Sample maintenance is an important issue in any survey operation. It is especially important when that survey is longitudinal; the Survey of Income and Program Participation follows its sample population through 2 2/3 years.

We define attrition as reduction in the numbers of initially interviewed sample persons over the time that those persons are eligible for interview. In a longitudinal survey, disproportionate attrition over time may cause the sample to no longer represent the population from which it was drawn. If, however, the attrition is minimal and no particular subgroups of persons leave the sample, then attrition may not be a cause for worry. This paper is intended to serve as an initial exploration of attrition from the SIPP and its potential effect upon the distribution of characteristics of the sample population. The data are the interviewing results from the first three waves of interviewing which covered an 11-month period from October 1983 through August 1984. This study describes the demographic and socioeconomic characteristics of persons who become nonrespondents and compares those to characteristics of the persons who continue to respond.

In the future, we will follow the 1984 panel of the SIPP through its sample life to keep track of changes in representativeness of the sample from wave to wave. The goal of this work is to determine whether attrition from the survey is basically a random phenomenon or whether it is systematic. If attrition is indeed related to personal characteristics, it may be possible to predict from early attrition the characteristics of future attrition.

Description of the SIPP Design and Sample.

The SIPP is an ambitious data collection effort effort. The survey is intended to measure extremely complex phenomena: detailed income sources, recipiency of Federal and state aid, weekly labor force status, health and health insurance, taxes, assets, and interest income. In addition to these types of information, the survey collects information on demographic char-acteristics of all household members. During During each visit, interviewers ask questions from a core questionnaire and also, on most visits, ask variable sets of additional questions in the form of "topical modules" on particular issues, such as child care or educational financing. Interviewers who administer the questionnaires are highly trained; they must understand the questions they are asking and be able to establish rapport with their assigned group of respondents who, over the 2 2/3 years they are in the sample, must be willing to commit significant amounts of time responding to the survey.

SIPP went into the field in October 1983; 21,000 households were initially interviewed between October 1983 and January 1984. The sample that was initially interviewed (in four equal-size groups) was nationally representative of the civilian noninstitutional population of the United States. Starting in 1985, a new smaller sample is scheduled to be introduced each February and annually thereafter. More details on both the structure and content of SIPP are available in SIPP Working Paper No. 8401, "An Overview of the SIPP" by Nelson, McMillen, and Kasprzyk.

Persons whose usual residence was at one of the selected addresses will be followed throughout the 2 2/3 years of the 1984 sample's life, that is, until the summer of 1986. Those persons contacted during that initial interview will be interviewed eight more times, once every 4 months, over that period. While other major surveys such as the Current Population Survey and the National Crime Survey, both conducted by the Census Bureau, return to the same address for each subsequent visit regardless of whether the occupants of that address change, the SIPP interviewer returns to interview the same persons who form the sample. Persons who move in with SIPP sample persons after the first interview, while they live with sample persons, are also included in the sample and interviewed. If persons move to a new address, they are followed and interviews are obtained at the new address (for more information about mover's procedures, see Jean and McArthur, 1984).

Throughout the sample period efforts are made to continue to interview all persons who are ever part of the sample--even if they move into other parts of the country--with a few exceptions: persons who moved into households with sample persons after the first interview are not followed unless they moved with those sample persons; persons who are institutionalized, move outside of the United States, or live in an Armed Forces barracks are not followed; children under 15 who move and are not accompanied by a sample person who is 15 years old or over are not followed. Restricted Sample for Attrition Study.

For this study we included only those sample persons who were 15 years old and over, who were members of a household that lived at one of the selected addresses, and for whom a personal interview was obtained during the first visit by an interviewer. Further, the sample for this study excludes approximately one-quarter of the total SIPP sample for whom the second interview was not scheduled. Because they were not eligible for three interviews, they are not included in our current study sample. Persons who became part of the sample after the initial interview, by moving in with initially interviewed persons, are also not included in this analysis. Thus, our restricted sample consists of 30,458 persons who were members of the 14,844 households contacted as of the initial interview and who were subsequently eligible for 3 waves of interviews.

