proportion of our work force was employed in jobs providing less than full-time, year-round employment. 3/

Assuming Sippis cornect, CPS was overreporting full time workers by 4%

Why are women overreporting at double the rale

--According to the CPS, in 1985 27.4 million women worked year round, full time, but the comparable SIPP estimate, was 25.3 million. The proportion of women employed full time, year round is frequently regarded as an indicator of women's growing involvement in the labor market.

These differences and others are discussed in this paper. We begin with some additional background about how the CPS and SIPP work experience comparisons were developed. We then present the data and discuss the possible implications of these differences. A final section explores the impact of recall period differences between CPS and SIPP on the estimates as well as other possible survey differences.

Methodological Background

As mentioned at the outset, the BLS has the responsibility for reporting and analyzing the annual work experience statistics collected in the CPS. Their reports and analyses have appeared regularly. 4/ The Census Bureau also uses these data in their periodic reports on income and other topics, since work

experience is highly correlated with many of these subject reports. $\frac{5}{}$

In this paper, we use the work experience data which were used in the Census Bureau's 1985 report on money income (U.S. Bureau of the Census, 1987). The universe of these data differs slightly from that published by the BLS, one difference being that the BLS data are for persons 16 years of age and over while the Census Bureau's are for persons 15 years of age and over. A second difference is that our data relate only to persons with earnings in 1985, while the BLS's includes a small proportion of persons who worked without pay on a family operated farm or business. The differences between our work experience data for 1985 and those of the BLS are shown below.

	Work expe	rience data as	s published by:
(In thousands)	Census	BLS	<u>Difference</u>
	(1)	(2)	(1)-(2)=(3)
Total who worked	124,105	123,466	639
Full time	96,446	96,472	-26
50-52 wks.	72,326	72,422	-96
48-49 wks.	2,483	2,485	1
40-47 wks.	5,599	5,603	10
27-39 wks.	5,519	5,527	-8
14-26 wks.	5,770	5,759	
1-13 wks.	4,748	4,676	72
Part time	27,659	26,993	666
50-52 wks.	10,206	10,188	18
40-49 wks.	3,329	3,290	39
27-39 wks.	3,336	3,263	73
14-26 wks.	4,861	4,707	154
1-13 wks.	5,927	5,545	382

As would be expected, the largest difference, which was statistically significant at the 5-percent level, occurred among persons working part time between 1 and 13 weeks. Some young persons that work, such as the 15 years olds that are excluded in the BLS work experience data, are most likely to be classified in

this category.

Both the Census and BLS work experience data, of course, are derived from the same CPS questionnaire, a copy of which is displayed in the Appendix. The work experience questions, which are actually contained in what is referred to as the March CPS Income and Work Experience Supplement, follow a series of questions about one's labor force activity in February but come before questions concerning income amounts and income sources one had in the previous calendar year. The work experience questions are straightforward in that they immediately ascertain whether or not a person worked at a job or business at any time in the previous year and if so for how many weeks. (Information about the specific weeks and months in which one worked, however, is not collected.) As shown in the questionnaire in Appendix A, additional questions are asked about usual weekly hours in the weeks worked, jobseeking, weeks spent looking for work or on layoff, reasons for not working, and so on. The 1985 data are weighted up to population controls as of March 1986.

The work experience data, like the monthly labor force information and income data, are obtained for all members of a household from a "responsible household member." In other words, one respondent usually will answer all the questions for himself or herself, as well as for others person living in the household. While it was not possible to find out the specific proportions of all responses to the work experience questions that were self-responses and proxy responses, it is known that in the CPS, in general, about 50 percent are self and 50 percent proxy

responses.

In SIPP, work experience data are collected much differently. Because of SIPP's longitudinal design, data are collected for the same group of individuals every four months for eight times in the life of a panel. Technically, while SIPP's work experience data are also collected retrospectively, the recall periods are much shorter than in the CPS. In this paper, the work experience data for 1985 were taken from SIPP's 1984 longitudinal research panel, specifically, interview waves 5, 6, 7, and 8. The number of households covered averaged about 16,000. 6/

Another difference in the methodology is that in SIPF the data for an individual from three or four interviews must be "stitched" together, while in the CPS the data are taken from only one interview. From each SIPP interview it is necessary to determine whether or not an individual usually worked full time (35 hours or more a week) or usually worked part time (less than 35 hours a week) during each month of the reference period. In the CPS, this is determined by a direct question about one's usual weekly hours during the past year. In SIPP, if in the combined three or four interviews covering a calendar year, an individual reports usually working less than 35 hours a week in one-half or more of all months worked during the calendar year, the person is classified as usually working part time. Otherwise, the worker would be classified as usually working full time.

A copy of the SIPP questions about work experience can be

found in the Appendix. These questions are at the beginning of the questionnaire, and, as in the CPS, immediately determine whether or not an individual had a job or business in the previous four month reference period. Unlike the CPS, however. an attempt is made to find out—with the assistance of a calendar—in which weeks the job or business was held. Other questions inquire about whether or not the person was absent from the job without pay in any weeks and whether or not the persons had any weeks in which he or she was looking for a job or on layoff. In these instances, the specific weeks are sought in which the event took place, again with the assistance of a calendar.

The remainder of the SIPP questionnaire (which is not shown in the Appendix) is devoted to obtaining information on income recipiency (i.e., the receipt of certain types of income), earnings and employment characteristics, income amounts, Federal government program participation, and special topics which vary from interview to interview. 7/ The questionnaire is longer than the March CPS and many questions, especially those dealing with income recipiency and income amounts, are potentially sensitive for some respondents. Attrition is a problem for any longitudinal survey and in SIPP, by the end of the 8th interview wave in the 1984 panel, sample loss had amounted to 22 percent of households (King, Petroni, and Singh, 1986). 8/combination of weighting adjustments and imputation are used to compensate for the loss of information. (The CPS noninterview rate in March 1986 was 5.6 percent.)