To perform this study, a unique computer file was constructed. This file matches records for each sample person across the interviewing waves. The file is updated with information collected in each wave as the data are available. Thus, for each person, we have a continuous and growing record of data collected during each successive interview. The variables contained in the file consist of a selection of the characteristics that are collected during each interview and, as such, are only a subsample of what is collected in the survey.

Reasons for Attrition.

For this study we defined four separate groups of initially interviewed persons according to their interviewing experience through the third wave. There were 26,992 persons who were interviewed all 3 times, the "stayers"; 1,447 persons were interviewed only once, the "one-interview leavers"; 1,725 persons were interviewed only on 2 successive times, "two-interview leavers"; and lastly, 294 persons were interviewed initially, missed the second interview, and then were interviewed during the third interviewing cycle, the "returners."

Individuals may not have been interviewed for many reasons. An entire household may not have been interviewed; if the household was interviewed, some individual household members may not have been interviewed. The SIPP is designed to keep a detailed record of the outcome of each interview attempt. Interviewers use detailed codes that represent the outcome of each interview attempt; these codes are part of the records kept for each individual and for each household.

There are many reasons for a household noninterview: no one was home in repeated visits, all household members were away the entire period; the household members refused to be interviewed; the interviewer was unable to locate the unit; roads were impassable; a serious illness or death had occurred in the household; all sample persons in the household were deceased, institutionalized, moved out of the country, or living in Armed Forces barracks; or all sample persons were living at an unknown address or more than 100 miles from a SIPP sample area with no available telephone number.

Even if a household interview was obtained, individual household members may have refused to be interviewed or may not have been available during the entire interviewing period, and no other household member may have been willing or able to supply information about that individual.

Table 1. Reasons for Leaving the SIPP: Leavers and Persons Who Returned (initially interviewed persons = 30,458)

	Leave	ers After	Detuneed
			Missed 2nd Inter-
			view (W-2 reason)
Total Persons	1,447	1,725	294
Percent of those			
initially interview	wed 4.8	5.7	1.0
Reason for Leaving	100.0	100.0	100.0
Refusals, total	65.6	49.7	50.7
Household	59.4	43.6	38.4
Person	6.2	6.1	12.2
Person left SIPP	12.2	10.8	1.0
Deceased	4.4	4.5	-
Institutionalized	2.7	2.0	0.7
A.F. Barracks	2.1	1.0	0.3
Overseas	3.0	3.2	-
Unable to contact			
Household	4.8	11.8	23.8
No one home	2.7	3.7	9.2
Temporarily absent	2.1	8.1	14.6
Unable to locate	0.1	0.1	-
Moved, address	-		
unknown	9.7	13.9	12.2
All other reasons	7.6	13.8	12.2

Table 1 displays the reasons for leaving in five category groupings: 1) refusals, which combines "household" and "person refusals"; 2) unable to contact household, which combines "no one home," "temporarily absent," and "away entire period"; 3) persons who were deceased, institutionalized, in Armed Forces barracks, or out of the country; 4) "moved, address unknown;" and 5) all other. These reasons for leaving are shown for the three groups that were not interviewed three times: the one-interview leavers, the two-interview leavers, and the returners. The principal reason for noninterview in SIPP

for all three groups was refusal for the whole household. Among the one-interview leavers, 60 percent of the persons were not interviewed because their whole household was classified as a "household refusal" during the second wave; 38 percent of the noninterviews among the returners that is, those persons who missed the second interview but were interviewed in the third--had been classified as a "household refusal" for the second interviewing wave but were converted to an "interview" during the third wave. During the third wave, about 44 percent of the noninterviewed persons were classified as "household refusals." Another significant category of noninterview is the fourth category, "moved, address unknown." Ten percent of the one-interview leavers, 14 of the two interview leavers, and 12 of the returners were in this category. Another major reason for noninterview during the second wave among persons who returned during the third interview was that the interviewer was unable to contact that household. Twenty-four percent of the returners had been classified into that grouping during the second wave compared to 5 of the one-interview leavers and about 12 of the two-interview leavers.