In SIPP, because so much detailed social, demographic, and economic information is being collected, self-respondent interviews are important. This is especially so for those persons who have irregular patterns of labor force activity, such as teenagers. Approximately 40 percent of the persons participating in all eight interviews were self-respondents and another 19 percent had only one or two proxy interviews (Kalton, Kaspryzk, McMillen, 1988). In addition, SIPP sample members who move are followed as long as they move within 100 miles of a SIPP primary sampling area.

SIPP and CPS Work Experience Data for 1985

The number of persons 16 years of age and over who had some work experience in 1985 totaled 124.7 million according to SIPP and 124.1 million according to the CPS. The difference between these two estimates was not statistically signficant at the 5-percent level. An estimate of the annual number of hours supplied to the labor market is shown in the tabulation below.

Estimated annual hours supplied according to:

	SIPP	<u>CPS</u>
Total persons (in thous.)	124,655	124,101
Mean usual weekly hours	37.5	38.0
Mean annual weeks worked	43.8	43.5
Annual hours (in mil.)	204,745	205,139

In many respects, it is interesting that two very different household surveys can yield such similar estimates of our population's work effort during a calendar year. Differences exist in terms of sample sizes and designs, questionnaire wordings, and even the purposes of both surveys.

Major differences exist, however, in the distribution of these hours supplied to the labor market as reflected in the "extent of employment" categories shown in Table la. As mentioned at the outset, SIPP and CPS estimates of the number of persons who worked year round 50 to 52 weeks, usually full time, were significantly different at the 5-percent significance level. The SIPP estimate was almost 69.0 million compared to the CPS estimate of 72.3 million.

D4H 3.3

One might argue that in relative terms the estimated difference of 3.3 million persons with full-time, year-round employment is small since the SIPP estimate is less than 5 percent below the CPS estimate. This work experence category, however, has been traditionally thought of as representing a "norm" with respect to labor force activity in our country. That is, it reflects the full utilization of labor and lesser amounts of annual work experience are viewed as the result of either voluntary (supply side) choices or involuntary (demand side) choices. The fact that the SIPP estimate of the size of this group is significantly below that of the CPS suggests that either the labor market may not be operating as efficiently as has been believed and/or persons allocate their hours between work and leisure somewhat differently than we thought based on CPS data.

An obvious corollary of this difference is that SIPP finds more persons who worked less than full time, year round. According to SIPP, 55.7 million persons had worked less than 50

3.9

Table 1a. SIPP and CPS Work Experience Estimates, 1985

(Numbers in thousands) Difference CPS Extent of Employment SIPP 554 Total 124,655 124,101 -1,631 * 96,443 Full time 94,812 -3,343 *50-52 weeks 72,324 68,981 8,082 1,904 * 40-49 weeks 9,986 1,883 * 27-39 weeks 5,519 7,402 -723 * 14-26 weeks 5,770 5,047 -1,350 *13 weeks or less 4,747 3,397 2,185 * 27,658 Part time 29,843 239 50-52 weeks 10,205 10,444 990 * 40-49 weeks 4,319 3,329 27-39 weeks 3,335 1,957 * 5,292 14-26 weeks 4,700 4,861 -161 13 weeks or less 5,088 5,927 -839 * Total minus full time, 55,674 51,777 3,897 *

50-52 weeks

^{*} Significant at the .05 level.

to 52 weeks a year, usually full time in 1985, while in CPS the comparable estimate was 51.8 million. This difference too was statistically significant at the 5-percent level.

The differences in the SIPP and CPS work experience estimates presented in Table 1a sketch out a unique pattern, which will be discussed in more detail below. As shown in that Table, SIPP tends to otain greater numbers of persons with work experience in the 27 to 49 week categories than CPS and smaller numbers of persons with work experience at the extremes of the distribution.

Sex Differences. Tables 1b and 1c show the work experience estimates from SIPP and CPS for men and women. Estimates of men and women with work experience from both surveys are not statistically different from one another. However, significant differences exist in the amounts of work experience each sex has. For example, among the men, the SIPP estimate of full-time, year-round employment is 43.7 million compared to the CPS estimate of 44.9 million—a difference of 1.2 million persons. For women, the SIPP estimate was only 25.3 million and the CPS estimate 27.4 million. This discrepancy is noteworthy since, in recent years, much attention has been paid to the growing proportion of women with full-time, year-round employment.

As would follow from the above, less than full-time, year-round employment among women was found to be higher in SIPP than in the CPS. For men there was some evidence of this also (a significant difference at the 10-percent level).

Race Differences. Tables 2a to 2c profile the annual work

Table 1b. SIPP and CPS Work Experience Estimates for Men, 1985

(Numbers in thousands)

Extent of Employment	SIPP	CPS	Difference
Total	67,443	67,808	-365
Full time	57,365	58,273	-908 **
50-52 weeks	43,695	44,943	-1,284 *
40-49 weeks	5,549	4,638	911 *
27-39 weeks	4,102	3,118	984 *
14-26 weeks	2,340	3,130	-790 *
13 weeks or less	1,680	2,444	-764 *
Part time	10,078	9,535	543 **
50-52 weeks	3,088	3,322	-234
40-49 weeks	1,542	1,057	485 *
27-39 weeks	1,744	1,150	594 *
14-26 weeks	1,769	1,753	16
13 weeks or less	1,935	2,253	-318 **
Total minus full time,	23,748	22,865	883 **
50-52 weeks			

^{*} Significant at the .05 level.