During succeeding interviewing waves, interviewers continue to visit households and persons who were noninterviews, for whatever reason, to try to obtain interviews. From one wave to the next, the reason for a noninterview may change. Thus, persons who were "not home" in one interview may in the next interview become "refusals." In this paper persons were grouped on the basis of the reason they were not interviewed in their first noninterview. It was not surprising to find that the "unable to contact" households made up a significantly larger proportion of those persons who returned compared to those who were classified as leavers and, conversely, that the reasons grouped under the heading: "death, institutionalization, overseas, living in Armed Forces barracks" made up only 1 percent of the returners but over 11 percent of both the groups classified as leavers. While it is yood to note that some of the noninterviews in one wave are interviews in the next wave of interviewing, with the data available at this time we have observed that the majority of persons who were classified as noninterviews during one wave continued to be noninterviews in the succeeding wave.

The following discussion compares the persons who left the SIPP sample after their first or second interview, the leavers, to persons who completed three interviews, the stayers. Using unweighted data in accordance with our interest in the sample itself, table 2 illustrates differences in the selected characteristics of persons who were members of those groups which were re-corded during their first interview. The first column represents distributions of these characteristics in the initially interviewed group. The second column shows the distributions of those characteristics after the second wave for persons who had been interviewed two times. The third column displays the distributions among those who, at the end of the third wave of interviewing, had been successfully interviewed three times. The fourth column lists the distributions for all persons who at the end of the third interviewing period appear to have left the SIPP sample. The fifth column singles out only those individuals who refused to be interviewed (combining "household" and "person refusals"). This group is examined separately screening out persons who left the sample due to the other reasons discussed previously.

For this analysis we employed chi-square statistics. These statistics were calculated to test the independence of the selected characteristics and the probability of leaving the sample. A sample design effect was used to compensate for the effect of within household clustering on a person sample. Using a conservative design effect parameter, the following characteristics are significant at the 5-percent level: regional office, size of metropolitan area, renting or owning a home, race, whether the interview was conducted by self or proxy, age, sex, ethnicity, relationship to reference person, marital status, household monthly income. and asset ownership.

In general persons who left the sample tended to be residents of large metropolitan areas, to rent rather than own their homes, and to have no assets (such as a savings account). They were more likely to have been interviewed by proxy rather than in person during the first interview. They were also more likely to have been classified as an "other relative" (that is, not a spouse, a child, or a household head) or as a "nonrelative" in the household, and to be "never married" or "separated," to be male, to be of Spanish origin (rather than some other ethnicity), to be Black (rather than some other race), and to be between 15 and 24 years old.

More definite patterns emerge when the association of these characteristics with the probability of refusing to continue to participate in the SIPP is examined. Calculated chi-square statistics which incorporated the design effect parameter showed that regional office, size of metropolitan area, whether the interview was conducted in person or through a proxy and receipt of cash or noncash benefits were significantly associated with refusing to be interviewed.

Characteristics of persons who continue to participate in the SIPP.

Table 2 also gives evidence of how the sample, as represented by our 30,458 initially interviewed persons, is changing over the interviewing waves as a result of attrition. Columns one, two, and three show distributions of the selected characteristics calculated after each wave for all persons successfully interviewed up to that point: after Wave 1, after Wave 2, and after Wave 3, respectively.

Of interest here are the declining proportions of the sample in large metropolitan areas and living in rented quarters. There are also decreasing proportions of males, persons under the age of 25, Blacks, and those of Spanish origin. There is a decline of persons who were classified as "never married" in Wave 1. The proportion of persons in households with very low income and persons with no assets also declines across waves of interviews.