^{**} Significant at the .10 level.

Table 1c. SIPP and CPS Work Experience Estimates for Women, 1985

(Numbers in thousands)

Extent of Employment	SIPP	CPS	Difference
Total	57,211	56,293	918
Full time	37,447	38,170	-723
50-52 weeks	25,286	27,381	-2,095 *
40-49 weeks	4,437	3,445	992 *
27-39 weeks	3,301	2,401	900 *
14-26 weeks	2,706	2,640	66
13 weeks or less	1,717	2,303	-586 *
Part time	19,764	18,123	1,641 *
50-52 weeks	7,356	6,883	473 **
40-49 weeks	2,777	2,272	505 *
27-39 weeks	3,547	2,185	1,362 *
14-26 weeks	2,931	3,108	-177
13 weeks or less	3,153	3,675	-522 *
Total minus full-time,	31,925	28,912	3,013 *
50-52 weeks			
50-52 weeks			

^{*} Significant at the .05 level.

^{**} Significant at the .10 level.

experience situations in 1985 for whites, Blacks, and other races (Indians, Japanese, Chinese, and any other race except white and Black) according to the two surveys. Each survey obtained very similar—and not statistically different—estimates of persons with work experience. The white estimate was a bit more than 108.0 million, the Black stood at approximately 12.7 million, and the estimate for others was around 3.5 million.

Differences in survey estimates, however, did occur in the distribution of work experience among whites and Blacks in 1985. In terms of full-time, year-round employment, SIRP recorded 2.6 million fewer white persons in this category and almost 700,000 fewer Black persons.

Age and Sex Differences in Work Experience Categories. The general pattern of work experience differences observed in SIPP and CPS, as was shown in Table 1a, is that relatively fewer persons are found at the extremes of the work experience distribution in SIPP than in the CPS and more within the central part of the distribution. In this section, we examine this pattern from another angle. We first divide the SIPP and CPS work experience data into four broad categories:

- --Persons who usually worked full-time, 50 to 52 weeks
- --Persons who usually worked full-time, 27 to 49 weeks
- --Persons who usually worked part-time, 27 to 49 weeks
- --Persons who usually worked full time or part time for

Table 2a. SIPP and CPS Work Experience Estimates for Whites,

(Numbers in thousands) Extent of Employment SIPP CPS Difference Total 209 108,215 108,006 Full time 81,933 83,717 -1,784 *50-52 weeks -2,557 *60,553 63,110 40-49 weeks 1,457 * 8,551 7,094 27-39 weeks 1,313 * 6,000 4,687 14-26 weeks 4,125 4,921 -796 * 3,904 13 weeks or less -1,139 *2,765 Part time 26,282 24,289 1,993 * 50-52 weeks 9,327 9,033 294 40-49 weeks 837 * 3,862 3,025 27-39 weeks 1,880 * 4,816 2,936 14-26 weeks 4,249 -136 4,113 13 weeks or less 4,203 5,044 -841 *

^{*} Significant at the .05 level.

Table 2b. SIPP and CPS Work Experience Estimates for Blacks, 1985

(Numbers in thousands)			
Extent of Employment	SIPP	CPS	Difference
Total	12,829	12,616	213
Full-time	10,083	9,987	96
50-52 weeks	6,508	7,199	-691 *
40-49 weeks	1,143	787	356 *
27-39 weeks	1,111	662	449 *
14-26 weeks	822	680	142
13 weeks or less	500	660	-160 **
Part-time	2,746	2,629	117
50-52 weeks	846	889	-43
40-49 weeks	348	222	126 **
27-39 weeks	381	285	96
14-26 weeks	416	522	-106
13 weeks or less	756	710	46

^{*} Significant at the .05 level.

^{**} Significant at the .10 level.

Table 2c. SIPP and CPS Work Experience Estimates for "Others," 1985 $\underline{1}/$

(Numbers in thousands)			
Extent of Employment	SIPP	CPS	Difference
Total	3,510	3,479	31
Full time	2,735	2,739	-4
50-52 weeks	1,920	2,015	-95
40-49 weeks	292	201	91
27-39 weeks	292	170	122 **
14-26 weeks	100	170	-70
13 weeks or less	131	183	-49
Part time	775	740	35
50-52 weeks	271	283	-12
40-49 weeks	109	81	28
27-39 weeks	95	113	-18
14-26 weeks	171	90	81 **
13 weeks or less	130	173	-43

^{1/ &}quot;Others" are defined as Indians, Chinese, Japanese, and other persons not of the White or Black race.

^{**} Significant at the .10 level.

1 to 26 weeks

Then within each category we look at differences among age-sex groups so as to determine if a secondary pattern emerges among these age-sex groups. Tables 3a to 3d contain these data comparisons.

The general pattern of the work experience differences between SIPP and CPS can be seen at the total level in each work experience category. The SIPP estimate of full-time, year-round employment is lower than CPS's (Table 3a), the SIPP estimates of both full-time and part-time employment of between 27 and 49 weeks is higher than CPS's (Tables 3b and 3c), and the SIPP estimate of full-time and part-time employment of 1 to 26 weeks is lower than CPS's (Table 3d). All of these differences were statistically significant at the 5-percent level.

With respect to the full-time, year-round estimates, nearly all of the SIPP estimates by age-sex group were below their CPS counterparts, however, only a few of the differences were statistically significant either at the 5-precent or 10-percent levels. Among the men, significantly lower estimates of full-time, year-round employment were reported in SIPP for 20 to 24 year olds and men 65 and over. Among the women, lower SIPP estimates were found for 20 to 24 year olds and 35 to 44 year olds. Consequently, no particular age-sex pattern seems to emerge here.