It is important to note here that this discussion does not take into account the effect of new persons entering the sample in either Waves 2 or 3. Nor does it include those individuals who returned to the sample in the third wave. These numbers only reflect the change in the originally interviewed population as a result of attrition from that group. Statements about changes in representativeness of the United States population by the SIPP sample cannot be made from these findings alone but await further analysis of the characteristics of new arrivals into the sample.

Conclusions and future research.

This study has examined some characteristics of various groups in the SIPP sample as identified by their experience over three waves of interviewing. Of primary interest were those who had remained in sample throughout, those who had left the sample at some point, and those who had refused to be interviewed rather than leaving the sample for other reasons. Distributions of characteristics that might be significantly changed by attrition were compared among the various groups and tested for association with either all of the leavers or persons who refused.

For the initial three waves of the 1984 panel we have shown that noninterviews for persons have changed the distribution of characteristics of the initially interviewed persons over time. Leaving or remaining in the sample was not independent of sample person characteristics selected for the analysis. These findings may change when new entrants to the survey or returning persons are included in the analysis for those three waves of interviewing and as the sample matures.

<u>Refusing</u> to remain in the sample, on the other hand, was independent of several of the characteristics listed. Distributions of those characteristics among "refusals" were more often similar to those of stayers than for those of leavers as a whole. Again the characteristics of refusals may change as the sample matures. Those who choose to leave the sample, i.e., refused, may tend to do so early on. Attrition from later waves of the survey may be dominated by those who leave for "other reasons."

There remain many possibilities for further analysis. These include a study of the effect of interviewing procedures upon response rates. Response may vary if a different interviewer conducts successive interviews, if the interview is conducted over the telephone rather than in person, or if incentives for cooperation are offered. Further analyses by reason for attrition are important. We further plan to examine correlations between combinations of variables, such as income and residence, race and age, and response rates. And we plan to examine correlations between changes in certain statuses, such as employment, income, or marital status and response rates.

NOTE ON LISTED VARIABLES IN TABLE 2.

All variables contain values from the first interview. These values may have changed in the second or the third interview due to marital or job changes, for example. Regional office: a rough approximation for geographic location--SIPP interviewers are assigned to work out of regional offices. Residential characteristics: size of standard metropolitan statistical area (SMSA) in which respondent resides at time of interview. Living quarters: respondents' housing type and whether that housing is owner- or renter-occupied. Race: White; Black; American Indian, Eskimo or Alaska Native; or Asian or Pacific Islander as identified by respondent. Age: as of interview month, collapsed into four categories. Ethnicity: collapses self-reported ethnicity into a dichotomous variable, Spanish origin or not Spanish origin. Relationship: as of month of interview, reported in terms of relationship to reference person who is the person in whose name the house

is owned or rented. Marital status: as of month of interview. Highest grade attended: not necessarily completed. Employment recode: categories are based upon respondents' reporting of labor force activity for each week of the last month of the reference period. Hours worked per week: usual number of hours worked per week for the period that respondent was employed. Household's monthly income and person's monthly income: total income for the fourth month of reference period (A description of income sources included here may be found in appendix B of the quarterly SIPP report series P-70, "Economic Characteristics of Households in the United States," published by the Census Bureau.) Asset summary: two categories shown based upon respondent's report of ownership of the asset during the reference period--saving account and other assets, including money market accounts, certificates of deposit, rental property. Recipiency of means-tested benefits: "cash benefits" include Aid to Families with Dependent Children and Federal Supplemental Security Income. The category "noncash benefits" represents participation in Federal programs such as Medicaid and Food Stamps.

REFERENCES

Jean, Anne and Edith McArthur. "Some Data Collection Issues for Panel Surveys with Applications to SIPP." <u>Proceedings of the Survey Methodology</u> <u>Section of the 1984 Annual Meeing of the American</u> Statistical Association.

Nelson, Dawn, David McMillen and Daniel Kapsryzk. "An Overview of the SIPP." Working Paper No. 8401 U.S. Bureau of the Census, Current Population Reports, Series P-70, No. 5, Economic Characteristics of Households in the United States: Third Quarter 1984, U.S. G.P.O, Washington, D.C. 1985.