Table 3b contains the comparisons of persons who worked full time for between 27 to 49 weeks. SIPP estimates are higher than the CPS estimates, and the majority of them are

Table 3a. SIPP and CPS Estimates of Persons With Full-Time, Year-Round Employment, 1985

(Numbers in thousands)

Age and Sex	SIPP	CPS	Difference
Total, FTYR	68,981	72,324	-3,343 *
Men	43,695	44,943	-1,248 *
15 to 19	330	407	-77
20 to 24	3,455	3,926	-471 *
25 to 34	13,840	14,074	-234
35 to 44	11,943	11,874	69
45 to 54	7,962	8,167	-205
55 to 64	5,516	5,664	-148
65 and over	650	832	-182 **
Women	25,286	27,381	-2,096 *
15 to 19	332	333	
20 to 24	2,810	3,132	-322 **
25 to 34	8,228	8,716	-488
35 to 44	6,533	7,048	-515 **
45 to 54	5,649	6,033	-384
55 to 64	2,766	3,048	-282
65 and over	274	340	-66

^{*} Significant at the .05 level.

^{**} Significant at the .10 level.

Table 3b. SIPP and CPS Estimates of Persons Who Worked Full Time for 27 to 49 Weeks, 1985

(Numbers in thousands) Difference Age and Sex SIPP CPS 3,784 * 13,604 Total, FT, 27-49 17,388 7,757 1,893 * Men 9,650 243 * 15 to 19 281 524 20 to 24 2,090 1,347 743 * 25 to 34 2,962 2,660 302 ** 35 to 44 115 1,727 1,612 100 45 to 54 985 1,085 307 * 55 to 64 718 1,025 83 ** 65 and over 237 154 1,891 * 5,847 Women 7,738 194 148 * 15 to 19 342 20 to 24 1,039 518 * 1,557 638 * 25 to 34 2,582 1,944 35 to 44 1,460 1,328 132 45 to 54 783 115 898 282 * 55 to 64 751 469 65 and over 148 90 58

^{*} Significant at the .05 level.

^{**} Significant at the .10 level

Table 3c. SIPP and CPS Estimates of Persons Who Worked Part Time for 27 to 49 Weeks, 1985

(Numbers in Thousands) Age and Sex CPS Difference SIPP Total, PT, 27-49 2,948 * 9,613 6,665 1,078 * Men 3,286 2,208 15 to 19 1,186 636 550 * 20 to 24 415 * 905 490 25 to 34 324 372 -48 35 to 44 -57 138 195 45 to 54 144 98 46 55 to 64 85 ** 224 139 65 and over 87 278 365 1,870 ** Women 4,457 6,327 15 to 19 442 * 1,193 751 20 to 24 348 * 1,071 723 25 to 34 440 * 1,406 966 35 to 44 237 * 1,097 860 45 to 54 661 495 166 ** 55 to 64 138 ** 571 433 99 ** 65 and over 328 229

^{*} Significant at the .05 level.

^{**} Significant at the .10 level.

Table 3d. SIPP and CPS EStimates of Persons Who Worked Either
Full Time or Part Time for 1 to 26 Weeks, 1985

(Numbers in thousands) Lifference Age and Sex SIPP CPS -3,074 *Total, FT, PT, 1-26 18,229 21,303 -1,858 * 9,579 Men 7,721 -19715 to 19 2,921 3,118 -598 * 20 to 24 2,087 1,489 -280 * 25 to 34 1,547 1,267 836 -281 * 35 to 44 555 -216 * 45 to 54 386 602 -100 55 to 64 673 573 -186 * 65 and over 530 716 10,508 11,724 -1,216 *Women 15 to 19 2,786 2,685 101 20 to 24 -453 * 1,720 2,173 25 to 34 -328 ** 2,348 2,676 -287 * 35 to 44 1,542 1,829 -227 * 45 to 54 813 1,040 108 868 55 to 64 976 -130 ** 323 453 65 and over

^{*} Significant at the .05 level.

^{**} Significant at the .10 level.

statistically significant. There does appear to be some evidence of an age-sex pattern in that the differences are large and significant among both men and women in the 15 to 34 year old range, but small and not significant among men and women in the 35 to 54 year old range? In addition, SIPP estimates were also significantly higher among the older men, as well as some evidence among women age 55 to 64 years. One possible reason for this pattern, which will be discussed more fully in the next, section, is that young and older workers may be somewhat more cavalier than middle-age workers in recounting their work experience on an annual retrospective basis, but somewhat more diligent in SIPP where a longitudinal approach is used with a shorter reference period.

SIPP also obtains a significantly higher estimate of persons who worked part time for 27 to 49 weeks than the CPS, as is shown in Table 3c. All of the differences among the women were statistically significant. Here too there was some indication that the greatest differences existed in the two or three youngest age groups. Among the men, the greatest absolute differences were among young workers age 15 to 24, while among the women it was in the 15 to 34 year old age groups.

For workers with the least amount of work experience in these four categories--persons who worked full time or part time for 1 to 26 weeks--SIPP obtains a lower estimate than the CFS (Table 3d). This group, of course, is dominated by young persons under 25 years of age. SIPP's estimates were below CPS's for both the men and women, age 20 to 24, and significantly

differently from one another. In fact, this single age group accounted for 32 percent of the total men's difference and 37 percent of the total women's difference. Lower estimates for both sexes in SIPP were also found in the 25 to 34 year old intervals and for persons age 65 and over. One interpretation for the greater CPS estimates is that since the amount of work hours expended is relatively small, some individuals may think they actually worked more than they really did.

Survey Differences and Work Experience Differences

It is well known in the literature on survey methodology that survey estimates are very sensitive to the nature of the questions, their wording and ordering, and other characteristics of the survey instrument. In this section of the paper we discuss some of the survey differences which may account for the different estimates of work experience in 1985 from both surveys.

As has been pointed out, the CPS collects its information from one interview about labor force activity that has taken place in a time period extending from 3 to 15 months earlier. In SIPP, the data are collected from three or four interviews spaced four months apart during the calendar year, and from the same group of individuals. It is our hypothesis that the shorter recall period in SIPP, as compared to the CPS, plays an important part in explaining the different work experience estimates from these surveys.

As Sudman and Bradburn (1982) have pointed out, two important considerations in selecting a survey's reference period, or the period for which information is collected, are

"elapsed time" and "saliency." Survey respondents have an easier time remembering important events. Saliency is related to the unusualness of the event, its economic and social costs/benefits, and its continuing consequences.

How does this help explain the pattern of differences observed in the work experience estimates? One possible explanation is that in the CPS a certain proportion of persons who normally work full time, year around, may in fact have worked worked less for a variety of reasons, but when they come to recall their previous year's work experience in the March CPS, they forget (500 Mg these minor deviations in their normal work routine. * In SIPP, however, because the recall period is only four months and because a calendar is used in the interview, minor deviations in work routines probably have greater saliency and get reported. This would explain, to some extent, SIPP's lower estimate of full-time, year-round employment, but higher estimate employment for 27 to 49 weeks in full-time jobs.

On the other hand, some persons with a fairly strong attachment to the labor force, for example, part-time workers employed for 27 to 49 weeks, may also report their work experience differently in both surveys. In SIPP, because of the shorter recall period, they would be more apt to remember the hours and weeks worked, than they would in the CPS where the reference period stretches back over 15 months.

For persons who have the weakest attachment to the labor force, persons working 1 to 26 weeks a year, usually full time or part time, the CPS has significantly higher continues than SIPP.

normally normal? One possible explanation for this difference may be that in the CPS, persons overreport their small amounts of work experience because it is hard to remember but socially desirable to be working. In SIPP on the other hand, the shorter recall period would make it easier for respondents to remember their work activities. This explanation, however, may be one among many. For example, attrition in the SIPP sample may have a greater impact on the comparison since persons with irregular work patterns are more likely to have left the SIPP sample.

Finding a job and losing a job are relatively important events for most people, but no doubt the saliency of these events varies by demographic characteristics. A change in employment status probably has greater saliency for a middle-age head of a family than it does for a young person with no family obligations. Furthermore, it is well known that job mobility, or job changing, among the young is much greater than it older persons since many of the former are, in a "shopping" for the right job at this point in their lives. It could be hypothesized that these demographic differences with respect to labor force activity account for some of the observed work experience differences. For example, among persons who usually work full-time 27 to 49 weeks a year, it was observed that the SIPP estimate was considerably higher than the CPS estimate, and that most of the absolute difference was accounted for by persons under 35 years of age. It could be that in the CPS young persons are more inclined to attach less saliency to their job changes because of the long reference period and forget

the specifics of their work activity in the previous calendar year. Research has shown that the probability of reporting an event is inversely related to the number of similar events an individual experiences (Crowder, 1976). In SIPP, however, these persons would be more likely to recall their job changes because of the shorter recall period.

Other survey differences could also account for the different survey estimates. Self-respondents in SIPP are somewhat more common than in CPS and this could mean better quality work experience data, especially for persons who work less than full time, year round. However, as was indicated, not all of the interviews in SIPP used to construct the calendar year estimates are from self-respondents.

The SIPP's questionnaire is considerably more formidable than the CPS's, even though in SIPP, the work experience information over the previous four months is collected initially. Because SIPP collects a wider range of information from the same individuals eight times over a two and one-half year period, the possibility for conditioning is probably greater in SIPP than in CPS. Respondents might be inclined to find the chortest way through the questionnaire after repeated interviewing. It was shown in an earlier investigation into the SIPP unemployment data that some respondents had reported one labor force status for a complete reference period and then an entirely different status for the next four month reference period (Ryscavage and Feldman-Harkins, 1985). The change in status may not have necessarily occurred at the "seam" of the reference period.

Summary

This paper has shown that while both the SIPP and CPS obtained similar estimates of persons with work experience in 1985, significant differences existed in the distribution of work experience. SIPP shows relatively fewer persons with full-time, year-round employment than in the CPS and fewer persons with employment of 1 to 26 weeks. However, SIPP observed a larger number of workers with employment in the intermediate range of 27 to 49 weeks, either full-time or part-time.

It was hypothesized that reference period differences were primarily responsible for the differences. In CPS the data are collected every March, but the reference period is the previous calendar year, in other words, retrospectively. In SIPP the data are collected every four months from the same group of individuals and the relevant data are then combined to form a calendar year's worth of data. Respondents should be better able to remember their work activities over a shorter time period than a longer one. Although formal tests of this hypothesis were not made, recent literature would suggest this to be the case.