	Restricted Sample (1)	Stayers After 2 Interviews (2)	Stayers After 3 Interviews (3)	All Leavers (4)	All Refusals (5)
Total Number WAVE 1 VARIABLES REGIONAL OFFICE:	30,458	28,709	26,992	3,172	1,807
Boston	7.1	7.2	7.2	6.8	8.2
New York Philadelohia	6.9 10.3	6.5 10.5	6.2 10.6	11.5 8.4	10.2 10.8
Detroit	8.5	8.6	8.7	7.8	9.4
Chicago	7.7	7.9	8.0	5.1	3.7
Kansas City Seattle	8.4 8.6	8.6 8.7	8.8 8.9	5.7 7.0	6.9 7.2
Charlotte	9.0	9.0	9.1	8.4	9.2
Atlanta	11.5	11.3	11.2	13.1	10.6
Dallas Denver	9.5 5.7	9.5 5.7	9.4 5.7	10.6 6.2	9.6 5.5
Los Angeles	6.7	6.5	6.4	9.5	8.7
Cols. 3 and 4 (Chi-squar		Cols. 3 and	5 (Chi-square =	38.67)*	
RESIDENTIAL CHARACTERISTICS Not an SMSA	25.7	26.2	26.6	20.0	19.6
SMSA: LT 100,000	1.2	1.2	1.2	1.1	1.2
SMSA: 100-249 thou.	9.0	9.1	9.3	7.0	7.6
SMSA: 250-499 thou. SMSA: 500-999 thou.	9.3 13.4	9.4 13.4	9.5 13.4	8.3 13.6	9.3 13.2
SMSA: 1-2.9 mill.	24.1	23.8	23.6	28.2	28.2
SMSA: 3-14.9 mill.	17.2	16.8	16.5	21.8	20.8
Cols. 3 and 4 (Chi-squar LIVING QUARTERS:	$e = 24.00)^{*}$	Cols. 3 and :	o (Uni-square =	23.23)*	
House, Apt., Flat	94.2	94.1	94.1	94.7	95.4
Nontransient Hotel	0.2	0.2	0.2	0.3	0.3
Perm.in Trans.Hotel HU/Rooming House	$0.1 \\ 0.1$	$0.1 \\ 0.1$	0.1 0.1	0.1 0.1	0.1 0.1
Not HU/Room Hse	0.1	0.1	0.1	0.1	0.1
Mobile Home, no add.	4.3	4.4	4.4	3.6	3.0
Mobile Home, w/add. All other	0.8 0.4	0.8 0.2	0.8	0.9 0.2	1.1 0.0
Cols. 3 and 4 (Chi-squar LIVING QUARTERS:	e = 12.00)	Cols. 3 and !	5 (Chi-square =	6.03)	
Owned/Being bought	69.6	69.9	70.6	61.6 37.0	71.9
Rented for cash Occ'd w/o cash pmt	28.2 2.2	27.8 2.3	27.1 2.3	1.5	26.7 1.4
Cols. 3 and 4 (Chi-squar					-
RACE:	96 9	07 ()	07.0	83.7	86.7
White Black	86.8 10.5	87.0 10.3	87.3 10.1	12.9	11.0
Am.Ind/Esk/AlNativ	0.4	0.4	0.4	0.5	0.2
Asian/Pac.Isl. Cols. 3 and 4 (Chi-squar	2.3	2.3 Cole 3 and 1	2.2 ≤ (Chi-square =	2.9	2.0
INTERVIEW STATUS:	e - 9.307	cors. 5 and	5 (GIT-3quare	1.077	
Self	67.0	67.0	67.5	63.4	61.8
Proxy Cols. 3 and 4 (Chi-squar	33.0 = 7.20)*	32.7 Cols 3 and 1	32.5 5 (Chi-square =	36.6 8.30)*	38.2
INTERVIEW LENGTH: (Minutes)					
Less than 15	27.2 43.9	27.1	26.9	29.1	30.7
15 to 29 30 to 44	20.9	43.8 21.0	43.9 21.1	43.9 19.4	43.9 18.6
45 to 59	6.1	6.1	6.1	5.6	5.1
60 or more Cols. 3 and 4 (Chi-squar	1.9	2.0 Cols 3 and 1	1.9 5 (Chi-square =	2.0	1.5
NUMBER OF PERSONS IN HOUSE		cors, 5 and	o (oni-square -	3.007	
l person	11.4	11.3	11.3	12.4	9.5
2 persons	29.1 20.5	29.1 20.4	29.0 20.4	29.7 21.2	30.9 22.3
3 persons 4 persons	19.9	20.4	20.4	16.8	18.6
5 persons	11.0	11.0	11.0	11.2	11.6
6 persons	4.3 1.9	4.3 1.9	4.2 1.3	5.2 2.4	4.4 2.1
7 persons 8 or more persons	1.9	1.8	1.8	1.0	0.7
Cols. 3 and 4 (Chi-squar	e = 14.88)*	Cols. 3 and !	6 (Chi-square =	9.26)	
RELATIONSHIP: Reference Person	35.4	35.6	35.8	32.3	34.9
Primary Individual	12.8	12.8	12.6	14.7	11.2
Spouse	28.6	28.9	29.2	23.4	28.2
Child Other Relative	16.8 3.4	16.7 3.3	16.6 3.2	18.5 5.4	19.6 3.6
Non-rel w/rels.	0.4	0.4	0.4	0.8	0.5
Non-rel, no rels.	2.5	2.4	2.2	4.9	2.0
Cols. 3 and 4 (Chi-squar AGE:	e = 65.53)*	cois. 3 and 4	6 (Chi-square =	5.20)	
15-24	21.8	21.7	21.4	25.1	22.1
25-44	37.6	37.8	37.7	36.9 23.0	34.9
45-64 65 and over	25.5 15.0	25.6 15.0	25.8 15.0	23.0 15.0	29.3 13.7
Cols. 3 and 4 (Chi-squar			5 (Cni-square =		