FOOTNOTES

- 1/ For further information on SIPP see Nelson, McMillen, and Kaspryzk (1985). For general information about the Current Population Survey, see the explanatory notes in the back of any Employment and Earnings, a publication of the U.S. Bureau of Labor Statistics.
- 2/ The SIPP sample is composed of four rotation groups of equal size and one group is in operation every month. Since households are interviewed every four month, this yields a "staggered" sample design.
- 3/ This difference is statistically significant at the 5-percent level. All differences in this paper were tested for statistical significance at the 5-percent and 10-percent significance levels.
- 4/ The BLS has periodically published their analyses on the work experience of the population in the Monthly Labor Review. and in their series of Special Labor Force Reports.
- 5/ For an example of the Census Bureau's use of the CPS work experience data see <u>Current Population Reports</u>, "Money Income and Poverty Status in the United States: 1987," Series P-60, No. 161, U.S Bureau of the Census, August 1988, Table 11, page 23.
- 6/ Other SIPP panels, lasting approximately two and one-half years, have been started each year since 1984.
- In the topical module of the fifth wave in SIPP's 1984 panel, for example, questions were asked about child care arrangements, welfare history, reservation wages, work-related expenses, and so on. In subsequent waves of interviewing, information was collected about assets and liabilities, taxes, marital history,

fertility history, pension plan coverage, and so on.

8/ In the only extensive examination of attrition in the 1984 SIPP panel, McArthur (1988) found, in general, that persons who missed at least two interviews had a weaker attachment to the work force than persons who were fully interviewed. A greater proportion of those fully interviewed worked full time (49.8 vs. 46.3 percent) and worked all weeks during a month (56.8 vs. 51.2 percent) than among those that missed at least the last two interviews.

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18A. LINE POP. NUMBER STAT. AGE Sex OFFICE USE ONLY 37. Were the (entry in item 36) 46. What was 's longest weeks was looking for work (Compare with entry in	0 18	DUSTRY
weeks was looking for work (Compare with entry in	ob during 1986?	0 4 0
		I B C
O O CIV C Male COCOOC (or on leyoff) all in one stretch? Same as item 23	C (Ship to 48A C & C	S C C
1 1 1 1 1 1 1 1 1 1 1 1 1 Yes - 1 stretch C 4 Different from	or 488) E 3 3	D O
No - 2 stretches ((Go to 38) item 23 or ite	nk O (Specify in	E C
3 3 A.F. 3 3 Female 3 3 3 3 3 3 3 3 3 3 3 No - 3+ stretches C	47A-47E) S 5 5	FC
47A For whom did we	E 66	G C
9 9 9 5 5 5 5 5 5 5 5 6 10 10 10 10 10 10 10 10 10 10 10 10 10	0 88	H C
	N 59	10
478. What kind of business		K C
	Ref.	OMO
9 5 1 5 0 5 0 5 0 0 m and remaining weeks of 1800r		MO
9A. Did work at a job or business at any time during 1985? Ill or disabled and unable to work C 47C. What kind of work w	sdoine	51B. How muc
Taking care of		recei
		unemplo
Going to school O 47D. What were 's most	important activities or duties?	benefits (1985?
98. Did do any temporary, part-time, or seasonal work even for No work available	된 이 이 시스에는 다른 사람들이 없다.	
e four dame during 10003		18
WIE. CLASS OF WORKER	Self-employment	•
Yes C (Ship to 33) No C -7	(Ash 48A)	
	(ASK INC.) No. SE C (Ash 488)	
D. Even though did not work in 1995 did habba and an air. 39. For how many employers did work	Without payWP O (Skip to	
O. Even though did not work in 1985, did he/she spend any time trying to find a job or on layoff? Local Gov't L C in 1985? If more than one at same	49A)	52A. During 10
time, only count it as one employer. 48A. How much did se	n from	Worker's
Yes O -7 No C (Skip to 32) 1 C (Skip to 41) this employer before		other pay related in
	55555	sick pay a
. How many different weeks was	ngs from this 33333	Y= 0
looking for work or on layoff from a job?		
40. Did look for work between jobs during 1985?	55 555	528. What was payments
in 1985?	66 666	State Worker
4 4 Yes C No O	- 77777	Employer or
5 5 \$	O Lost money 88888	Own insurans
(Mark weeks) G 41. In the weeks Ø Ø	99999	Other
7 thatworked, I I ARC Does this amount incl	de all tips, bonusss, overtime pay	
2 S and the second seco		52C. How muci
3 3 3		did rea
	O O (Probe and make corrections to 48A)	during 196
12. What was the main reason did not work in 1985?	om any other work he/she did during 1985?	\$
Ill or disabled and unable to work C \ Yes O	lo O (Skip to 50A)	<u> </u>
Retired (Mark hours)		Now I want to
Taking care of home or family.		some questions
Going to school (Skip to 57A) (100 to 42)		about where lived 1 year ago
Could not find work	보이라 하고 있다면 얼마 집 때문에 다 되었다.	where lived
Doing something else	S O No O Yes O No O	5 years ago
1-34 C (Ship to 44)		53. Was livis
13. During 1985 in how many weeks did		1 year ago; 1
work even for a few hours?	00 000 00 000	Yes O (Sh
Include paid vacation and sick leave		54A. Where did
as work,	88 888 88 888	1. Name o
수 수 of holidays, vacation, days off, 수 수 수 수 수	33 333 33 333 44 444 44 444	U.S. po
5 5 or sickness. 5 5 5 5 5		
G Yes C (Ask 44) 6 6 6 6 6	55 555 55 555 66 666	2. Name o
(Mark weeks	77 777	
and Go to 34) 8 8 8 8 8 8	88 888 88 888	3. Name o
9 44. How many weeks Ø Ø 99999	99 999 99 999	
INTERVIEWER OVERWITTEN	일시되다면 그 세탁하는 하라마 하나요?	6. Did 16
. INTERVIEWER CHECK ITEM 1-49 C (Skip to 36) then 35 hours in 2 2	C Lost money O Lost money	city, town
Number of weeks in item 33 is: 50-51 C (Ask 35) 19867 3 3 50A. INTERVIEWER CHE	K ITEM Longest job (Item 46) is farmer?	Yes O
52 C (Skip to 39) 4 4 Yes C —		C.Didal
5. Did loss any full weeks of work	No O (Ship to 51A)	5 years ag
	come we have already talked about, did	Yes O (Ne
in 1985 because he/she was on 508. Other than the farm in	n agricultural work done for others,	Pe
in 1985 because he/she was on (Skip to 39) 508. Other than the farm in leyoff from a job or lost a job? No C (Skip to 39)	government farm programs other than loans?	55. Where was . on March 1
in 1985 because he/she was on leyoff from a job or lost a job? No C (Skip to 39) (Mark wash)	Secondarion of the broken and area second	
in 1985 because he/she was on leyoff from a job or lost a job? No (Skip to 39) (Mark weeks)		
in 1985 because he/she was on leyoff from a job or lost a job? No C (Skip to 39) 3. You said worked about (Mark weeks)		In reference
in 1985 because he/she was on levoff from a job or lost a job? No C (Skip to 39) 8. You said worked about (antry in term 33) weeks in 1985. How many of the remaining 2 2 2 45. What was the main reson worked less then 35 hours per week? 510. Other than the farm in receive any income for recreational services, on Yes C (Probe corrections) and the services of the remaining 2 2 2 510. At any time during 15	nd make No O (Ask 51A)	in reference
in 1985 because he/she was on levoff from a job or lost a job? No C (Skip to 39) 8. You said worked about (antry in item 33) weeks in 1985. How many of the remaining 2 2 2 2 3 3 3 3 45. What was the main reason worked less than 35 hours per week? 51A. At any time during 18 51A. At any time during 18 51A. The proportion is suit time into the proportion of the standard or the standard	nd make No O (Ask 51A) tiens to 48A or 498) 15 did receive any State or Federal	O Current O Differen
in 1985 because he/she was on leyoff from a job or lost a job? No C (Skip to 39) (Mark weeks) (Ma	nd make No O (Ask 51A) tients to 48A or 49B) 15 did receive any State or Federal prestion?	O Current O Differen this of
in 1985 because ha/she was on leyoff from a job or lost a job? No C (Skip to 39) (Merk weeks) 7 (Merk weeks) 8 (Merk weeks) 9 (Merk weeks	nd make No O (Ask 51A) titens to 48A or 49B) 15 did receive any State or Federal mestion?	O Current O Differen this of Differen this S
in 1985 because he/she was on leyoff from a job or lost a job? No C (Skip to 39) (Merk weeks) — 9 45. What was the main reason worked less than 35 hours per week? (S2 minus entry in item 33) weeks was looking for work or on leyoff from a job? (Merk weeks — 6 (Merk weeks — 6 (Merk weeks — 7)	nd make No O (Ask SIA) tiens to 48A or 498) 15 did receive any State or Federal insetion? 10 O (Skip to S2A)	O Current O Differen this of Differen this S
in 1985 because ha/she was on leyoff from a job or lost a job? No C (Skip to 39) S. You said worked about (entry in item 33) weeks in 1985. How many of the remaining (52 minus entry in item 33) weeks was looking for work or on leyoff from a job? (Mark weeks) 45. What was the main reason worked less than 35 hours per week? Could not find a full time job Wanted to work part time or only able to work part time or only able to work part time Slack work or material shortage.	nd make No O (Ask 51A) titens to 48A or 49B) 15 did receive any State or Federal mestion?	In reference Current Different this cc Different this Si Different