Note on chi-square statistic: Asterisks are shown by those distributions which were significantly different.

Table 2. (Cont'd) Distributions of First Interview Characteristics by Interview Status

	Restricted	Stayers After	Stayers After	A11	A11
	Sample (1)		3 Interviews (3)	Leavers (4)	Refusals
Total Number	30,458	28,709	26,992	3,172	(5) 1,807
WAVE 1 VARIABLES SEX:					
Male	46.8 53.2	46.6 53.4	46.2	51.7	47.9
Female Cols. 3 and 4 (Chi-squar	53.2 e = 11.27)*	53.4 Cols. 3 and 5	53.8 (Chi-square =	48.3 0.60)	52.1
ETHNICITY:		F 4	6.0	7.6	4.3
Spanish Origin Not Spanish Origin	94.5	94.6	94.8	92.4	95.7
Cols. 3 and 4 (Chi-squar MARITAL STATUS:	e = 10.07)*	Cols. 3 and 5	(Chi-square =	1.03)	
Mar'd, spouse present	58.1	58.6	59.2	49.9	58.5
Mar'd, spouse absent Widowed	0.6 7.3	0.6 7.2	0.5 7.3	0.9 7.4	0.4 6.8
Divorced	6.7	6.7	6.6	7.1	5.0
Separated Never Married	2.3 25.0	2.2 24.6	2.1 24.2	3.7 31.0	2.4 26.8
Cols. 3 and 4 (Chi-squar			(Chi-square =		
HIGHEST GRADE ATTENDED: Less than 9 years	10.8	11.3	10.9	10.2	8.6
9-11 years	17.0	17.0	16.8	17.9	16.5
12 years More than 12 years	36.2 36.0	36.1 35.7	36.3 36.0	36.4 35.5	37.3 37.6
Cols. 3 and 4 (Chi-squar	e = 0.73)				
HOURS WORKED/WEEK: Not applicable	37.0	37.0	36.8	38.7	34.9
None	0.3	0.1	0.1	0.1	0.1
1 to 19 20 to 34	5.6 9.0	5.7 8.9	5.8 8.8	4.4 10.2	4.9 11.5
35 to 40	33.1		33.3 15.1	32.0	34.3
41 or more Cols. 3 and 4 (Chi-squar	15.0 e = 5.47)	15.1 Cols. 3 and 5	(Chi-square =	14.5 5.90)	14.3
EMPLOYMENT RECODE:					
With Job: Worked all weeks	54.5	54.6	54.8	51.8	55.8
Missed 1+ weeks	1.2 0.2	1.1 0.2	1.2 0.2	1.2 0.3	1.3 0.4
Time on layoff Job Part of Time:			0.2		
No layoff/no lookiny Did look or on layoff	1.3	1.4 1.4	1.4 1.3	1.3 1.8	1.1 1.3
No Job:	1.4				
All mo.looked or on layof Some looking/layoff		4.5 0.6	4.4 0.6	6.6 0.7	5.0 0.6
No looking and no layoff	36.1	36.1	36.1	36.3	34.6
Cols. 3 and 4 (Chi-squar HOUSEHOLD MONTHLY INCOME:	e = 13.50)	Cols. 3 and 5	(Chi-square ⇒	2.13)	
Less than 300	4.3	4.2	4.0	6.3	4.3
300 to 599 600 to 899	7.6 8.4	7.6 8.3	7.6 8.3	8.1 9.3	6.0 7.6
900 to 1199	8.4 8.0 11.6 10.2	8-0	7.9 11.5	8.7	7.6
1200 to 1599 1600 to 1999	10.2	11.6 10.3	10.2	11.9 9.6	12.0 9.3
2000 to 2999	21.5	21.6	21.9	18.7 11.3	20.9 13.7
3000 to 3999 4000 or more	13.2 15.2	13.3 15.1	13.5 15.1	16.0	18.7
Cols. 3 and 4 (Chi-squar	e = 22 . 17)*	Cols. 3 and 5	(Chi-square =	8.17)	
PERSON MONTHLY INCOME: Less than 300	30.4	30.4	30.3	31.6	29.4
300 to 599 600 to 899	16.0 12.5	15.9 12.4	15.8 12.4	17.2	15.3 12.6
900 to 1199	9.7	9.8	9.8		10.5
1200 to 1599 1600 to 1999	10.2 6.6	10.2 6.7	10.2 6.7	10.3 5.6	11.2
2000 to 2999	8.7	8.8	8.9	7.0	7.9
3000 to 3999 4000 or more	3.2 2.7	3.2 2.7	3.2 2.7	2.8 3.1	3.8 3.3
Cols. 3 and 4 (Chi-squar			(Chi-square =		
ASSET SUMMARY: Savings account:					
Yes	56.4	56.7 43.3	57.2 42.8	50.5 49.5	57.0 43.0
No Cols. 3 and 4 (Chi-squar	43.6 e = 17.10)*		(Chi-square =		43.0
All Other Assets: Yes	41.0	41.2	41.5	36.4	42.7
No	59.0	58.8	58,5	63.6	57.3
Cols. 3 and 4 (Chi-squar HOUSEHOLD RECEIVES CASH BEN		Cols. 3 and 5	(Chi-square ≖	0.31)	
Yes	8.4	8.8	8.4 8.		
No 9 Cols. 3 and 4 (Cni-squar	1.6 e = 0.05)	91.2 Cols. 3 and 5	91.6 91. (Chi-square =		4
HOUSEHOLD RECEIVES NONCASH	BENEFITS:				7
	7.2 0.1	7.0 10.6	7.2 6. 10.0 10.		
No benefits 8	2.7	82.3	82.8 82. (Chi-square =		8
Cols. 3 and 4 (Chi-squar	e - 0./3)	CONDE D GING D	(onresquare =	13.31)	

Note on chi-square statistic: Astericks are shown by those distributions which were significantly different.