	Section 1 — LABOR FO	RCE	AND RECIPIENCY
	(SHOW FLASHCARD J) During the 4-month period outlined on this calendar, that is, from (4 months ago) thru (Last month), did have a job or business, either full time or part time, even for only a few days? Mark "Yes" for active duty in the Armed Forces, any temporary or part-time work, and work without pay in a family business or farm.	1000	I □Yes — Mark "Worked" (code 170) on ISS and SKIP to 4 2 □ No
2a.	Even though did not have a job during this period, did spend any time looking for work or on layoff from a job?	1002	ı ∐Yes 2 ∐No — SKIP to 3a
b.	Please look at the calendar. In which weeks was looking for work or on layoff from a job?	1006	ks□ALL □ 1 1018 □ 7 1030 □ 13
	Mark (X) all that apply.	1008 1010 1012 1014 1016	□ 2 1020 □ 8 1032 □ 14 □ 3 1022 □ 9 1034 □ 15 □ 4 1024 □ 10 1036 □ 16 □ 5 1026 □ 11 1038 □ 17 □ 6 1028 □ 12 1040 □ 18
C.	Could have taken a job during any of those weeks if one had been offered?	1042	1 ☐ Yes — SKIP to Check Item R1 2 ☐ No
d.	What was the main reason could not take a job during those weeks? Mark (X) only one.	1044	1 ☐ Already had a job 2 ☐ Temporary illness 3 ☐ School 4 ☐ Other — Specify
CHE	CK Refer to item 2b. Is the "ALL" box marked in 2b?	1046	ı□ Yes — SKIP to 9a, page 4 ₂□ No — SKIP to 3b
3a.	Were there any weeks in the 4-month period when wanted a job?	1	1 Yes — SKIP to 3c 2 No — SKIP to Check Item R6, page 4
b.	I have recorded that there were weeks that did not work or look for work. Did want a job in those weeks?	1050	ı
c.	Could have taken a job in those weeks if one had been offered?	1052	ı ☐ Yes 2 ☐ No — SKIP to 9a. page 4
d.	During the weeks that wented a job but was not looking for one, what was the main reason was not looking? Mark (X) only one.	1054	1 Believes no work available in line of work or area 2 Couldn't find any work 3 Lacks necessary schooling, training, skills, or experience 4 Employers think too young or too old 5 Other personal handicap in finding job 6 Can't arrange child care 7 Family responsibilities a In school or other training 9 Ill health, physical disability 10 Other — Specify 11 D K
4.	Did have a job or business, either full or part time, during EACH of the weeks in this period? Note that the person did not have to work each week	1056	1 Yes 2 No
5a.	Wasabsent without pay from's job or business for any FULL weeks during the 4-month period?	1058	2□ No — SKIP to 8s. page 4
b.	Please look at the calendar. In which weeks was absent without pay? Mark (X) all that apply.	1060 1062 1084 1066 1068 1070	xs
C	. What was the main reason was absent from 's job or business during those weeks? Mark (X) only one.	1098	[
Page	2	-	FORM SIFP-4500 (7-17-

Section 1 — LABOR FORCE AND RECIPIENCY (Continued)				
68. Please took at the calendar. In which weeks didhave a job or business? Mark (X) calendar below. "With a job or business."	ND RECIPIENCY (Continued) 1100			
b. Of those weeks that had a job or business, was absent from work for any full weeks without pay?	1136			
	1138			
d. What was the main reason was absent from 's job or business during those weeks? Mark (X) only one.	1174 1 On layoff 2 Own illness 3 On vacation 4 Bad weather 5 Labor dispute 6 New job to begin within 30 days 7 Other — Specify			
78. I have marked that there were some weeks in this period in which did NOT have a job or business. During that week or weeks did spend any time looking for work or on layoff?	1176 1 ☐ Yes 2 ☐ No — SKIP to 7e			
b. In which of these weeks was looking for work or on layoff from a lob?	1178 xs All weeks without a job			
Mark (X) calendar below, "Looking for work or on layoff" AND then mark appropriate box(es). →	1180 □1 1192 □7 1204 □13 1182 □2 1194 □8 1206 □14 1184 □3 1196 □9 1208 □15 1186 □4 1198 □10 □210 □16 1188 □5 1200 □11 1212 □17 1190 □6 1202 □12 1214 □18			
C. Could have taken a job during those weeks if one had been offered?	1216 1 Yes — SKIP to Check Item R2			
d. What was the main reason could not take a job during those weeks?	1218 1 Aiready had a job 2 Temporary illness 3 School 4 Other — Specify			
CHECK ITEM R2 Refer to the Labor Force Calendar, below. Is each week of the 4-month period marked as "With a job or business" or "Looking to work or on layoff"?				
76. Did want a job in those weeks when did not have one?	1222 1 ☐ Yes — SKIP to 7g 2 ☐ No — SKIP to 8s			
f . I have marked that there were weeks in this period when did not have a job and was not looking for a job. Did want a job in those weeks? If necessary, refer to Labor Force calendar.	1224 1 Yes 2 No - SKIP to 8a			
g. Could have taken a job during those weeks if one had been offered?	1226 1 Yes 2 No - SKIP to 8s			
	- Use when item 4 is marked "No"			
WEEK	7 8 9 10 11 12 13 14 15 16 17 18			
Looking for work or on layoff (and without a job or business.) Mark for item 7b. FORM SIPP-4500 (7-17-44)	Page			

457-354 0 - 84 -

	Section 2 — EARNINGS AND EMPLOYMENT (Continued)				
	Part A1 — EMPLOYER ID	ENTIFIC	ATION NUMBER 1		
2a.	What is the name of the employer for whom worked during this 4-month period?	PGM 8	Employer Name		
	(If worked for more than one employer, enter the employer for whom worked the most hours during the 4-month period or the most recent employer.)	2000			
CUE		1 1			
CHE		PGM 8	Employer ID No.		
2b.	What kind of business or industry was (Name of company or business)?	PGM 8			
	For example: TV and radio manufacturing, retail shoe store, State Labor Department, farm.				
c.	ASK OR VERIFY —	PGM 8	1 Manufacturing?		
	Is it mainly —	2000	2 ☐ Wholesale Trade? 3 ☐ Retail Trade?		
		1	4 Some other kind of business?		
d.	What kind of work was doing on this job? For example: Electrical engineer, stock clerk, typist, farmer	PGM 8			
e .	What were's main activities or duties?	PGM 8			
.	For example: Types, keeps account books, files, sells cars, operates printing press, finishes concrete.	2010			
f.	ASK OR VERIFY	PGM 8	1 ☐ A private company or individual?		
	Was an employee of —	2012	2 Federal government (exclude Armed Forces)? 3 State government?		
			4 Local government?		
			5 ☐ Armed Forces? 6 ☐ Unpaid in family business or farm? —		
		1	SKIP to Check Item E5		
3a.	ASK OR VERIFY — Wasemployed by (Name of employer) during	PGM 7	1 ☐ Yes — SKIP to 4 2 ☐ No		
	the entire 4-month period?				
b.	When was employed by (Name of employer) during this 4-month period?	2016	FROM Month 2018 Day		
		2020	Month 2022 Day		
4.	ASK OR VERIFY —	-			
	How many hours per week did usually work at this job?	2024	Hours		
	at tills jobi	į	x3□ None x1□ DK		
5.	Waspaid by the hour on this job?	2026	1		
6.	What was's regular hourly pay rate at the end of (Read last month or "to" date in item 3b)?	2028	\$		
		1	x2 Ref. — SKIP to Check Item E5		
7.	During the 4-month period how often was paid on this job?	2030	1 ☐ Once a week 2 ☐ Once each 2 weeks 3 ☐ Once a month 4 ☐ Twice a month 5 ☐ Some other way — Specify)		